Illinois Environmental Protection Agency

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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)

1 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)

Original copy submitted to Springfield. Electronic copies submitted separately directly to Collinsville FOS (Ali Al-Janabi), Amy Butler, and Visal Poornaka.

AECOM
100 N. Broadway, 20th Floor
St. Louis, MO 63102
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April 30, 2024

Ms. Jacqueline M Cooperider, 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 – 1st Quarter 2024

Roxana, Illinois

1191150002 – Madison County

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

Log No. B-43R-CA-21

Dear Ms. Cooperider:

On behalf of Shell Oil Products US (Shell), AECOM Technical Services, Inc. (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.

Electronic copies of the referenced report are being submitted separately directly to Ms. Amy Butler, Mr. Visal Poornaka, and IEPA Collinsville FOS (Ali Al-Janabi) with Illinois Environmental Protection Agency (IEPA).

If you have any questions during your review, please contact Leroy (Buddy) Bealer, Shell 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

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Enclosures: 1st Quarter 2024 Report, Roxana Interim Groundwater Monitoring Program
RCRA Facility Groundwater, Leachate and Gas Reporting Form

cc: Leroy (Buddy) Bealer, Shell
Thomas Morgan, Phillips 66
Amy Butler, IEPA, Springfield
Visal Poornaka, IEPA, Collinsville
IEPA Collinsville FOS (Ali Al-Janabi), IEPA, Collinsville
Michelle Knapp, Atlantic Richfield Company
Ryan Mohr, Fox Smith LLC
Repositories - Roxana Public Library, website

AECOM

1st Quarter 2024 Report

Roxana Interim Groundwater Monitoring Program

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

Project number: 60721927

April 2024

Delivering a better world

Quality information

Prepared by	Checked by	Verified by	Approved by
			
Mary Massa, PG Geologist	Melissa Remiger Environmental Scientist	Rudy Torrini, Jr., Ph.D. 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	No	Ms. Jacqueline M Cooperider, PE IEPA, Springfield
None	Yes	Mr. Thomas Morgan Phillips 66
None	Yes	Ms. Amy Butler IEPA, Springfield
None	Yes	IEPA Collinsville FOS IEPA, Collinsville
None	Yes	Mr. Visal Poornaka IEPA, Collinsville
None	Yes	Ms. Michelle Knapp Atlantic Richfield Company
None	Yes	Ryan Mohr Fox Smith LLC
None	Yes	Roxana Public Library
None	Yes	website

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1 Introduction

AECOM Technical Services, Inc. (AECOM) is submitting this report on behalf of Equilon Enterprises LLC d/b/a Shell Oil Products US (Shell) for the 1st Quarter 2024 (1Q24) 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 regulatory-related correspondence between AECOM, on behalf of Shell, and the IEPA during this reporting period (January 2024 through March 2024); prior regulatory-related correspondence which has not yet been addressed by IEPA can be found in **Appendix A**.

- On November 8, 2023, IEPA issued a Violation Notice (VN L-2023-00369), in response to the triennial site inspection performed in July 2023. The alleged violations included in this violation notice were related to monitoring well labels and construction. A meeting was held between AECOM, Shell and IEPA on January 4, 2024. A request for extension to submit a response to the Violation Notice was submitted to IEPA on January 15, 2024, and was approved by IEPA in an email dated January 24, 2024. AECOM, on behalf of Shell, submitted a Response to Violation Notice L-2023-00370 on February 16, 2024. IEPA issued a Proposed Compliance Commitment Agreement, which was dated March 21, 2024, and received by AECOM on March 25, 2024.

- On January 26,2024, IEPA approved with conditions the Response to 5/5/2023 Illinois EPA Letter as well as two Additional Information submittals related to the FPWY SEE FDRCWP. On February 23, 2024, AECOM, on behalf of Shell, submitted a response to the IEPA letter dated 1/26/2024. On March 14, 2024, a virtual meeting was held between IEPA, Shell and AECOM to provide an update on the SEE prior to startup and facilitate an open forum for any questions.

- On March 4, 2024, AECOM, on behalf of Shell, submitted the *Former Public Works Yard Steam Enhanced Extraction – Pre-SEE Additional Sampling Results* in response to conditions from the IEPA May 5, 2023 letter.

- On March 22, 2024, AECOM, on behalf of Shell, submitted a replacement RCRA Corrective Action Certification form for the October 14, 2016 Response to IEPA comments in a 7/27/2016 letter. This submittal is related to the proposed GMZ and the replacement form was requested by IEPA in an email dated March 6, 2024.

Groundwater samples were collected and analyzed during 1Q24 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 January 16, 2024 (AECOM, 2024).

2.2 Additional Activities or Modifications

As required by Condition 1 of the Illinois Environmental Protection Agency's (IEPA's) letter dated August 1, 2023, gauging and sampling of the groundwater monitoring wells in the Interim Groundwater Monitoring Network was performed on a monthly basis throughout 1Q24.

In addition to January 2 – January 4, 2024 comprehensive gauging, February 2024 and March 2024 Interim Groundwater Monitoring Network gauging was performed February 6 – February 7, 2024, and March 11 – March 12, 2024, respectively. Due to previously scheduled site activities and staff availability, February and March monthly sampling events were combined. February/March 2024 (Feb/Mar 24) sampling was performed from Febraury 29 – March 11, 2024. Analytical results collected during the Feb/Mar 24 groundwater sampling event are still under review and evaluation. Finalized Feb/Mar 24 analytical results will be included in the April 2024 Monthly Roxana Interim Groundwater Monitoring Report due on May 1, 2024. Finalized Nov/Dec 23 analytical results, lab reports, and figures for monthly reports are included in **Appendix E**; finalized Feb/Mar 24 groundwater contour figures are also included in **Appendix E**.

Depth to bottom measurements were collected from the groundwater monitoring wells in the Interim Groundwater Monitoring Program and compared to corresponding well construction information. Well P-93D contained sediment above redevelopment criteria in the SOP (10% screen occlusion for sampled wells, and 75% screen occlusion for gauged-only wells); therefore, P-93D will be redeveloped prior to 2nd Quarter 2024 (2Q24) sampling activities.

2.3 Groundwater Monitoring Well Gauging and Sampling

Groundwater Monitoring Well Gauging

The comprehensive quarterly groundwater monitoring well gauging event was conducted between January 2nd and 4th, 2024. The gauging activities were conducted in conjunction with the 1Q24 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 January 5th through 12th and January 17th through 18th, 2024. 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-7, MW-9 through MW-14; MW-16; MW-22 through MW-28; P-54; P-56 through P-59; P-93A, B, and C; P-114R; ROST-3-MW; ROST-4-PZ(C); ROST-4-PZ(E); 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 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 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-66, 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, 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

[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.

then delivered via overnight courier, under the proper COC documentation, to Eurofins Environment Testing America Southeast, LLC (EETA Southeast) in Pensacola, Florida for analysis.

Samples were analyzed by EETA Southeast 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 1Q24 groundwater gauging and sampling event.

3.1 Groundwater Monitoring Well Gauging Results

The comprehensive quarterly groundwater monitoring well gauging for the 1Q24 event was conducted between January 2nd and January 5th, 2024. 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 have fallen approximately 1 foot since the 4Q23 gauging event. Groundwater levels in most wells in the central and eastern portions of the WRR have fallen approximately 1.2 feet since the 4Q23 gauging event. Water levels are above the top of the screens in the majority of the wells gauged during the 1Q24 event. The potentiometric surface observed during the 1Q24 groundwater monitoring well gauging (**Figures 3a** and **3b**) illustrates an inward gradient with groundwater flow toward the WRR groundwater production wells.

During the 1Q24 quarterly groundwater monitoring well gauging event, LNAPL was detected in three Interim Groundwater Monitoring Program groundwater monitoring wells (P-55R, P-66, and P-68) (**Table 1**). These monitoring wells are located in the WRR. In these wells, LNAPL thicknesses ranged from 0.02 to 1.03 feet. LNAPL was not observed in groundwater monitoring wells located in the Village (**Table 1**). **Figures 4a** and **4b** illustrate the measured LNAPL thickness observed along the West Fenceline and inside the refinery, respectively, during the 1Q24 gauging event. Measured LNAPL thickness and the number of locations where it was observed during the 1Q24 quarterly gauging events was generally comparable to that observed in 4Q23.

The Illinois Emergency Management Agency (IEMA) was notified 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. Groundwater monitoring wells P-58 and P-66 have yielded some anomalous observations/detections since the reported release; LNAPL has been detected in P-66 since 2Q22, however LNAPL was previously last detected in P-66 during 4Q12. These wells will be gauged, and sampled in the absence of LNAPL, during the quarterly Roxana Interim Groundwater Monitoring program.

During 1Q24, LNAPL was observed in groundwater monitoring well P-66 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 metal drum and will be sent for reuse of in accordance with RCRA, Illinois and United States Department of Transportation (DOT) regulations.

3.2 Data Quality Review Results

A total of 10 sample delivery groups (SDGs) were prepared and sent to EETA Southeast for the 1Q24 event. Fifty different groundwater sample sets were prepared and analyzed for VOCs and SVOCs (including PAHs). The 50 samples included 39 different investigative sample sets, five field duplicate sets, and three matrix spike/matrix spike duplicate (MS/MSD) sets. SDGs for 1Q24 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.

Analytical results qualified by AECOM are specified in the data reviews presented in **Appendix C**.

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

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 4Q23 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, 2023). 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 10 groundwater monitoring wells in the Interim Groundwater Monitoring Program (three in the Village, seven in the WRR along the West Fenceline) exhibited exceedances of the groundwater screening criteria for one or more of the following constituents:

- Benzene
- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- Benzo(a)anthracene
- Benzo(a)pyrene
- Phenol

Figure 5 presents concentrations of analytes that exceeded the indicated screening criteria for 1Q24. These findings are generally consistent with the results from previous sampling events.

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

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 1Q24, statistically significant downward trends were displayed for seven wells, no wells displayed statistically significant increasing trends, and the remaining well displayed a trend that is not statistically significant[5]. Results from the Mann-Kendall analysis conducted via GWSDAT are presented in **Appendix D-2**.

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

4 Summary and Conclusions

AECOM conducted the 1Q24 Interim Groundwater Monitoring Program, and the following conclusions are based on the data and information collected as part of this program:

- During 1Q24, 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 have fallen approximately 1 foot since the 4Q23 gauging event. Groundwater levels in most wells in the central and eastern portion of the WRR have fallen approximately 1.2 feet since the 4Q23 gauging event.
- Measured LNAPL thickness and the number of locations where it was observed during the 1Q24 quarterly gauging events was generally comparable to that observed in 4Q23. LNAPL has been detected in P-66 since 2Q22, LNAPL was previously last detected in P-66 during 4Q12. 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 in the absence of LNAPL during the 1Q24 Roxana Interim Groundwater Monitoring program.
- The analytical results from 1Q24 are generally consistent with the results from previous sampling events.
- 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 seven wells, no wells displayed statistically significant increasing trends, and the remaining well displayed a trend that is 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

Shell 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. Shell 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 Shell 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 (Shell), dated April 16, 2015.

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

AECOM, 2016 (AECOM, 2016b); *Proposed Groundwater Management Zone*. Prepared for Shell Oil Products US (Shell), 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 (Shell), dated October 14, 2016.

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

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

AECOM, 2020 (AECOM, 2020a); *Response to IEPA Notice of Permit Renewal Application Incompleteness*. Prepared for Shell Oil Products US (Shell) 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 Shell Oil Products US (Shell), dated October 12, 2020.

AECOM, 2022 (AECOM, 2022a); *Public Works Yard (PWY) Steam Enhanced Extraction (SEE) Workplan*. Prepared for Shell Oil Products US (Shell), dated January 31, 2022.

AECOM, 2022 (AECOM, 2022b); *Additional Information Supplemental to the Proposed Groundwater Management Zone*. Prepared for Shell Oil Products US (Shell), dated March 18, 2022.

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AECOM, 2023 (AECOM, 2023); *Additional Information to Log No. B-43R-CA-109 (PWY SEE – Response to 8/22/22 Letter & FDRCWP).* Prepared for Shell Oil Products US (Shell), dated January 30, 2023.

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Tables

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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											
2Q23	442.83	4/3/2023	NE	40.76	NA	NA	NA	402.07	394.03-384.03 (48.80-58.80)	0.0	*
3Q23		7/6/2023	NE	40.51	NA	NA	NA	402.32		0.0	*
4Q23		10/2/2023	NE	41.06	NA	NA	NA	401.77		0.0	*
1Q24		1/3/2024	NE	42.11	NA	NA	NA	400.72		0.0	*
MW-02											
2Q23	443.93	4/3/2023	NE	42.03	NA	NA	NA	401.90	394.06-384.06 (49.87-59.87)	0.0	*
3Q23		7/5/2023	NE	41.71	NA	NA	NA	402.22		0.0	*
4Q23		10/2/2023	NE	42.27	NA	NA	NA	401.66		28.6	*
1Q24		1/2/2024	NE	43.38	NA	NA	NA	400.55		66.0	*
MW-03											
2Q23	430.23	4/3/2023	NE	28.03	NA	NA	NA	402.20	395.56-385.56 (34.67-44.67)	0.0	*
3Q23		7/6/2023	NE	27.75	NA	NA	NA	402.48		0.0	*
4Q23		10/2/2023	NE	28.48	NA	NA	NA	401.75		0.0	*
1Q24		1/3/2024	NE	29.46	NA	NA	NA	400.77		0.0	*
MW-04											
2Q23	441.31	4/3/2023	NE	39.21	NA	NA	NA	402.10	396.25-386.25 (45.06-55.06)	0.0	*
3Q23		7/6/2023	NE	38.96	NA	NA	NA	402.35		0.0	*
4Q23		10/2/2023	NE	39.57	NA	NA	NA	401.74		0.0	*
1Q24		1/3/2024	NE	40.55	NA	NA	NA	400.76		0.0	*
MW-05											
2Q23	429.98	4/3/2023	NE	27.68	NA	NA	NA	402.30	396.01-386.01 (33.97-43.97)	0.0	*
3Q23		7/6/2023	NE	27.53	NA	NA	NA	402.45		0.0	*
4Q23		10/2/2023	NE	28.16	NA	NA	NA	401.82		0.0	*
1Q24		1/3/2024	NE	29.11	NA	NA	NA	400.87		0.0	*
MW-06A											
2Q23	432.33	4/3/2023	NE	29.80	NA	NA	NA	402.53	398.48-388.48 (33.85-43.85)	0.0	*
3Q23		7/6/2023	NE	29.64	NA	NA	NA	402.69		0.0	*
4Q23		10/2/2023	NE	30.39	NA	NA	NA	401.94		0.0	*
1Q24		1/3/2024	NE	31.36	NA	NA	NA	400.97		0.0	*
MW-06B											
2Q23	432.37	4/3/2023	NE	29.85	NA	NA	NA	402.52	368.32-363.32 (64.05-69.05)	0.0	*
3Q23		7/6/2023	NE	29.71	NA	NA	NA	402.66		0.0	*
4Q23		10/2/2023	NE	30.41	NA	NA	NA	401.96		0.0	*
1Q24		1/3/2024	NE	31.30	NA	NA	NA	401.07		0.0	*
MW-06C											
2Q23	432.18	4/3/2023	NE	29.69	NA	NA	NA	402.49	347.23-342.23 (84.95-89.95)	0.0	*
3Q23		7/6/2023	NE	29.52	NA	NA	NA	402.66		0.0	*
4Q23		10/2/2023	NE	30.20	NA	NA	NA	401.98		0.0	*
1Q24		1/3/2024	NE	31.10	NA	NA	NA	401.08		0.0	*
MW-06D											
2Q23	432.06	4/3/2023	NE	29.50	NA	NA	NA	402.56	327.34-322.34 (104.72-109.72)	0.0	*
3Q23		7/6/2023	NE	29.37	NA	NA	NA	402.69		0.0	*
4Q23		10/2/2023	NE	30.07	NA	NA	NA	401.99		0.0	*
1Q24		1/3/2024	NE	30.30	NA	NA	NA	401.76		0.0	*
MW-07											
2Q23	443.31	4/3/2023	NE	41.19	NA	NA	NA	402.12	400.39-390.39 (42.92-52.92)	0.0	*
3Q23		7/5/2023	NE	40.97	NA	NA	NA	402.34		33.8	*
4Q23		10/2/2023	NE	41.63	NA	NA	NA	401.68		0.0	*
1Q24		1/2/2024	NE	42.58	NA	NA	NA	400.73		0.0	*
MW-09											
2Q23	445.28	4/3/2023	NE	42.55	NA	NA	NA	402.73	399.24-389.24 (46.04-56.04)	0.0	*
3Q23		7/5/2023	NE	42.43	NA	NA	NA	402.85		0.0	*
4Q23		10/2/2023	NE	43.11	NA	NA	NA	402.17		0.0	*
1Q24		1/2/2024	NE	44.07	NA	NA	NA	401.21		0.0	*
MW-10											
2Q23	445.06	4/3/2023	NE	42.44	NA	NA	NA	402.62	400.63-390.63 (44.43-54.43)	0.0	*
3Q23		7/5/2023	NE	42.43	NA	NA	NA	402.63		0.0	*
4Q23		10/2/2023	NE	42.98	NA	NA	NA	402.08		0.0	*
1Q24		1/2/2024	NE	43.93	NA	NA	NA	401.13		0.0	*

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MW-11											
2Q23	442.38	4/3/2023	NE	40.03	NA	NA	NA	402.35	400.72-390.72 (41.66-51.66)	0.0	*
3Q23		7/5/2023	NE	39.86	NA	NA	NA	402.52		0.0	*
4Q23		10/2/2023	NE	40.67	NA	NA	NA	401.71		0.0	*
1Q24		1/2/2024	NE	41.73	NA	NA	NA	400.65		0.0	
MW-12											
2Q23	442.64	4/3/2023	NE	40.47	NA	NA	NA	402.17	400.72-390.72 (41.92-51.92)	0.0	*
3Q23		7/6/2023	NE	40.24	NA	NA	NA	402.40		0.0	*
4Q23		10/2/2023	NE	40.81	NA	NA	NA	401.83		0.0	*
1Q24		1/3/2024	NE	41.88	NA	NA	NA	400.76		0.0	*
MW-13											
2Q23	430.30	4/4/2023	NE	27.66	NA	NA	NA	402.64	405.50-395.50 (24.80-34.80)	0.8	
3Q23		7/6/2023	NE	27.46	NA	NA	NA	402.84		0.0	
4Q23		10/3/2023	NE	28.36	NA	NA	NA	401.94		0.0	
1Q24		1/3/2024	NE	29.21	NA	NA	NA	401.09		0.0	
MW-14											
2Q23	434.61	4/6/2023	NE	32.32	NA	NA	NA	402.29	401.19-391.19 (33.42-43.42)	43.8	*
3Q23		7/7/2023	NE	31.86	NA	NA	NA	402.75		52.1	*
4Q23		10/4/2023	NE	32.52	NA	NA	NA	402.09		28.8	*
1Q24		1/4/2024	NE	33.47	NA	NA	NA	401.14		26.9	
MW-16											
2Q23	443.60	4/3/2023	NE	41.52	NA	NA	NA	402.08	406.10-396.10 (37.50-47.50)	0.0	
3Q23		7/7/2023	NE	41.33	NA	NA	NA	402.27		0.0	
4Q23		10/2/2023	NE	41.76	NA	NA	NA	401.84		0.0	
1Q24		1/3/2024	NE	42.88	NA	NA	NA	400.72		0.0	
MW-17											
2Q23	441.78	4/3/2023	NE	39.69	NA	NA	NA	402.09	407.49-392.49 (34.29-49.29)	0.0	
3Q23		7/5/2023	NE	39.52	NA	NA	NA	402.26		0.0	
4Q23		10/2/2023	NE	39.91	NA	NA	NA	401.87		0.0	
1Q24		1/2/2024	NE	41.07	NA	NA	NA	400.71		0.0	
MW-18											
2Q23	442.24	4/3/2023	NE	40.25	NA	NA	NA	401.99	407.32-392.32 (34.92-49.92)	0.0	
3Q23		7/5/2023	NE	40.08	NA	NA	NA	402.16		0.0	
4Q23		10/2/2023	NE	40.43	NA	NA	NA	401.81		0.0	
1Q24		1/2/2024	NE	41.63	NA	NA	NA	400.61		0.0	
MW-19											
2Q23	442.98	4/3/2023	NE	41.06	NA	NA	NA	401.92	406.64-391.64 (36.34-51.34)	0.0	
3Q23		7/5/2023	NE	40.74	NA	NA	NA	402.24		0.0	
4Q23		10/2/2023	NE	41.20	NA	NA	NA	401.78		0.0	
1Q24		1/2/2024	NE	42.43	NA	NA	NA	400.55		0.0	
MW-20											
2Q23	443.86	4/3/2023	NE	42.01	NA	NA	NA	401.85	407.98-392.98 (35.88-50.88)	0.0	
3Q23		7/5/2023	NE	41.72	NA	NA	NA	402.14		0.0	
4Q23		10/2/2023	NE	42.15	NA	NA	NA	401.71		0.0	
1Q24		1/2/2024	NE	43.34	NA	NA	NA	400.52		0.0	
MW-21											
2Q23	444.01	4/3/2023	NE	42.02	NA	NA	NA	401.99	409.00-394.00 (35.01-50.01)	0.0	
3Q23		7/5/2023	NE	41.91	NA	NA	NA	402.10		0.0	
4Q23		10/2/2023	NE	42.37	NA	NA	NA	401.64		0.0	
1Q24		1/2/2024	NE	43.39	NA	NA	NA	400.62		0.0	
MW-22											
2Q23	442.38	4/3/2023	NE	40.21	NA	NA	NA	402.17	403.95-393.95 (38.43-48.43)	0.0	
3Q23		7/6/2023	NE	40.04	NA	NA	NA	402.34		0.0	
4Q23		10/2/2023	NE	40.53	NA	NA	NA	401.85		0.0	
1Q24		1/11/2024	NE	41.71	NA	NA	NA	400.67		0.0	
MW-23											
2Q23	431.57	4/3/2023	NE	29.17	NA	NA	NA	402.40	402.55-392.55 (29.02-39.02)	0.0	
3Q23		7/6/2023	NE	29.00	NA	NA	NA	402.57		0.2	*
4Q23		10/3/2023	NE	29.81	NA	NA	NA	401.76		0.0	
1Q24		1/3/2024	NE	30.71	NA	NA	NA	400.86		0.0	

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MW-24											
2Q23	443.65	4/3/2023	NE	41.36	NA	NA	NA	402.29	404.04-394.04 (39.61-49.61)	0.0	
3Q23		7/5/2023	NE	41.12	NA	NA	NA	402.53		0.0	
4Q23		10/2/2023	NE	41.76	NA	NA	NA	401.89		0.0	
1Q24		1/2/2024	NE	42.77	NA	NA	NA	400.88		0.0	
MW-25											
2Q23	438.53	4/3/2023	NE	36.35	NA	NA	NA	402.18	402.94-392.94 (35.59-45.59)	0.0	
3Q23		7/6/2023	NE	36.11	NA	NA	NA	402.42		141.2	
4Q23		10/2/2023	NE	36.74	NA	NA	NA	401.79		82.3	
1Q24		1/3/2024	NE	37.71	NA	NA	NA	400.82		88.4	
MW-26											
2Q23	441.23	4/3/2023	NE	39.14	NA	NA	NA	402.09	403.08-393.08 (38.15-48.15)	0.0	
3Q23		7/6/2023	NE	38.88	NA	NA	NA	402.35		0.0	
4Q23		10/2/2023	NE	39.45	NA	NA	NA	401.78		0.0	
1Q24		1/3/2024	NE	40.47	NA	NA	NA	400.76		0.0	
MW-27											
2Q23	443.60	4/3/2023	NE	40.57	NA	NA	NA	403.03	403.81-393.81 (39.79-49.79)	0.0	
3Q23		7/5/2023	NE	40.32	NA	NA	NA	403.28		0.0	
4Q23		10/2/2023	NE	40.70	NA	NA	NA	402.90		0.0	
1Q24		1/2/2024	NE	41.70	NA	NA	NA	401.90		0.0	
MW-28											
2Q23	443.55	4/3/2023	NE	39.68	NA	NA	NA	403.87	409.94-399.94 (33.61-43.61)	0.0	
3Q23		7/5/2023	NE	39.82	NA	NA	NA	403.73		0.0	
4Q23		10/2/2023	NE	39.98	NA	NA	NA	403.57		0.0	
1Q24		1/2/2024	NE	40.72	NA	NA	NA	402.83		0.0	
P-01											
2Q23	442.98	4/4/2023	NE	32.96	NA	NA	NA	410.02	380.76-375.76 (62.22-67.22)	0.0	*
3Q23		7/7/2023	NE	34.40	NA	NA	NA	408.58		0.0	*
4Q23		10/3/2023	NE	35.76	NA	NA	NA	407.22		0.0	*
1Q24		1/4/2024	NE	37.34	NA	NA	NA	405.64		0.0	*
P-4U											
2Q23	442.74	4/4/2023	NE	34.68	NA	NA	NA	408.06	361.59-359.59 (81.15-83.15)	0.0	*
3Q23		7/6/2023	NE	35.70	NA	NA	NA	407.04		0.0	*
4Q23		10/3/2023	NE	36.88	NA	NA	NA	405.86		0.0	*
1Q24		1/4/2024	NE	38.46	NA	NA	NA	404.28		0.0	*
P-5L											
2Q23	444.01	4/4/2023	NE	34.71	NA	NA	NA	409.30	303.61-301.61 (140.40-142.40)	0.0	*
3Q23		7/7/2023	NE	35.75	NA	NA	NA	408.26		0.0	*
4Q23		10/3/2023	NE	37.12	NA	NA	NA	406.89		0.0	*
1Q24		1/4/2024	NE	38.57	NA	NA	NA	405.44		0.0	*
P-5U											
2Q23	444.42	4/4/2023	NE	35.91	NA	NA	NA	408.51	313.79-311.79 (130.63-132.63)	0.0	*
3Q23		7/7/2023	NE	36.85	NA	NA	NA	407.57		0.0	*
4Q23		10/3/2023	NE	38.22	NA	NA	NA	406.20		0.0	*
1Q24		1/4/2024	NE	39.94	NA	NA	NA	404.48		0.0	*
P-6U											
2Q23	443.63	4/4/2023	NE	35.58	NA	NA	NA	408.05	363.13-361.13 (80.50-82.50)	0.0	*
3Q23		7/6/2023	NE	36.46	NA	NA	NA	407.17		0.0	*
4Q23		10/3/2023	NE	37.56	NA	NA	NA	406.07		0.0	*
1Q24		1/4/2024	NE	39.11	NA	NA	NA	404.52		0.0	*
P-7U											
2Q23	444.08	4/4/2023	NE	35.86	NA	NA	NA	408.22	383.00-381.00 (61.08-63.08)	0.0	*
3Q23		7/7/2023	NE	36.70	NA	NA	NA	407.38		0.0	*
4Q23		10/3/2023	NE	37.83	NA	NA	NA	406.25		0.0	*
1Q24		1/4/2024	NE	39.32	NA	NA	NA	404.76		0.0	*
P-8U											
2Q23	442.07	4/4/2023	NE	36.15	NA	NA	NA	405.92	382.72 - 380.72 (59.35 - 61.35)	0.0	*
3Q23		7/7/2023	NE	36.75	NA	NA	NA	405.32		0.0	*
4Q23		10/3/2023	NE	37.71	NA	NA	NA	404.36		0.0	*
1Q24		1/2/2024	NE	39.04	NA	NA	NA	403.03		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-9U											
2Q23	445.20	4/4/2023	NE	40.98	NA	NA	NA	404.22	344.61-342.61 (100.59-102.59)	0.0	*
3Q23		7/7/2023	NE	41.42	NA	NA	NA	403.78		0.0	*
4Q23		10/3/2023	NE	42.19	NA	NA	NA	403.01		0.0	*
1Q24		1/2/2024	NE	43.68	NA	NA	NA	401.52		0.0	*
P-11L											
2Q23	442.76	4/4/2023	NE	36.76	NA	NA	NA	406.00	332.55-330.55 (110.21-112.21)	0.0	*
3Q23		7/6/2023	NE	37.50	NA	NA	NA	405.26		0.0	*
4Q23		10/3/2023	NE	38.56	NA	NA	NA	404.20		0.0	*
1Q24		1/4/2024	NE	40.10	NA	NA	NA	402.66		0.0	*
P-11U											
2Q23	443.38	4/4/2023	NE	37.34	NA	NA	NA	406.04	343.46-341.46 (99.92-101.92)	0.0	*
3Q23		7/6/2023	NE	38.13	NA	NA	NA	405.25		0.0	*
4Q23		10/3/2023	NE	39.17	NA	NA	NA	404.21		0.0	*
1Q24		1/4/2024	NE	40.74	NA	NA	NA	402.64		0.0	*
P-14											
2Q23	443.01	4/4/2023	NE	33.04	NA	NA	NA	409.97	395.54-385.54 (47.47-57.47)	0.0	*
3Q23		7/7/2023	NE	34.50	NA	NA	NA	408.51		0.0	*
4Q23		10/3/2023	NE	35.85	NA	NA	NA	407.16		4.1	*
1Q24		1/4/2024	NE	37.39	NA	NA	NA	405.62		0.0	*
P-15											
2Q23	443.88	4/4/2023	NE	35.38	NA	NA	NA	408.50	398.43-388.43 (45.45-55.45)	0.0	*
3Q23		7/6/2023	NE	36.30	NA	NA	NA	407.58		0.0	*
4Q23		10/3/2023	NE	37.52	NA	NA	NA	406.36		0.0	*
1Q24		1/4/2024	NE	39.04	NA	NA	NA	404.84		0.0	*
P-16											
2Q23	442.84	4/4/2023	NE	34.49	NA	NA	NA	408.35	397.10-387.10 (45.74-55.74)	0.0	*
3Q23		7/6/2023	NE	35.36	NA	NA	NA	407.48		0.0	*
4Q23		10/3/2023	NE	36.50	NA	NA	NA	406.34		0.0	*
1Q24		1/4/2024	NE	38.03	NA	NA	NA	404.81		0.0	*
P-43											
2Q23	444.62	4/4/2023	NE	38.20	NA	NA	NA	406.42	381.06-371.06 (63.56-73.56)	0.0	*
3Q23		7/6/2023	NE	39.00	NA	NA	NA	405.62		0.0	*
4Q23		10/3/2023	NE	40.73	NA	NA	NA	403.89		0.0	*
1Q24		1/4/2024	NE	41.60	NA	NA	NA	403.02		0.0	*
P-53											
2Q23	446.57	4/3/2023	NE	42.16	NA	NA	NA	404.41	406.26-381.26 (40.31-65.31)	0.0	
3Q23		7/6/2023	NE	42.50	NA	NA	NA	404.07		0.0	
4Q23		10/3/2023	NE	43.10	NA	NA	NA	403.47		0.0	
1Q24		1/2/2024	NE	43.97	NA	NA	NA	402.60		0.0	
P-54											
2Q23	442.52	4/3/2023	NE	40.13	NA	NA	NA	402.39	404.52-379.52 (38.00-63.00)	0.0	
3Q23		7/5/2023	NE	39.90	NA	NA	NA	402.62		0.0	
4Q23		10/2/2023	NE	40.60	NA	NA	NA	401.92		0.0	
1Q24		1/5/2024	NE	41.60	NA	NA	NA	400.92		0.0	
P-55R											
2Q23	444.01	4/3/2023	40.00	40.11	403.90	404.01	0.11	403.99	403.58-393.58 (40.43-50.43)	104.6	*
3Q23		7/5/2023	39.91	39.92	404.09	404.10	0.01	404.10		74.4	*
4Q23		10/2/2023	40.35	40.37	403.64	403.66	0.02	403.66		119.6	*
1Q24		1/2/2024	41.11	41.13	402.88	402.90	0.02	402.90		114.7	
P-56											
2Q23	446.32	4/3/2023	NE	44.46	NA	NA	NA	401.86	405.50-380.50 (40.82-65.82)	5.7	
3Q23		7/5/2023	NE	44.20	NA	NA	NA	402.12		0.0	
4Q23		10/2/2023	NE	44.54	NA	NA	NA	401.78		13.8	
1Q24		1/2/2024	NE	45.87	NA	NA	NA	400.45		5.2	
P-57											
2Q23	447.15	4/3/2023	NE	45.22	NA	NA	NA	401.93	402.96-392.96 (44.19-54.19)	22.9	
3Q23		7/5/2023	NE	44.92	NA	NA	NA	402.23		8.1	
4Q23		10/2/2023	NE	45.43	NA	NA	NA	401.72		0.5	
1Q24		1/2/2024	NE	46.53	NA	NA	NA	400.62		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-58											
2Q23	445.16	4/3/2023	NE	43.06	NA	NA	NA	402.10	404.95-379.95 (40.21-65.21)	3.0	
3Q23		7/5/2023	NE	42.82	NA	NA	NA	402.34		0.0	
4Q23		10/2/2023	NE	43.42	NA	NA	NA	401.74		0.0	
1Q24		1/2/2024	NE	44.42	NA	NA	NA	400.74		0.0	
P-59											
2Q23	447.07	4/3/2023	NE	45.18	NA	NA	NA	401.89	399.16-374.16 (47.91-72.91)	201.2	*
3Q23		7/5/2023	NE	44.91	NA	NA	NA	402.16		161.8	*
4Q23		10/2/2023	NE	45.22	NA	NA	NA	401.85		205.6	*
1Q24		1/2/2024	NE	46.53	NA	NA	NA	400.54		302.5	*
P-60											
2Q23	446.88	4/3/2023	NE	44.72	NA	NA	NA	402.16	402.23-382.23 (44.65-64.65)	0.1	
3Q23		7/5/2023	NE	44.60	NA	NA	NA	402.28		0.0	*
4Q23		10/2/2023	NE	44.97	NA	NA	NA	401.91		0.4	
1Q24		1/2/2024	NE	46.13	NA	NA	NA	400.75		20.8	
P-61											
2Q23	444.66	4/3/2023	NE	43.40	NA	NA	NA	401.26	398.99-373.99 (45.68-70.68)	9.9	*
3Q23		7/5/2023	NE	43.19	NA	NA	NA	401.47		19.5	*
4Q23		10/3/2023	NE	43.22	NA	NA	NA	401.44		24.5	*
1Q24		1/3/2024	44.25	46.50	398.16	400.41	2.25	399.96		392.8	*
P-62											
2Q23	442.60	4/3/2023	40.78	41.81	400.79	401.82	1.03	401.61	401.13-376.13 (41.47-66.47)	330.0	*
3Q23		7/6/2023	NE	41.60	NA	NA	NA	401.00		0.0	
4Q23		10/2/2023	40.95	42.01	400.59	401.65	1.06	401.44		0.0	
1Q24		1/3/2024	42.06	43.34	399.26	400.54	1.28	400.28		3.8	
P-63											
2Q23	446.06	4/4/2023	44.59	44.61	401.45	401.47	0.02	401.47	398.77-373.77 (47.29-72.29)	78.9	*
3Q23		7/6/2023	NE	45.10	NA	NA	NA	400.96		1.4	*
4Q23		10/2/2023	45.41	45.56	400.50	400.65	0.15	400.62		0.0	*
1Q24		1/3/2024	NE	46.19	NA	NA	NA	399.87		45.2	*
P-64											
2Q23	446.78	4/4/2023	45.75	45.82	400.96	401.03	0.07	401.02	399.55-374.55 (47.23-72.23)	184.3	*
3Q23		7/6/2023	44.09	44.12	402.66	402.69	0.03	402.68		72.0	* Results anomalous
4Q23		10/3/2023	46.71	46.85	399.93	400.07	0.14	400.04		264.4	*
1Q24		1/3/2024	47.34	47.45	399.33	399.44	0.11	399.42		420.5	
P-65											
2Q23	444.77	4/3/2023	43.42	43.43	401.34	401.35	0.01	401.35	397.75-372.75 (47.02-72.02)	4.4	*
3Q23		7/5/2023	NE	43.32	NA	NA	NA	401.45		3.4	*
4Q23		10/2/2023	44.00	44.06	400.71	400.77	0.06	400.76		0.0	*
1Q24		1/3/2024	NE	44.82	NA	NA	NA	399.95		38.2	*
P-66											
2Q23	437.00	4/6/2023	34.79	36.21	400.79	402.21	1.42	401.93	402.28-377.28 (34.72-59.72)	58.9	
3Q23		7/7/2023	34.52	35.02	401.98	402.48	0.50	402.38		21.3	*
4Q23		10/4/2023	34.91	36.35	400.65	402.09	1.44	401.80		0.0	
1Q24		1/4/2024	35.97	37.00	400.00	401.03	1.03	400.82		197.7	
P-67											
2Q23	444.30	4/5/2023	41.49	41.50	402.80	402.81	0.01	402.81	402.33-377.33 (41.98-66.98)	0.7	*
3Q23		7/7/2023	41.07	41.11	403.19	403.23	0.04	403.22		0.7	*
4Q23		10/4/2023	41.75	41.76	402.54	402.55	0.01	402.55		0.0	*
1Q24		1/4/2024	NE	42.73	NA	NA	NA	401.57		0.9	
P-68											
2Q23	445.38	4/3/2023	43.25	43.36	402.02	402.13	0.11	402.11	401.62-376.62 (43.76-68.76)	146.2	*
3Q23		7/5/2023	43.17	43.19	402.19	402.21	0.02	402.21		114.3	*
4Q23		10/2/2023	43.41	43.47	401.91	401.97	0.06	401.96		0.0	*
1Q24		1/3/2024	44.57	44.64	400.74	400.81	0.07	400.80		202.7	
P-69											
2Q23	443.77	4/3/2023	NE	42.03	NA	NA	NA	401.74	402.95-377.95 (40.82-65.82)	0.0	
3Q23		7/5/2023	NE	42.87	NA	NA	NA	400.90		0.0	
4Q23		10/2/2023	NE	42.06	NA	NA	NA	401.71		0.0	
1Q24		1/3/2024	NE	43.56	NA	NA	NA	400.21		0.0	

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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-70											
2Q23	443.11	4/3/2023	41.50	41.51	401.60	401.61	0.01	401.61	398.44-373.44 (44.67-69.67)	152.9	*
3Q23		7/5/2023	41.00	41.40	401.71	402.11	0.40	402.03		55.7	*
4Q23		10/3/2023	NE	41.53	NA	NA	NA	401.58		171.8	*
1Q24		1/3/2024	NE	42.82	NA	NA	NA	400.29		160.1	*
P-71											
2Q23	445.09	4/3/2023	NE	42.43	NA	NA	NA	402.66	402.48-377.48 (42.61-67.61)	44.6	*
3Q23		7/5/2023	NE	40.91	NA	NA	NA	404.18		46.9	*
4Q23		10/2/2023	NE	43.14	NA	NA	NA	401.95		0.0	
1Q24		1/3/2024	NE	44.17	NA	NA	NA	400.92		112.5	
P-72											
2Q23	444.70	4/3/2023	NE	42.33	NA	NA	NA	402.37	398.93-373.93 (45.77-70.77)	2.4	*
3Q23		7/5/2023	NE	42.20	NA	NA	NA	402.50		0.1	*
4Q23		10/2/2023	NE	42.73	NA	NA	NA	401.97		0.0	*
1Q24		1/3/2024	NE	43.71	NA	NA	NA	400.99		82.6	*
P-73											
2Q23	444.02	4/3/2023	NE	42.41	NA	NA	NA	401.61	402.43-377.43 (41.60-66.60)	0.0	
3Q23		7/6/2023	NE	42.25	NA	NA	NA	401.77		25.3	
4Q23		10/3/2023	NE	42.56	NA	NA	NA	401.46		0.0	
1Q24		1/3/2024	NE	43.56	NA	NA	NA	400.46		0.0	
P-74											
2Q23	442.93	4/3/2023	NE	41.16	NA	NA	NA	401.77	399.10-374.10 (43.83-68.83)	0.0	*
3Q23		7/5/2023	NE	40.91	NA	NA	NA	402.02		10.6	*
4Q23		10/2/2023	NE	41.11	NA	NA	NA	401.82		0.0	*
1Q24		1/3/2024	NE	42.44	NA	NA	NA	400.49		0.0	*
P-75											
2Q23	446.68	4/6/2023	NE	44.98	NA	NA	NA	401.70	403.55-378.55 (43.13-68.13)	0.0	
3Q23		7/7/2023	NE	44.65	NA	NA	NA	402.03		0.2	
4Q23		10/4/2023	NE	44.95	NA	NA	NA	401.73		0.0	
1Q24		1/4/2024	NE	45.93	NA	NA	NA	400.75		0.7	
P-82A											
2Q23	434.94	4/4/2023	NE	28.95	NA	NA	NA	405.99	401.73-386.73 (33.21-48.21)	0.0	*
3Q23		7/19/2023	NE	29.28	NA	NA	NA	405.66		0.0	*
4Q23		10/3/2023	NE	30.05	NA	NA	NA	404.89		0.0	*
1Q24		1/4/2024	NE	31.02	NA	NA	NA	403.92		0.0	*
P-82B											
2Q23	434.68	4/4/2023	NE	28.66	NA	NA	NA	406.02	371.88-369.88 (62.80-64.80)	0.0	*
3Q23		7/19/2023	NE	29.01	NA	NA	NA	405.67		0.0	*
4Q23		10/3/2023	NE	29.76	NA	NA	NA	404.92		0.0	*
1Q24		1/4/2024	NE	30.74	NA	NA	NA	403.94		0.0	*
P-82C											
2Q23	434.41	4/4/2023	NE	28.42	NA	NA	NA	405.99	351.64-349.64 (82.77-84.77)	0.0	*
3Q23		7/19/2023	NE	28.71	NA	NA	NA	405.70		0.0	*
4Q23		10/3/2023	NE	29.48	NA	NA	NA	404.93		0.0	*
1Q24		1/4/2024	NE	30.45	NA	NA	NA	403.96		0.0	*
P-82D											
2Q23	435.09	4/4/2023	NE	29.16	NA	NA	NA	405.93	323.55-321.55 (111.54-113.54)	0.0	*
3Q23		7/19/2023	NE	29.50	NA	NA	NA	405.59		0.0	*
4Q23		10/3/2023	NE	30.25	NA	NA	NA	404.84		0.0	*
1Q24		1/4/2024	NE	31.21	NA	NA	NA	403.88		0.0	*
P-83A											
2Q23	445.54	4/4/2023	NE	42.58	NA	NA	NA	402.96	398.14-383.14 (47.40-62.40)	0.0	*
3Q23		7/6/2023	NE	43.46	NA	NA	NA	402.08		0.0	*
4Q23		10/3/2023	NE	43.94	NA	NA	NA	401.60		0.0	*
1Q24		1/2/2024	NE	44.82	NA	NA	NA	400.72		0.0	*
P-83B											
2Q23	445.77	4/4/2023	NE	42.93	NA	NA	NA	402.84	371.97-369.97 (73.80-75.80)	0.0	*
3Q23		7/6/2023	NE	43.73	NA	NA	NA	402.04		0.0	*
4Q23		10/3/2023	NE	44.20	NA	NA	NA	401.57		0.0	*
1Q24		1/2/2024	NE	44.90	NA	NA	NA	400.87		0.0	*

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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-83C											
2Q23	445.95	4/4/2023	NE	42.97	NA	NA	NA	402.98	353.56-351.56 (92.39-94.39)	0.0	*
3Q23		7/6/2023	NE	43.87	NA	NA	NA	402.08		0.0	*
4Q23		10/3/2023	NE	44.35	NA	NA	NA	401.60		0.0	*
1Q24		1/2/2024	NE	45.20	NA	NA	NA	400.75		0.0	*
P-83D											
2Q23	445.86	4/4/2023	NE	42.94	NA	NA	NA	402.92	312.06-310.06 (133.80-135.80)	0.0	*
3Q23		7/6/2023	NE	43.85	NA	NA	NA	402.01		0.0	*
4Q23		10/3/2023	NE	45.30	NA	NA	NA	400.56		0.0	*
1Q24		1/2/2024	NE	44.98	NA	NA	NA	400.88		0.0	*
P-84A											
2Q23	446.63	4/4/2023	NE	43.03	NA	NA	NA	403.60	397.71-382.71 (48.92-63.92)	0.0	*
3Q23		7/7/2023	NE	43.51	NA	NA	NA	403.12		0.0	*
4Q23		10/3/2023	NE	44.44	NA	NA	NA	402.19		0.0	*
1Q24		1/3/2024	NE	44.84	NA	NA	NA	401.79		0.0	*
P-84B											
2Q23	446.35	4/4/2023	NE	42.76	NA	NA	NA	403.59	372.85-370.85 (73.50-75.50)	0.0	*
3Q23		7/7/2023	NE	43.23	NA	NA	NA	403.12		0.0	*
4Q23		10/3/2023	NE	43.78	NA	NA	NA	402.57		0.0	*
1Q24		1/3/2024	NE	44.57	NA	NA	NA	401.78		0.0	*
P-84C											
2Q23	446.37	4/4/2023	NE	42.50	NA	NA	NA	403.87	352.32-350.32 (94.05-96.05)	0.0	*
3Q23		7/7/2023	NE	43.26	NA	NA	NA	403.11		0.0	*
4Q23		10/3/2023	NE	43.78	NA	NA	NA	402.59		0.0	*
1Q24		1/3/2024	NE	44.57	NA	NA	NA	401.80		0.0	*
P-84D											
2Q23	446.38	4/4/2023	NE	43.76	NA	NA	NA	402.62	325.55-323.55 (120.83-122.83)	0.0	*
3Q23		7/7/2023	NE	43.24	NA	NA	NA	403.14		0.0	*
4Q23		10/3/2023	NE	43.78	NA	NA	NA	402.60		0.0	*
1Q24		1/3/2024	NE	44.57	NA	NA	NA	401.81		0.0	*
P-88A											
2Q23	443.27	4/4/2023	NE	34.82	NA	NA	NA	408.45	404.87-389.87 (38.40-53.40)	0.0	*
3Q23		7/7/2023	NE	35.08	NA	NA	NA	408.19		0.0	*
4Q23		10/3/2023	NE	35.86	NA	NA	NA	407.41		0.0	*
1Q24		1/4/2024	NE	36.97	NA	NA	NA	406.30		0.0	*
P-88B											
2Q23	443.35	4/4/2023	NE	34.89	NA	NA	NA	408.46	371.70-369.70 (71.65-73.65)	0.0	*
3Q23		7/7/2023	NE	35.11	NA	NA	NA	408.24		0.0	*
4Q23		10/3/2023	NE	35.93	NA	NA	NA	407.42		0.0	*
1Q24		1/4/2024	NE	37.03	NA	NA	NA	406.32		0.0	*
P-88C											
2Q23	443.31	4/4/2023	NE	34.85	NA	NA	NA	408.46	351.01-349.01 (92.30-94.30)	0.0	*
3Q23		7/7/2023	NE	35.09	NA	NA	NA	408.22		0.0	*
4Q23		10/3/2023	NE	35.88	NA	NA	NA	407.43		0.0	*
1Q24		1/4/2024	NE	36.99	NA	NA	NA	406.32		0.0	*
P-88D											
2Q23	443.38	4/4/2023	NE	35.95	NA	NA	NA	407.43	331.21-329.21 (112.17-114.17)	0.0	*
3Q23		7/7/2023	NE	35.20	NA	NA	NA	408.18		0.0	*
4Q23		10/3/2023	NE	35.97	NA	NA	NA	407.41		0.0	*
1Q24		1/4/2024	NE	37.10	NA	NA	NA	406.28		0.0	*
P-89B											
2Q23	447.64	4/4/2023	NE	43.68	NA	NA	NA	403.96	370.28-368.28 (77.36-79.36)	0.0	*
3Q23		7/6/2023	NE	44.16	NA	NA	NA	403.48		0.0	*
4Q23		10/3/2023	NE	44.98	NA	NA	NA	402.66		0.6	*
1Q24		1/3/2024	NE	46.47	NA	NA	NA	401.17		0.0	*
P-89C											
2Q23	447.96	4/4/2023	NE	44.05	NA	NA	NA	403.91	351.56-349.56 (96.40-98.40)	0.0	*
3Q23		7/6/2023	NE	44.50	NA	NA	NA	403.46		0.0	*
4Q23		10/3/2023	NE	45.34	NA	NA	NA	402.62		103.6	*
1Q24		1/3/2024	NE	46.86	NA	NA	NA	401.10		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-89D											
2Q23	447.83	4/4/2023	NE	44.13	NA	NA	NA	403.70	309.33-307.33 (138.50-140.50)	0.0	*
3Q23		7/6/2023	NE	44.60	NA	NA	NA	403.23		0.0	*
4Q23		10/3/2023	NE	45.36	NA	NA	NA	402.47		0.0	*
1Q24		1/3/2024	NE	46.88	NA	NA	NA	400.95		0.0	*
P-91A											
2Q23	447.43	4/3/2023	46.84	46.85	400.58	400.59	0.01	400.59	395.92-380.92 (51.52-66.52)	9.7	*
3Q23		7/6/2023	NE	48.30	NA	NA	NA	399.13		8.4	*
4Q23		10/3/2023	47.99	48.06	399.37	399.44	0.07	399.43		3.2	*
1Q24		1/2/2024	48.75	48.76	398.67	398.68	0.01	398.68		1.7	*
P-91B											
2Q23	447.47	4/3/2023	NE	46.91	NA	NA	NA	400.56	372.78-370.78 (74.69-76.69)	1.2	*
3Q23		7/6/2023	NE	48.45	NA	NA	NA	399.02		0.1	*
4Q23		10/3/2023	NE	48.02	NA	NA	NA	399.45		3.3	*
1Q24		1/2/2024	NE	48.78	NA	NA	NA	398.69		0.0	*
P-91C											
2Q23	447.27	4/3/2023	NE	46.68	NA	NA	NA	400.59	352.54-350.54 (94.73-96.73)	0.2	*
3Q23		7/6/2023	NE	48.20	NA	NA	NA	399.07		0.0	*
4Q23		10/3/2023	NE	47.76	NA	NA	NA	399.51		0.0	*
1Q24		1/2/2024	NE	48.54	NA	NA	NA	398.73		0.0	*
P-91D											
2Q23	447.26	4/3/2023	NE	46.69	NA	NA	NA	400.57	278.94-276.94 (168.32-170.32)	0.1	*
3Q23		7/6/2023	NE	48.20	NA	NA	NA	399.06		0.0	*
4Q23		10/3/2023	NE	47.76	NA	NA	NA	399.50		2.2	*
1Q24		1/2/2024	NE	48.81	NA	NA	NA	398.45		8.2	*
P-92A											
2Q23	446.39	4/3/2023	NE	45.44	NA	NA	NA	400.95	398.82-383.82 (47.57-62.57)	108.8	*
3Q23		7/6/2023	45.61	45.76	400.63	400.78	0.15	400.75		55.8	*
4Q23		10/2/2023	NE	46.16	NA	NA	NA	400.23		0.0	*
1Q24		1/3/2024	46.84	46.87	399.52	399.55	0.03	399.54		132.9	*
P-92B											
2Q23	446.33	4/3/2023	NE	45.37	NA	NA	NA	400.96	371.92-369.92 (74.41-76.41)	0.4	*
3Q23		7/6/2023	NE	45.54	NA	NA	NA	400.79		0.0	*
4Q23		10/2/2023	NE	46.10	NA	NA	NA	400.23		0.0	*
1Q24		1/3/2024	NE	46.81	NA	NA	NA	399.52		0.0	*
P-92C											
2Q23	446.34	4/3/2023	NE	45.38	NA	NA	NA	400.96	353.38-348.38 (92.96-97.96)	2.0	*
3Q23		7/6/2023	NE	45.52	NA	NA	NA	400.82		1.5	*
4Q23		10/2/2023	NE	46.12	NA	NA	NA	400.22		0.0	*
1Q24		1/3/2024	NE	46.79	NA	NA	NA	399.55		0.0	*
P-92D											
2Q23	446.15	4/3/2023	NE	45.26	NA	NA	NA	400.89	305.15-303.15 (141.00-143.00)	0.6	*
3Q23		7/6/2023	NE	45.42	NA	NA	NA	400.73		0.0	*
4Q23		10/2/2023	NE	45.99	NA	NA	NA	400.16		0.0	*
1Q24		1/3/2024	NE	45.68	NA	NA	NA	400.47		0.0	*
P-93A											
2Q23	445.37	4/3/2023	NE	43.38	NA	NA	NA	401.99	402.30-392.30 (43.07-53.07)	0.0	
3Q23		7/5/2023	NE	43.10	NA	NA	NA	402.27		0.0	
4Q23		10/2/2023	NE	43.64	NA	NA	NA	401.73		0.0	
1Q24		1/2/2024	NE	44.71	NA	NA	NA	400.66		0.4	
P-93B											
2Q23	446.70	4/3/2023	NE	44.74	NA	NA	NA	401.96	371.92-369.92 (74.78-76.78)	0.0	*
3Q23		7/5/2023	NE	44.43	NA	NA	NA	402.27		0.0	*
4Q23		10/2/2023	NE	44.98	NA	NA	NA	401.72		0.0	*
1Q24		1/2/2024	NE	46.07	NA	NA	NA	400.63		0.0	*
P-93C											
2Q23	446.55	4/3/2023	NE	44.57	NA	NA	NA	401.98	353.67-348.67 (92.88-97.88)	0.0	*
3Q23		7/5/2023	NE	44.30	NA	NA	NA	402.25		0.0	*
4Q23		10/2/2023	NE	44.83	NA	NA	NA	401.72		0.0	*
1Q24		1/2/2024	NE	45.90	NA	NA	NA	400.65		99.2	*

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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-93D											
2Q23	446.97	4/3/2023	NE	44.92	NA	NA	NA	402.05	321.31 - 319.31 (125.66 - 127.66)	0.0	*
3Q23		7/5/2023	NE	44.64	NA	NA	NA	402.33		0.0	*
4Q23		10/2/2023	NE	45.21	NA	NA	NA	401.76		0.0	*
1Q24		1/2/2024	NE	46.26	NA	NA	NA	400.71		0.0	*
P-94											
2Q23	445.04	4/4/2023	NE	39.82	NA	NA	NA	405.22	398.80-383.80 (46.24-61.24)	0.0	*
3Q23		7/6/2023	NE	40.34	NA	NA	NA	404.70		0.0	*
4Q23		10/3/2023	NE	41.17	NA	NA	NA	403.87		0.0	*
1Q24		1/2/2024	NE	42.39	NA	NA	NA	402.65		0.0	*
P-95											
2Q23	443.95	4/4/2023	NE	32.81	NA	NA	NA	411.14	407.43-392.43 (36.52-51.52)	0.0	*
3Q23		7/7/2023	NE	33.21	NA	NA	NA	410.74		0.0	*
4Q23		10/3/2023	NE	34.04	NA	NA	NA	409.91		0.0	*
1Q24		1/4/2024	NE	35.25	NA	NA	NA	408.70		0.0	*
P-102											
2Q23	445.14	4/4/2023	NE	36.41	NA	NA	NA	408.73	402.39-382.39 (42.75-62.75)	3.5	*
3Q23		7/7/2023	NE	37.07	NA	NA	NA	408.07		19.1	*
4Q23		10/3/2023	NE	38.18	NA	NA	NA	406.96		2.9	*
1Q24		1/4/2024	NE	39.48	NA	NA	NA	405.66		2.3	*
P-114R											
2Q23	429.48	4/4/2023	NE	26.72	NA	NA	NA	402.76	406.47-396.47 (23.01-33.01)	21.8	
3Q23		7/6/2023	NE	26.50	NA	NA	NA	402.98		0.0	
4Q23		10/3/2023	NE	27.65	NA	NA	NA	401.83		0.0	
1Q24		1/3/2024	NE	28.45	NA	NA	NA	401.03		37.0	
P-115											
2Q23	433.54	4/4/2023	NE	30.65	NA	NA	NA	402.89	401.24-381.24 (32.30-52.30)	0.1	*
3Q23		7/6/2023	NE	30.61	NA	NA	NA	402.93		0.0	*
4Q23		10/3/2023	NE	31.71	NA	NA	NA	401.83		0.0	*
1Q24		1/4/2024	NE	32.65	NA	NA	NA	400.89		0.0	
P-116											
2Q23	436.79	4/4/2023	NE	34.05	NA	NA	NA	402.74	399.35-379.35 (37.44-57.44)	0.0	*
3Q23		7/6/2023	NE	34.00	NA	NA	NA	402.79		0.1	*
4Q23		10/3/2023	NE	35.16	NA	NA	NA	401.63		0.0	*
1Q24		1/4/2024	NE	36.09	NA	NA	NA	400.70		0.0	*
P-117											
2Q23	432.87	4/4/2023	NE	30.25	NA	NA	NA	402.62	399.94-379.94 (32.93-52.93)	0.0	*
3Q23		7/6/2023	NE	30.22	NA	NA	NA	402.65		0.0	*
4Q23		10/3/2023	NE	31.38	NA	NA	NA	401.49		0.0	*
1Q24		1/3/2024	NE	32.15	NA	NA	NA	400.72		0.0	*
P-118											
2Q23	431.48	4/4/2023	NE	29.07	NA	NA	NA	402.41	400.36-384.43 (31.12-47.05)	0.0	*
3Q23		7/6/2023	NE	29.10	NA	NA	NA	402.38		0.2	*
4Q23		10/3/2023	NE	30.41	NA	NA	NA	401.07		0.0	*
1Q24		1/4/2024	NE	31.33	NA	NA	NA	400.15		0.0	
P-119											
2Q23	432.11	4/4/2023	NE	29.05	NA	NA	NA	403.06	401.44-385.51 (30.67-46.60)	0.0	*
3Q23		7/6/2023	NE	28.90	NA	NA	NA	403.21		0.0	*
4Q23		10/3/2023	NE	29.85	NA	NA	NA	402.26		0.0	*
1Q24		1/4/2024	NE	30.79	NA	NA	NA	401.32		0.0	
P-120											
2Q23	433.00	4/4/2023	NE	29.38	NA	NA	NA	403.62	401.62-385.69 (31.38-47.31)	0.0	*
3Q23		7/6/2023	NE	29.31	NA	NA	NA	403.69		0.0	*
4Q23		10/3/2023	NE	30.38	NA	NA	NA	402.62		0.0	*
1Q24		1/4/2024	NE	31.32	NA	NA	NA	401.68		0.0	*
P-129											
2Q23	432.66	4/4/2023	NE	30.91	NA	NA	NA	401.75	400.69-384.76 (31.97-47.90)	0.0	*
3Q23		7/6/2023	NE	31.41	NA	NA	NA	401.25		0.0	*
4Q23		10/3/2023	NE	32.78	NA	NA	NA	399.88		1.3	
1Q24		1/3/2024	NE	33.41	NA	NA	NA	399.25		5.7	

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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
ROST-3-MW											
2Q23	442.52	4/3/2023	NE	40.11	NA	NA	NA	402.41	404.71-394.71 (37.81-47.81)	0.0	
3Q23		7/5/2023	NE	40.00	NA	NA	NA	402.52		0.0	
4Q23		10/2/2023	NE	40.44	NA	NA	NA	402.08		0.0	
1Q24		1/2/2024	NE	41.47	NA	NA	NA	401.05		0.0	
ROST-4-PZ											
2Q23	442.15	4/3/2023	NE	39.30	NA	NA	NA	402.85	407.22-397.22 (34.93-44.93)	0.0	
3Q23		7/5/2023	NE	39.10	NA	NA	NA	403.05		0.0	
4Q23		10/2/2023	NE	39.48	NA	NA	NA	402.67		0.0	
1Q24		1/2/2024	NE	40.10	NA	NA	NA	402.05		0.0	
ROST-4-PZ(A)											
2Q23	442.15	4/3/2023	NE	38.75	NA	NA	NA	403.40	407.38-397.38 (34.77-44.77)	0.0	
3Q23		7/5/2023	NE	38.56	NA	NA	NA	403.59		0.0	
4Q23		10/2/2023	NE	39.06	NA	NA	NA	403.09		0.0	
1Q24		1/2/2024	NE	40.34	NA	NA	NA	401.81		0.0	
ROST-4-PZ(B)											
2Q23	442.40	4/3/2023	NE	39.34	NA	NA	NA	403.06	407.35-397.35 (35.05-45.05)	0.0	
3Q23		7/5/2023	NE	39.15	NA	NA	NA	403.25		0.0	
4Q23		10/2/2023	NE	39.50	NA	NA	NA	402.90		0.0	
1Q24		1/2/2024	NE	40.35	NA	NA	NA	402.05		0.0	
ROST-4-PZ(C)											
2Q23	442.97	4/3/2023	NE	40.29	NA	NA	NA	402.68	408.02-398.02 (34.95-44.95)	0.0	
3Q23		7/5/2023	NE	40.10	NA	NA	NA	402.87		0.0	
4Q23		10/2/2023	NE	39.55	NA	NA	NA	403.42		0.0	
1Q24		1/2/2024	NE	41.36	NA	NA	NA	401.61		0.0	
ROST-4-PZ(D)											
2Q23	442.92	4/3/2023	NE	40.07	NA	NA	NA	402.85	407.95-397.95 (34.97-44.97)	0.0	
3Q23		7/5/2023	NE	40.05	NA	NA	NA	402.87		0.0	
4Q23		10/2/2023	NE	40.30	NA	NA	NA	402.62		0.0	
1Q24		1/2/2024	NE	41.10	NA	NA	NA	401.82		0.0	
ROST-4-PZ(E)											
2Q23	441.98	4/3/2023	NE	39.14	NA	NA	NA	402.84	407.23-397.23 (34.75-44.75)	0.0	
3Q23		7/5/2023	NE	38.96	NA	NA	NA	403.02		0.0	
4Q23		10/2/2023	NE	39.29	NA	NA	NA	402.69		0.0	
1Q24		1/2/2024	NE	39.80	NA	NA	NA	402.18		0.0	
ROST-4-PZ(F)											
2Q23	442.12	4/3/2023	NE	39.23	NA	NA	NA	402.89	407.59-397.59 (34.53-44.53)	0.0	
3Q23		7/5/2023	NE	39.07	NA	NA	NA	403.05		0.0	
4Q23		10/2/2023	NE	39.35	NA	NA	NA	402.77		0.0	
1Q24		1/2/2024	NE	39.80	NA	NA	NA	402.32		0.0	
ROST-4-PZ(G)											
2Q23	442.20	4/3/2023	NE	40.00	NA	NA	NA	402.20	407.92-397.92 (34.28-44.28)	0.0	
3Q23		7/5/2023	NE	39.82	NA	NA	NA	402.38		0.0	
4Q23		10/2/2023	NE	40.26	NA	NA	NA	401.94		0.0	
1Q24		1/2/2024	NE	41.35	NA	NA	NA	400.85		0.0	
S-1											
2Q23	444.06	4/3/2023	42.34	42.36	401.70	401.72	0.02	401.72	444.06 - 444.06 (0.00 - 0.00)	172.6	
3Q23		7/5/2023	42.18	42.20	401.86	401.88	0.02	401.88		102.3	
4Q23		10/2/2023	42.67	42.71	401.35	401.39	0.04	401.38		0.0	
1Q24		1/3/2024	43.66	43.68	400.38	400.40	0.02	400.40		274.6	
T-1											
2Q23	445.61	4/3/2023	NE	42.80	NA	NA	NA	402.81	398.61-388.61 (47.00-57.00)	0.0	*
3Q23		7/5/2023	NE	42.90	NA	NA	NA	402.71		0.0	*
4Q23		10/2/2023	NE	43.33	NA	NA	NA	402.28		0.0	*
1Q24		1/2/2024	NE	44.33	NA	NA	NA	401.28		0.0	*
T-2											
2Q23	443.40	4/3/2023	NE	40.91	NA	NA	NA	402.49	392.91-372.76 (50.50-70.65)	0.2	*
3Q23		7/6/2023	NE	41.35	NA	NA	NA	402.05		0.0	*
4Q23		10/2/2023	NE	41.66	NA	NA	NA	401.74		0.0	*
1Q24		1/2/2024	NE	42.49	NA	NA	NA	400.91		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-3											
2Q23	449.21	4/4/2023	NE	47.74	NA	NA	NA	401.47	403.99-388.99 (45.22-60.22)	0.0	
3Q23		7/6/2023	NE	48.60	NA	NA	NA	400.61		0.0	
4Q23		10/3/2023	NE	48.85	NA	NA	NA	400.36		0.0	
1Q24		1/2/2024	NE	49.59	NA	NA	NA	399.62		0.0	
T-4											
2Q23	446.82	4/4/2023	NE	46.88	NA	NA	NA	399.94	396.80-381.80 (50.02-65.02)	0.0	*
3Q23		7/6/2023	NE	47.45	NA	NA	NA	399.37		0.0	*
4Q23		10/3/2023	NE	48.07	NA	NA	NA	398.75		0.0	*
1Q24		1/2/2024	NE	48.21	NA	NA	NA	398.61		0.0	*
T-5											
2Q23	443.66	4/3/2023	NE	41.65	NA	NA	NA	402.01	395.33-378.78 (48.33-64.88)	0.5	*
3Q23		7/5/2023	NE	41.31	NA	NA	NA	402.35		5.6	*
4Q23		10/2/2023	NE	42.13	NA	NA	NA	401.53		0.0	*
1Q24		1/3/2024	NE	43.01	NA	NA	NA	400.65		54.8	*
T-6											
2Q23	446.78	4/3/2023	NE	44.90	NA	NA	NA	401.88	394.27-380.02 (52.51-66.76)	0.0	*
3Q23		7/5/2023	NE	44.61	NA	NA	NA	402.17		0.0	*
4Q23		10/2/2023	NE	45.07	NA	NA	NA	401.71		2.4	*
1Q24		1/2/2024	NE	46.19	NA	NA	NA	400.59		0.7	*
T-7											
2Q23	444.26	4/5/2023	41.47	41.49	402.77	402.79	0.02	402.79	395.54-380.54 (48.72-63.72)	0.8	*
3Q23		7/7/2023	NE	41.50	NA	NA	NA	402.76		1.3	*
4Q23		10/4/2023	NE	41.73	NA	NA	NA	402.53		3.2	*
1Q24		1/4/2024	NE	42.70	NA	NA	NA	401.56		12.0	*
T-12											
2Q23	444.99	4/3/2023	NE	42.93	NA	NA	NA	402.06	398.16-372.16 (46.83-72.83)	0.0	*
3Q23		7/5/2023	NE	42.74	NA	NA	NA	402.25		0.0	*
4Q23		10/2/2023	NE	43.09	NA	NA	NA	401.90		0.3	*
1Q24		1/2/2024	NE	44.32	NA	NA	NA	400.67		1.7	*
T-13											
2Q23	443.76	4/3/2023	NE	40.76	NA	NA	NA	403.00	399.95-373.95 (43.81-69.81)	0.0	*
3Q23		7/5/2023	NE	40.81	NA	NA	NA	402.95		0.0	*
4Q23		10/2/2023	NE	41.41	NA	NA	NA	402.35		0.0	*
1Q24		1/2/2024	NE	42.31	NA	NA	NA	401.45		0.0	*
T-15											
2Q23	445.35	4/3/2023	NE	42.72	NA	NA	NA	402.63	396.95-370.95 (48.40-74.40)	0.1	*
3Q23		7/6/2023	NE	43.45	NA	NA	NA	401.90		0.0	*
4Q23		10/3/2023	NE	43.79	NA	NA	NA	401.56		0.0	*
1Q24		1/2/2024	NE	44.56	NA	NA	NA	400.79		0.0	*
T-17											
2Q23	446.19	4/4/2023	NE	42.84	NA	NA	NA	403.35	401.72-375.72 (44.47-70.47)	0.0	*
3Q23		7/7/2023	NE	43.35	NA	NA	NA	402.84		0.0	*
4Q23		10/3/2023	NE	44.00	NA	NA	NA	402.19		0.0	*
1Q24		1/2/2024	NE	45.11	NA	NA	NA	401.08		0.0	
T-19											
2Q23	446.99	4/4/2023	NE	47.02	NA	NA	NA	399.97	396.22-370.22 (50.77-76.77)	5.0	*
3Q23		7/6/2023	NE	47.46	NA	NA	NA	399.53		14.8	*
4Q23		10/3/2023	NE	48.06	NA	NA	NA	398.93		92.6	*
1Q24		1/2/2024	NE	48.38	NA	NA	NA	398.61		55.2	*
T-21											
2Q23	444.22	4/4/2023	NE	33.50	NA	NA	NA	410.72	412.26-386.26 (31.96-57.96)	0.0	
3Q23		7/7/2023	NE	33.54	NA	NA	NA	410.68		0.0	
4Q23		10/3/2023	NE	34.42	NA	NA	NA	409.80		0.0	
1Q24		1/4/2024	NE	35.67	NA	NA	NA	408.55		0.0	
T-22											
2Q23	442.37	4/4/2023	NE	35.36	NA	NA	NA	407.01	410.82-385.12 (31.55-57.25)	0.0	
3Q23		7/7/2023	NE	34.96	NA	NA	NA	407.41		0.0	
4Q23		10/3/2023	NE	35.73	NA	NA	NA	406.64		0.0	
1Q24		1/4/2024	NE	36.77	NA	NA	NA	405.60		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
T-23											
2Q23	432.90	4/4/2023	NE	28.37	NA	NA	NA	404.53	405.67-379.67 (27.23-53.23)	0.0	
3Q23		7/6/2023	NE	27.53	NA	NA	NA	405.37		0.0	
4Q23		10/3/2023	NE	28.43	NA	NA	NA	404.47		0.0	
1Q24		1/4/2024	NE	29.42	NA	NA	NA	403.48		0.0	
T-24											
2Q23	444.00	4/3/2023	42.25	42.26	401.74	401.75	0.01	401.75	402.50-376.85 (41.50-67.15)	0.4	
3Q23		7/5/2023	NE	42.21	NA	NA	NA	401.79		0.0	
4Q23		10/2/2023	NE	42.40	NA	NA	NA	401.60		0.0	
1Q24		1/3/2024	43.17	45.03	398.97	400.83	1.86	400.46		25.6	
T-28											
2Q23	444.56	4/4/2023	NE	41.81	NA	NA	NA	402.75	444.56-444.56 (0.00-0.00)	0.0	
3Q23		7/6/2023	NE	42.65	NA	NA	NA	401.91		0.0	
4Q23		10/3/2023	NE	43.14	NA	NA	NA	401.42		0.0	
1Q24		1/2/2024	NE	43.90	NA	NA	NA	400.66		0.0	
T-37											
2Q23	447.44	4/4/2023	NE	43.52	NA	NA	NA	403.92	398.59-378.59 (48.86-68.86)	0.0	*
3Q23		7/6/2023	NE	44.00	NA	NA	NA	403.44		0.0	*
4Q23		10/6/2023	NE	44.97	NA	NA	NA	402.47		0.6	*
1Q24		1/3/2024	NE	46.33	NA	NA	NA	401.11		0.0	*
T-38											
2Q23	445.89	4/4/2023	NE	39.71	NA	NA	NA	406.18	396.75-376.75 (49.14-69.14)	0.0	*
3Q23		7/7/2023	NE	40.74	NA	NA	NA	405.15		0.0	*
4Q23		10/3/2023	NE	42.02	NA	NA	NA	403.87		1.2	*
1Q24		1/3/2024	NE	43.44	NA	NA	NA	402.45		0.0	*
T-62											
2Q23	432.16	4/4/2023	NE	28.73	NA	NA	NA	403.43	412.45-382.45 (19.71-49.71)	0.5	
3Q23		7/6/2023	NE	28.68	NA	NA	NA	403.48		0.2	
4Q23		10/3/2023	NE	29.68	NA	NA	NA	402.48		0.0	
1Q24		1/4/2024	NE	30.86	NA	NA	NA	401.30		0.0	
T-63											
2Q23	431.55	4/4/2023	NE	28.27	NA	NA	NA	403.28	411.57-381.57 (19.98-49.98)	0.5	
3Q23		7/6/2023	NE	28.34	NA	NA	NA	403.21		0.1	
4Q23		10/3/2023	NE	29.36	NA	NA	NA	402.19		0.0	
1Q24		1/4/2024	NE	30.53	NA	NA	NA	401.02		0.0	
T-64											
2Q23	429.10	4/4/2023	NE	26.27	NA	NA	NA	402.83	409.29-379.29 (19.81-49.81)	0.6	
3Q23		7/6/2023	NE	26.32	NA	NA	NA	402.78		0.0	
4Q23		10/3/2023	NE	27.50	NA	NA	NA	401.60		0.0	
1Q24		1/4/2024	NE	27.58	NA	NA	NA	401.52		0.0	

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 wells 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 million; 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							
2Q23	6.83	15.76	0.878	16.85	0.67	65.91	
3Q23	6.85	20.80	0.903	4.07	0.54	-6.30	
4Q23	6.76	18.88	0.851	7.05	1.80	104.51	
1Q24	6.59	15.56	0.922	0.00	0.42	124.54	
MW-02							
2Q23	6.90	16.32	0.903	9.86	0.88	-97.71	
3Q23	7.09	20.40	0.881	2.97	0.59	-136.02	
4Q23	7.22	19.57	0.941	19.98	0.51	-151.93	
1Q24	7.25	18.27	0.887	0.00	0.37	38.16	
MW-03							
2Q23	6.98	15.92	1.444	1.92	0.76	-133.81	
3Q23	6.82	21.14	1.155	42.16	1.16	-168.80	
4Q23	6.95	20.07	1.021	0.03	0.60	-120.38	
1Q24	6.80	16.50	1.161	0.00	0.32	94.44	
MW-04							
2Q23	7.00	15.01	1.015	28.87	0.66	-114.56	
3Q23	6.75	20.00	0.999	6.26	0.55	-137.25	
4Q23	6.69	18.39	0.953	0.55	0.59	35.63	
1Q24	6.68	15.80	1.044	0.00	0.43	129.98	
MW-05							
2Q23	6.75	18.24	1.176	4.04	0.53	-114.51	
3Q23	6.80	20.87	1.160	6.31	0.58	-140.50	
4Q23	6.44	18.18	1.188	0.00	0.57	-39.24	
1Q24	6.65	16.54	0.995	0.00	0.33	94.93	
MW-06A							
2Q23	6.81	19.50	0.982	38.99	0.59	-71.28	
3Q23	6.74	22.54	0.966	37.03	1.02	-154.44	
4Q23	6.80	19.67	0.913	14.00	0.66	-27.45	
1Q24	8.10	16.00	0.086	44.02	8.55	-8.10	DO results suspect.
MW-06B							
2Q23	7.30	19.04	0.745	0.53	0.52	-105.08	
3Q23	7.05	21.62	0.720	41.14	0.76	-149.21	
4Q23	7.04	19.58	0.814	3.33	0.61	-57.38	
1Q24	7.20	17.08	0.788	0.00	0.21	-48.44	
MW-06C							
2Q23	7.24	17.85	0.755	0.00	0.64	-116.11	
3Q23	7.03	20.68	0.839	19.48	1.13	-157.77	
4Q23	6.93	18.44	0.819	27.31	0.59	-84.37	
1Q24	7.21	15.71	0.823	0.00	0.27	-103.72	
MW-06D							
2Q23	7.08	17.18	1.279	2.21	0.61	-113.39	
3Q23	6.97	20.35	0.980	0.31	0.58	-133.68	
4Q23	7.04	19.49	1.249	9.03	0.60	-83.34	
1Q24	7.09	14.98	1.307	44.00	0.28	-37.82	

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							
2Q23	6.80	16.25	1.158	3.52	0.49	-75.94	
3Q23	6.80	20.63	1.189	2.98	0.56	-113.44	
4Q23	6.68	19.45	1.116	0.00	0.59	12.36	
1Q24	6.67	16.76	1.034	0.00	0.36	86.03	
MW-09							
2Q23	7.00	16.16	0.981	3.88	0.64	-73.85	
3Q23	6.77	19.72	0.967	28.91	0.57	-92.74	
4Q23	6.72	18.21	1.020	0.00	0.62	-47.63	
1Q24	6.97	16.34	1.026	2.46	0.26	-47.01	
MW-10							
2Q23	6.97	16.02	1.445	35.73	0.61	-110.43	
3Q23	6.89	20.15	1.351	40.74	0.53	-132.65	
4Q23	6.77	19.35	1.431	19.63	0.58	-77.60	
1Q24	7.09	14.65	1.305	23.10	0.46	-93.32	
MW-11							
2Q23	6.78	15.47	1.331	21.00	0.64	-42.83	
3Q23	6.78	19.42	1.371	27.92	0.54	-93.02	
4Q23	6.64	17.60	1.395	1.62	0.61	-12.31	
1Q24	6.67	14.86	1.426	2.04	0.40	108.78	
MW-12							
2Q23	6.97	16.44	0.914	8.23	0.59	44.80	
3Q23	6.83	20.09	0.967	5.42	0.57	140.14	
4Q23	6.87	19.36	0.862	0.64	0.64	40.61	
1Q24	6.64	17.48	0.812	0.00	0.46	121.32	
MW-13							
2Q23	6.77	20.10	1.200	44.06	0.41	-115.74	
3Q23	6.65	23.38	1.203	46.91	0.47	-125.85	
4Q23	6.26	20.78	1.209	1.73	0.55	-18.65	
1Q24	6.53	18.20	0.963	9.20	0.32	117.08	
MW-14							
2Q23	6.76	17.70	1.058	4.60	0.55	-85.75	
3Q23	6.59	20.61	1.066	0.00	0.56	-103.45	
4Q23	6.75	19.51	1.026	25.36	0.58	-76.88	
1Q24	6.49	16.50	1.081	0.00	0.43	61.91	
MW-16							
2Q23	6.80	18.07	0.812	19.61	0.65	-75.03	
3Q23	6.62	19.26	0.770	12.65	1.26	-97.39	
4Q23	6.54	18.64	0.806	0.00	0.71	89.08	
1Q24	6.97	15.27	0.800	0.00	0.30	-91.29	

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							
2Q23	6.97	17.47	1.211	7.68	0.83	-125.00	
3Q23	6.97	20.84	1.229	17.42	0.56	73.27	
4Q23	6.77	19.26	1.307	0.00	0.64	-57.24	
1Q24	6.72	17.41	1.126	16.68	0.39	109.66	
MW-23							
2Q23	6.84	18.62	0.928	45.52	0.38	-108.87	
3Q23	6.61	21.81	0.945	45.04	0.39	-130.90	
4Q23	6.41	19.14	1.140	15.65	0.60	-33.78	
1Q24	6.54	18.40	0.928	7.32	0.27	114.54	
MW-24							
2Q23	6.92	19.09	1.748	21.29	0.69	7.27	
3Q23	6.68	20.38	1.572	44.93	1.29	170.98	
4Q23	6.66	18.71	1.764	1.18	0.72	147.60	
1Q24	6.53	15.88	1.750	0.00	0.38	127.53	
MW-25							
2Q23	7.01	17.03	0.878	41.94	0.36	-122.25	
3Q23	6.90	22.56	0.898	5.94	0.56	-118.47	
4Q23	6.69	19.14	0.898	22.65	0.75	9.98	
1Q24	6.44	16.90	0.954	0.00	0.40	117.25	
MW-26							
2Q23	6.80	18.21	1.236	10.65	0.61	72.76	
3Q23	6.81	20.74	1.133	12.39	1.41	65.37	
4Q23	6.72	19.86	1.167	1.71	1.96	111.12	
1Q24	6.67	16.37	0.916	6.84	0.44	125.17	
MW-27							
2Q23	6.99	16.54	0.750	30.41	0.69	43.04	
3Q23	6.61	19.07	0.781	1.14	0.86	135.89	
4Q23	6.61	16.91	0.741	0.00	2.22	96.44	
1Q24	6.81	15.25	0.760	0.00	4.78	108.38	DO results suspect.
MW-28							
2Q23	6.75	19.14	1.484	8.15	0.77	-49.26	
3Q23	6.75	21.65	1.235	0.00	0.59	-61.00	
4Q23	6.77	20.31	1.282	3.90	0.67	16.06	
1Q24	6.97	17.19	1.686	5.65	1.17	-80.97	
P-54							
2Q23	6.94	19.57	1.305	3.46	2.09	-7.27	
3Q23	6.86	22.89	1.029	12.28	1.84	40.10	
4Q23	6.87	19.17	1.283	1.36	4.28	94.48	DO results suspect.
1Q24	6.69	14.85	1.260	0.00	2.60	125.23	
P-55R							
2Q23	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
3Q23	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
4Q23	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q24	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.

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							
2Q23	6.99	20.75	0.990	9.46	0.27	-36.37	
3Q23	7.27	25.70	1.270	26.93	0.48	-160.20	
4Q23	7.27	20.45	1.214	5.50	0.31	-128.05	
1Q24	7.25	16.89	1.207	0.00	0.21	-5.74	
P-57							
2Q23	6.38	20.03	0.976	0.00	0.18	-20.25	
3Q23	6.90	20.97	1.010	4.98	0.50	12.83	
4Q23	6.48	19.15	1.006	0.00	0.51	-23.89	
1Q24	6.82	15.98	1.006	0.00	0.40	-50.52	
P-58							
2Q23	6.31	22.49	1.285	17.33	0.17	-44.98	
3Q23	6.69	22.78	1.393	1.36	0.65	70.16	
4Q23	6.61	21.37	1.500	16.50	0.49	-74.73	
1Q24	6.85	17.32	1.731	13.58	0.31	-85.95	
P-59							
2Q23	6.45	23.59	1.369	0.00	0.32	-72.13	
3Q23	6.55	23.76	1.413	7.83	0.51	115.37	
4Q23	6.71	23.09	1.501	0.00	0.26	-108.90	
1Q24	6.75	18.34	1.546	3.93	0.22	-74.07	
P-66							
2Q23	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
3Q23	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
4Q23	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q24	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
P-68							
2Q23	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
3Q23	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
4Q23	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q24	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
P-74							
2Q23	7.24	18.13	0.214	6.29	1.51	-37.55	
3Q23	6.38	24.36	0.370	10.51	0.54	72.48	
4Q23	6.17	19.39	0.584	0.00	0.61	11.13	
1Q24	NM	NM	NM	NM	NM	NM	Inaccessible due to refinery construction.
P-93A							
2Q23	6.20	21.54	1.091	0.00	0.32	25.60	
3Q23	6.64	21.03	1.299	0.00	0.60	150.23	
4Q23	6.82	20.09	1.208	0.00	0.43	46.42	
1Q24	6.77	16.91	1.172	0.00	0.27	21.28	
P-93B							
2Q23	6.42	19.94	1.258	2.98	0.35	-49.48	
3Q23	6.75	19.87	1.332	17.00	0.53	125.35	
4Q23	6.85	18.34	1.439	0.00	0.23	-131.21	
1Q24	6.95	14.90	1.386	5.66	0.20	-92.02	

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							
2Q23	6.31	20.76	1.025	0.00	0.40	7.91	
3Q23	6.88	21.07	1.072	29.84	0.58	40.13	
4Q23	7.04	19.16	1.069	17.26	0.44	-95.38	
1Q24	6.81	14.55	1.396	0.00	0.40	44.23	
P-93D							
2Q23	6.86	18.09	0.970	1.23	0.99	-6.94	
3Q23	6.99	19.51	1.062	0.00	0.73	135.80	
4Q23	7.16	18.50	0.945	0.00	0.22	-89.26	
1Q24	7.09	15.87	1.003	0.00	0.68	0.20	
P-114R							
2Q23	7.13	21.60	0.854	48.63	0.32	-141.89	
3Q23	6.72	23.97	0.841	34.73	0.40	-162.87	
4Q23	6.50	22.58	0.861	38.90	0.46	-99.25	
1Q24	6.69	18.81	0.912	40.01	0.19	10.99	
ROST-3-MW							
2Q23	6.93	17.73	1.173	26.09	0.69	-99.95	
3Q23	6.80	19.78	1.143	0.27	0.55	-124.48	
4Q23	6.77	18.14	1.124	7.45	0.64	-92.31	
1Q24	6.65	16.16	1.053	7.03	0.36	86.14	
ROST-4-PZ(C)							
2Q23	6.99	15.82	1.253	10.70	0.67	-50.95	
3Q23	6.96	20.80	1.190	4.80	0.56	77.93	
4Q23	6.58	17.64	1.158	0.00	0.61	39.01	
1Q24	6.78	14.12	1.121	0.00	0.33	-49.08	
ROST-4-PZ(E)							
2Q23	6.69	NM	NM	13.82	0.75	-94.07	Temperature and conductivity sensor failure.
3Q23	6.76	21.39	2.224	20.45	0.59	95.27	
4Q23	6.75	19.90	1.858	4.81	0.71	-21.86	
1Q24	6.81	21.49	1.829	0.00	1.16	102.38	
ROST-4-PZ(G)							
2Q23	7.04	19.23	1.531	34.16	0.59	-111.97	
3Q23	7.02	20.50	1.340	29.57	0.44	-161.40	
4Q23	6.93	20.28	1.347	0.00	0.64	-73.40	
1Q24	7.07	16.43	1.383	0.00	0.24	-93.22	
T-12							
2Q23	6.56	22.50	1.815	4.97	0.33	-82.83	
3Q23	6.90	22.44	1.760	8.75	0.45	84.33	
4Q23	6.83	20.64	2.010	2.36	0.28	-138.55	
1Q24	6.91	17.99	1.797	0.00	0.32	-90.34	

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	Bromodichloromethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chloroform	Chloromethane	Cymene (p-Isopropyltoluene)	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Toluene
Screening Values (mg/L)			**6.3** [1]	**0.005** [1]	**0.0002** [2]	**4.2** [1]	**0.35** [3]	**0.7** [3]	**0.7** [3]	**0.7** [1]	**0.005** [1]	**0.07** [1]			**0.07** [1]	**0.7** [1]	**0.7** [1]	**0.56** [3]	**0.7** [1]	**0.14** [1]	**0.7** [3]	**1.0** [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																			
MW-01	MW1-ROX-040623	4/6/2023	< 0.025	0.00041 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	< 0.001	< 0.005	< 0.001	< 0.001
	MW1-ROX-071023	7/10/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW1-ROX-100523	10/5/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW1-ROX-010524	1/5/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
MW-02	MW2-ROX-041823	4/18/2023	0.062	0.00084 J	0.0010 J	< 0.05 U	0.0024	< 0.002	0.016	< 0.002	< 0.0020	< 0.002	< 0.002	0.0016 J	< 0.002	0.4	0.023	< 0.05	< 0.002	0.05	0.027	0.0031
	MW2-ROX-071823	7/18/2023	0.02 J	0.0017	< 0.0010	0.01 J	0.0045	0.0032	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0032	< 0.0010	0.19	0.042	< 0.025	< 0.0010	0.03	0.056	0.0037
	MW2-ROX-101323	10/13/2023	0.15	0.0011	< 0.0010	< 0.025	0.0029	0.0033	0.00083 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0028	< 0.0010	0.067	0.035	< 0.025	< 0.0010	0.018	0.049	0.0032
	MW2-ROX-011124	1/11/2024	0.026	0.0014	< 0.0010	0.0058 J	0.0027	0.0044	0.00064 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0028	< 0.0010	0.035	0.032	< 0.025	< 0.0010	0.0084	0.052	0.0024
MW-03	MW3-ROX-041723	4/17/2023	< 0.025	< 0.001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001 UJ	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	0.00064 J	< 0.005	< 0.001	< 0.001
	MW3-ROX-041723-DUP	4/17/2023	< 0.025	< 0.001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001 UJ	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	0.00074 J	< 0.005	< 0.001	< 0.001
	MW3-ROX-071023	7/10/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0010	< 0.0050	< 0.0010	< 0.0010
	MW3-ROX-101223	10/12/2023	0.024 J	< 0.0010	< 0.0010 UJ	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00087 J	< 0.0050	< 0.0010	< 0.0010
	MW3-ROX-101223-DUP	10/12/2023	0.024 J	< 0.0010	< 0.0010 UJ	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00088 J	< 0.0050	< 0.0010	< 0.0010
	MW3-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00076 J	< 0.0050	< 0.0010	< 0.0010
	MW3-ROX-010924-DUP	1/9/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.00057 J	< 0.025	0.00077 J	< 0.0050	< 0.0010	< 0.0010
MW-04	MW4-ROX-040723	4/7/2023	< 0.025	0.00076 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	0.00027 J	< 0.005	< 0.001	< 0.001
	MW4-ROX-071323	7/13/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW4-ROX-102023	10/20/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW4-ROX-011724	1/17/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
MW-05	MW5-ROX-041423	4/14/2023	< 0.025	0.00031 J	< 0.001	< 0.025	< 0.001	< 0.001	0.0010	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	0.0029	< 0.005	< 0.001	< 0.001
	MW5-ROX-071723	7/17/2023	< 0.025	0.0030	< 0.0010	< 0.025	< 0.0010	< 0.0010	0.00098 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0025	< 0.0050	< 0.0010	< 0.0010
	MW5-ROX-101623	10/16/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0020	< 0.0050	< 0.0010	< 0.0010
	MW5-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	0.0018	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0041	< 0.0050	< 0.0010	< 0.0010
MW-06A	MW6A-ROX-041123	4/11/2023	< 0.025	0.00038 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	0.00038 J	< 0.005	< 0.001	< 0.001
	MW6A-ROX-041123-DUP	4/11/2023	< 0.025	0.00038 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	0.00034 J	< 0.005	< 0.001	< 0.001
	MW6A-ROX-071123	7/11/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00031 J	< 0.0050	< 0.0010	< 0.0010
	MW6A-ROX-101023	10/10/2023	0.013 J	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW6A-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
MW-06B	MW6B-ROX-041123	4/11/2023	< 0.025	< 0.001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	0.00041 J	< 0.005	< 0.001	< 0.001
	MW6B-ROX-071123	7/11/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00034 J	< 0.0050	< 0.0010	< 0.0010
	MW6B-ROX-071123-DUP	7/11/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00031 J	< 0.0050	< 0.0010	< 0.0010
	MW6B-ROX-101023	10/10/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW6B-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00046 J	< 0.0050	< 0.0010	< 0.0010
MW-06C	MW6C-ROX-041123	4/11/2023	< 0.025	0.00025 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	0.00023 J	< 0.005	< 0.001	< 0.001
	MW6C-ROX-071123	7/11/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW6C-ROX-101023	10/10/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010 UJ	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.025	< 0.0010	< 0.0050	< 0.0010 UJ	< 0.0010
	MW6C-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
MW-06D	MW6D-ROX-041123	4/11/2023	< 0.025	0.00080 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	< 0.001	< 0.005	< 0.001	< 0.001
	MW6D-ROX-071223	7/12/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW6D-ROX-100923	10/9/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW6D-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
MW-07	MW7-ROX-040723	4/7/2023	< 25	890 J	< 1	< 25	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 25	< 1	< 5	< 1	0.71 J
	MW7-ROX-040723-DUP	4/7/2023	< 25	620 J	< 1	< 25	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 25	< 1	< 5	< 1	0.43 J
	MW7-ROX-071323	7/13/2023	< 130	490	< 5	< 130	< 5	< 5	< 5	< 5	< 5	< 5	< 5 UJ	< 5	< 5	< 5	< 5	< 130	< 5	< 25	< 5	< 5
	MW7-ROX-071323-DUP	7/13/2023	< 130	490	< 5	< 130	< 5	< 5	< 5	< 5	< 5	< 5	< 5 UJ	< 5	< 5	< 5	< 5	< 130	< 5	< 25	< 5	< 5
	MW7-ROX-102023	10/20/2023	< 130	1400	< 5	< 130	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 130	< 5	< 25	< 5	< 5
	MW7-ROX-102023-DUP	10/20/2023	< 130	1200	< 5	< 130	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 130	< 5	< 25	< 5	< 5
	MW7-ROX-011724	1/17/2024	< 50 UJ	680 J	< 2 UJ	< 50 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 50 UJ	< 2 UJ	< 10 UJ	< 2 UJ	< 2 UJ
	MW7-ROX-011724-DUP	1/17/2024	< 50 UJ	1000 J	< 2 UJ	< 50 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 50 UJ	< 2 UJ	< 10 UJ	< 2 UJ	< 2 UJ

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs																			
			Acetone	Benzene	Bromodichloromethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chloroform	Chloromethane	Cymene (p-Isopropyltoluene)	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Toluene
Screening Values (mg/L)			**6.3** [1]	**0.005** [1]	**0.0002** [2]	**4.2** [1]	**0.35** [3]	**0.7** [3]	**0.7** [3]	**0.7** [1]	**0.005** [1]	**0.07** [1]			**0.07** [1]	**0.7** [1]	**0.7** [1]	**0.56** [3]	**0.7** [1]	**0.14** [1]	**0.7** [3]	**1.0** [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																			
MW-09	MW9-ROX-041023	4/10/2023	< 0.025	0.00071 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	< 0.001	< 0.005	< 0.001	< 0.001
	MW9-ROX-071823	7/18/2023	< 0.025	0.0038	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW9-ROX-101623	10/16/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW9-ROX-010524	1/5/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	0.00090 J
MW-10	MW10-ROX-040623	4/6/2023	< 0.025	0.00073 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	< 0.001	< 0.005	< 0.001	< 0.001
	MW10-ROX-071823	7/18/2023	< 0.025	0.00063 J	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW10-ROX-101323	10/13/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW10-ROX-010524	1/5/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
MW-11	MW11-ROX-040623	4/6/2023	< 0.025	0.00033 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	< 0.001	< 0.005	< 0.001	< 0.001
	MW11-ROX-071223	7/12/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW11-ROX-100623	10/6/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW11-ROX-010524	1/5/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
MW-12	MW12-ROX-040723	4/7/2023	< 0.025	0.0020	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	< 0.001	< 0.005	< 0.001	< 0.001
	MW12-ROX-071223	7/12/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW12-ROX-101023	10/10/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0014	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW12-ROX-011124	1/11/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
MW-13	MW13-ROX-041323	4/13/2023	< 0.025	0.00091 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	0.0011	< 0.005	< 0.001	< 0.001
	MW13-ROX-071423	7/14/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0011	< 0.0050	< 0.0010	< 0.0010
	MW13-ROX-101823	10/18/2023	0.013 J	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00070 J	< 0.0050	< 0.0010	< 0.0010
	MW13-ROX-011024	1/10/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00053 J	< 0.0050	< 0.0010	< 0.0010
MW-14	MW14-ROX-041223	4/12/2023	0.011 J	0.00052 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	< 0.001	< 0.005	< 0.001	< 0.001
	MW14-ROX-071723	7/17/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW14-ROX-100923	10/9/2023	< 0.025 UJ	0.011	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	0.0033 F1 J
	MW14-ROX-011724	1/17/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
MW-16	MW16-ROX-041023	4/10/2023	< 0.025	0.00023 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	< 0.001	< 0.005	< 0.001	< 0.001
	MW16-ROX-071123	7/11/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW16-ROX-101823	10/18/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW16-ROX-101823-DUP	10/18/2023	0.011 J	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW16-ROX-010824	1/8/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
MW-22	MW22-ROX-041823	4/18/2023	0.048 J	0.023	< 0.002	0.0052 J	0.0033	0.0018 J	0.0045	< 0.002	< 0.0020	< 0.002	< 0.002	0.0020	< 0.002	0.082	0.02	< 0.05	< 0.002	0.067	0.036	0.018
	MW22-ROX-071323	7/13/2023	0.023 J	0.0076	< 0.0020	< 0.05	0.0019 J J	< 0.0020	0.0025	< 0.0020	< 0.0020	< 0.0020	< 0.0020 UJ	< 0.0020	< 0.0020	0.031	0.013	< 0.05	< 0.0020	0.043	0.023	0.0093
	MW22-ROX-101623	10/16/2023	< 0.025	0.0061	< 0.0010	< 0.025	0.0029	0.0015	0.0043	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0019	< 0.0010	0.022	0.014	< 0.025	< 0.0010	0.034	0.027	0.0088
	MW22-ROX-011224	1/12/2024	< 0.13	0.13	< 0.0050	< 0.13	0.0093	0.0053	0.01	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0048 J	< 0.0050	0.34	0.06	< 0.13	0.0013 J	0.14	0.11	0.06
	MW22-ROX-011224-DUP	1/12/2024	< 0.13	0.12	< 0.0050	< 0.13	0.0078	0.0045 J	0.0087	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0039 J	< 0.0050	0.29	0.051	< 0.13	< 0.0050	0.13	0.086	0.052
MW-23	MW23-ROX-041223	4/12/2023	< 0.025	0.00032 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	0.00066 J	< 0.005	< 0.001	< 0.001
	MW23-ROX-071423	7/14/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.00023 J	< 0.0010	< 0.0010	< 0.025	0.00090 J	< 0.0050	< 0.0010	< 0.0010
	MW23-ROX-101023	10/10/2023	0.015 J	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW23-ROX-011124	1/11/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.00032 J	< 0.0010	< 0.0010	< 0.025	0.00095 J	< 0.0050	< 0.0010	< 0.0010
MW-24	MW24-ROX-041323	4/13/2023	< 0.025	< 0.001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	< 0.001	< 0.005	< 0.001	< 0.001
	MW24-ROX-071023	7/10/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW24-ROX-101223	10/12/2023	< 0.025	< 0.0010	< 0.0010 UJ	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW24-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
MW-25	MW25-ROX-040723	4/7/2023	< 0.025	0.04	< 0.001	0.0036 J	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	0.00037 J	< 0.005	< 0.001	< 0.001
	MW25-ROX-071323	7/13/2023	0.062	0.027	< 0.0010	0.0058 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW25-ROX-102023	10/20/2023	< 0.025	0.043	< 0.0010	< 0.025	< 0.0010	< 0.0010	0.00091 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00035 J	< 0.0050	< 0.0010	< 0.0010
	MW25-ROX-011824	1/18/2024	< 0.025	0.053	< 0.0010	< 0.025	< 0.0010	< 0.0010	0.00064 J	0.00050 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
MW-26	MW26-ROX-041023	4/10/2023	< 0.025	0.00027 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	< 0.001	< 0.005	< 0.001	< 0.001
	MW26-ROX-071023	7/10/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW26-ROX-100523	10/5/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW26-ROX-010524	1/5/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs																			
			Acetone	Benzene	Bromodichloromethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chloroform	Chloromethane	Cymene (p-Isopropyltoluene)	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Toluene
Screening Values (mg/L)			6.3 [1]	0.005 [1]	0.0002 [2]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.005 [1]	0.07 [1]			0.07 [1]	0.7 [1]	0.7 [1]	0.56 [3]	0.7 [1]	0.14 [1]	0.7 [3]	1.0 [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																			
MW-27	MW27-ROX-041023	4/10/2023	< 0.025	0.00060 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	< 0.001	< 0.005	< 0.001	< 0.001
	MW27-ROX-071823	7/18/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW27-ROX-101823	10/18/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	MW27-ROX-010824	1/8/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
MW-28	MW28-ROX-041423	4/14/2023	< 0.025	0.00031 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	0.0019	< 0.005	< 0.001	< 0.001
	MW28-ROX-071223	7/12/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0011	< 0.0050	< 0.0010	< 0.0010
	MW28-ROX-101223	10/12/2023	0.01 J	< 0.0010	< 0.0010 UJ	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00051 J	< 0.0050	< 0.0010	< 0.0010
	MW28-ROX-010524	1/5/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0017	< 0.0050	< 0.0010	< 0.0010 UJ
P-54	P54-ROX-041223	4/12/2023	< 0.025	0.00036 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	< 0.001	< 0.005	< 0.001	< 0.001
	P54-ROX-041223-DUP	4/12/2023	< 0.025	0.00037 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	< 0.001	< 0.005	< 0.001	< 0.001
	P54-ROX-071223	7/12/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	P54-ROX-100623	10/6/2023	0.011 JF1 J	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	P54-ROX-010824	1/8/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
P-56	P56-ROX-042023	4/20/2023	< 0.025	0.00075 J	< 0.001	0.0047 J	0.0014	0.0019	< 0.001	< 0.001	< 0.0010	< 0.001 UJ	< 0.001	0.0013	< 0.001	0.0061	0.02	< 0.025	< 0.001	0.0059	0.024	0.0027
	P56-ROX-071023	7/10/2023	0.031	< 0.0010	< 0.0010	0.0057 J	0.00098 J J	0.0020	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0010	< 0.0010	0.00083 J	0.016	< 0.025	< 0.0010	< 0.0050	0.019	0.0014
	P56-ROX-101823	10/18/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	0.0025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.00075 J	< 0.0010	0.00059 J	0.011	< 0.025	< 0.0010	< 0.0050	0.014	< 0.0010
	P56-ROX-011024	1/10/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	0.0024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.00084 J	< 0.0010	0.00094 J	0.015	< 0.025	< 0.0010	< 0.0050	0.017	< 0.0010
P-57	P57-ROX-041923	4/19/2023	< 0.025	0.27	< 0.001	< 0.025	0.00088 J	0.0017	0.0021	< 0.001	< 0.0010	< 0.001 UJ	< 0.001	< 0.001	< 0.001	0.0012	0.0093	< 0.025	< 0.001	0.026	0.01	0.0023
	P57-ROX-071323	7/13/2023	< 0.05	0.21 J	< 0.0020	0.0057 J	0.0050	0.0075	0.0085	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	0.0028	0.032	< 0.05	< 0.0020	0.023	0.042	0.0044
	P57-ROX-071323-DUP	7/13/2023	< 0.05	0.4 J	< 0.0020	< 0.05	0.0056	0.0090	0.01	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	0.0044	0.038	< 0.05	< 0.0020	0.041	0.05	0.0057
	P57-ROX-101723	10/17/2023	0.017 J	0.084	< 0.0010	< 0.025	0.0031	0.0040	0.0039	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0015	0.022	< 0.025	< 0.0010	0.013	0.022	0.0031
	P57-ROX-011124	1/11/2024	< 0.025	0.037	< 0.0010	0.0031 J	0.0021	0.0040	0.0051	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.00060 J	0.02	< 0.025	< 0.0010	< 0.0050	0.021 J	0.0031
	P57-ROX-011124-DUP	1/11/2024	< 0.025	0.041	< 0.0010	< 0.025	0.0031	0.0057	0.0064	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.00079 J	0.025	< 0.025	< 0.0010	< 0.0050	0.029 J	0.0035
P-58	P58-ROX-041923	4/19/2023	< 25	150	< 1	< 25	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 1	< 1	< 1	< 1	< 1	< 25	< 1	< 5	< 1	< 1
	P58-ROX-071823	7/18/2023	< 25	220	< 1	< 25	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 25	< 1	< 5	< 1	< 1
	P58-ROX-071823-DUP	7/18/2023	< 25	250	< 1	< 25	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 25	< 1	< 5	< 1	< 1
	P58-ROX-101723	10/17/2023	< 25 UJ	570	< 1 UJ	< 25 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 25 UJ	< 1 UJ	< 5 UJ	< 1 UJ	< 1 UJ
	P58-ROX-011224	1/12/2024	< 25	240	< 1	< 25	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 25	< 1	< 5	< 1	< 1
	P58-ROX-011224-DUP	1/12/2024	< 25	250	< 1	< 25	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 25	< 1	< 5	< 1	< 1
P-59	P59-ROX-042023	4/20/2023	< 0.25	1.4	< 0.01	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 UJ	< 0.01	< 0.01	< 0.01	0.084	0.028	< 0.25	< 0.01	0.077	0.043	0.062
	P59-ROX-071823	7/18/2023	0.15	0.97	< 0.0050	< 0.13	< 0.0050	< 0.0050	< 0.0050	< 0.0010	< 0.0050	< 0.0010	< 0.0010	< 0.0050	< 0.0050	0.038	0.017	< 0.13	< 0.0050	0.029	0.023	0.043
	P59-ROX-101823	10/18/2023	< 0.25	1.8	< 0.01	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.12	0.048	< 0.25	< 0.01	0.043 J	0.075	0.086
	P59-ROX-011224	1/12/2024	< 0.25	1.6	< 0.01	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.16	0.047	< 0.25	< 0.01	0.044 J	0.066	0.075
P-74	P74-ROX-041723	4/17/2023	0.022 J	0.012	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001 UJ	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	< 0.001	< 0.005	< 0.001	< 0.001
	P74-ROX-071223	7/12/2023	0.025	0.42	< 0.0010	0.0038 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	0.0019	< 0.0010	< 0.025	0.0036	< 0.0050	< 0.0010	0.0040
	P74-ROX-101723	10/17/2023	0.065 J	1	< 0.0050	< 0.13	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0055	< 0.0050	0.016 J	0.0065	< 0.025	< 0.0050	0.0086
	P74-ROX-101723-DUP	10/17/2023	0.071 J	1	< 0.0050	< 0.13	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0050	< 0.0050	0.015 J	0.0065	< 0.025	< 0.0050	0.0091
P-93A	P93A-ROX-041923	4/19/2023	< 0.025	0.00093 J	< 0.001	< 0.025	< 0.001	< 0.001	0.00085 J	< 0.001	< 0.0010	< 0.001 UJ	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	< 0.001	< 0.005	< 0.001	< 0.001
	P93A-ROX-071123	7/11/2023	< 0.025	0.0053	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	P93A-ROX-101823	10/18/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	0.00070 J	< 0.0010	0.0012	0.0030	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	P93A-ROX-011024	1/10/2024	< 0.025	0.055	< 0.0010	< 0.025	< 0.0010	< 0.0010	0.0023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
P-93B	P93B-ROX-042023	4/20/2023	< 50	400	< 2	< 50	< 2	< 2	< 2	< 2	< 2	< 2 UJ	< 2	< 2	< 2	< 2	< 2	< 50	< 2	< 10	< 2	< 2
	P93B-ROX-071823	7/18/2023	< 25 UJ	1200	< 1 UJ	< 25 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 25	< 1 UJ	< 5 UJ	< 1 UJ	< 1 UJ
	P93B-ROX-101923	10/19/2023	< 130	610	< 5	< 130	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 130	< 5	< 25	< 5	< 5
	P93B-ROX-011224	1/12/2024	< 63	690	< 2.5	< 63	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 63	< 2.5	< 13	< 2.5	< 2.5
P-93C	P93C-ROX-041923	4/19/2023	< 0.025	0.071	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001 UJ	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	0.0028	< 0.005	< 0.001	< 0.001
	P93C-ROX-071423	7/14/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0028	< 0.0050	< 0.0010	< 0.0010
	P93C-ROX-101623	10/16/2023	< 0.025	0.013	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0025	< 0.0050	< 0.0010	< 0.0010
	P93C-ROX-011124	1/11/2024	< 13 UJ	490	< 0.5 UJ	< 13 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 13 UJ	< 0.5 UJ	< 2.5 UJ	< 0.5 UJ	< 0.5 UJ

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs																			
			Acetone	Benzene	Bromodichloromethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chloroform	Chloromethane	Cymene (p-Isopropyltoluene)	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Toluene
Screening Values (mg/L)			**6.3** [1]	**0.005** [1]	**0.0002** [2]	**4.2** [1]	**0.35** [3]	**0.7** [3]	**0.7** [3]	**0.7** [1]	**0.005** [1]	**0.07** [1]			**0.07** [1]	**0.7** [1]	**0.7** [1]	**0.56** [3]	**0.7** [1]	**0.14** [1]	**0.7** [3]	**1.0** [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																			
P-93D	P93D-ROX-042123	4/21/2023	< 0.025	< 0.001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	0.00083 J	< 0.005	< 0.001	0.00056 J
	P93D-ROX-071123	7/11/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00072 J	< 0.0050	< 0.0010	< 0.0010
	P93D-ROX-101623	10/16/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00053 J	< 0.0050	< 0.0010	< 0.0010
	P93D-ROX-011024	1/10/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00047 J	< 0.0050	< 0.0010	< 0.0010
P-114R	P114R-ROX-041323	4/13/2023	< 0.025	0.00031 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	0.0011	< 0.005	< 0.001	< 0.001
	P114R-ROX-071423	7/14/2023	0.013 J	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0018	< 0.0050	< 0.0010	< 0.0010
	P114R-ROX-101823	10/18/2023	0.019 J	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0015	< 0.0050	< 0.0010	< 0.0010
	P114R-ROX-011024	1/10/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0018	< 0.0050	< 0.0010	< 0.0010
ROST-3-MW	ROST3MW-ROX-041123	4/11/2023	< 0.025	0.00056 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001 UJ	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	< 0.001	< 0.005	< 0.001	< 0.001
	ROST3MW-ROX-071723	7/17/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	ROST3MW-ROX-071723-DUP	7/17/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	ROST3MW-ROX-100623	10/6/2023	0.038	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	ROST3MW-ROX-010824	1/8/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
ROST-4-PZ(C)	ROST4PZ(C)-ROX-041723	4/17/2023	< 0.025	0.0010	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001 UJ	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	< 0.001	< 0.005	0.00086 J	0.00056 J
	ROST4PZC-ROX-071123	7/11/2023	< 0.025	0.0022	< 0.0010	0.016 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	0.0020	0.0030	< 0.025	< 0.0010	0.035	0.0056	0.0064
	ROST4PZ(C)-ROX-101623	10/16/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	ROST4PZ(C)-ROX-101623-DUP	10/16/2023	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	ROST4PZ(C)-ROX-010824	1/8/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
ROST-4-PZ(E)	ROST4PZ(E)-ROX-041823	4/18/2023	< 0.025	0.0016	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	0.0091	0.0024	< 0.025	< 0.001	0.026	0.0017	0.00090 J
	ROST4PZ(E)-ROX-041823-DUP	4/18/2023	< 0.025	0.0018	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	0.01	0.0026	< 0.025	< 0.001	0.027	0.0019	0.0011
	ROST4PZ(E)-ROX-071223	7/12/2023	< 0.025	0.00074 J	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	0.0046	0.00089 J	< 0.025	< 0.0010	0.0058	< 0.0010	< 0.0010
	ROST4PZ(E)-ROX-101323	10/13/2023	0.062	0.00061 J	< 0.0010	0.0082 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0054	0.00076 J	< 0.025	< 0.0010	0.0031 J	0.00075 J	< 0.0010
	ROST4PZE-ROX-011124	1/11/2024	< 0.025	0.00095 J	< 0.0010	0.0086 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0087	0.00095 J	< 0.025	< 0.0010	< 0.0050	0.00085 J	0.00090 J
ROST-4-PZ(G)	ROST4PZ(G)-ROX-041423	4/14/2023	< 0.025	0.00041 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.025	< 0.001	< 0.005	< 0.001	< 0.001
	ROST4PZ(G)-ROX-071023	7/10/2023	0.011 J	< 0.0010	< 0.0010	0.0030 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	ROST4PZ(G)-ROX-101223	10/12/2023	0.033	< 0.0010	< 0.0010 UJ	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
	ROST4PZ(G)-ROX-010824	1/8/2024	< 0.025	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010
T-12	T12-ROX-042023	4/20/2023	< 0.25	1.2	< 0.01	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 UJ	< 0.01	< 0.01	< 0.01	0.012	< 0.01	< 0.25	0.0022 J	< 0.05	< 0.01	0.026
	T12-ROX-071423	7/14/2023	< 0.25	1.5	< 0.01	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.011	0.0077 J	< 0.25	< 0.01	< 0.05	0.0092 J	0.031
	T12-ROX-101923	10/19/2023	< 0.25	1.5	< 0.01	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.013	0.019	< 0.25	< 0.01	< 0.05	0.031	0.037
	T12-ROX-011124	1/11/2024	< 0.25	1.3	< 0.01	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.0069 J	0.011	< 0.25	< 0.01	< 0.05	0.01	0.024

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs						SVOCs												
			Trichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene
Screening Values (mg/L)			0.005 [1]	0.07 [3]	0.07 [3]	10 [1]		10 [1]	0.42 [1]	0.42 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]	0.006 [1]	1.4 [2]	0.012 [1]	0.0003 [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-01	MW1-ROX-040623	4/6/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
	MW1-ROX-071023	7/10/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020	< 0.00020
	MW1-ROX-100523	10/5/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.017	< 0.0057	< 0.0057	< 0.00011	< 0.00011
	MW1-ROX-010524	1/5/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020	< 0.00020
MW-02	MW2-ROX-041823	4/18/2023	< 0.002	0.086	0.027	0.23	0.02	0.25	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	MW2-ROX-071823	7/18/2023	< 0.0010	0.032	0.026	0.1	0.0088	0.11	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
	MW2-ROX-101323	10/13/2023	< 0.0010	0.012	0.015	0.028	0.0029 J	0.031	< 0.00099 UJ	< 0.00099 UJ	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020 UJ	< 0.00020
	MW2-ROX-011124	1/11/2024	< 0.0010	0.0054	0.0085	0.014	0.0017 J	0.016	< 0.00020	< 0.00020	< 0.00020 UJ	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020	< 0.00020
MW-03	MW3-ROX-041723	4/17/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0097	< 0.0097	< 0.00019	< 0.00019
	MW3-ROX-041723-DUP	4/17/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0096	< 0.0096	< 0.00019	< 0.00019
	MW3-ROX-071023	7/10/2023	< 0.01	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
	MW3-ROX-101223	10/12/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020 UJ	< 0.00020
	MW3-ROX-101223-DUP	10/12/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0098	< 0.0098	< 0.00020 UJ	< 0.00020
	MW3-ROX-010924	1/9/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020	< 0.00020
	MW3-ROX-010924-DUP	1/9/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.031	< 0.01	< 0.01	< 0.00020	< 0.00020
MW-04	MW4-ROX-040723	4/7/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00039 UJ	< 0.00039 UJ	< 0.00039 UJ	< 0.00039 UJ	< 0.00039 UJ	< 0.00039 UJ	< 0.00039 UJ	< 0.00039 UJ	< 0.059	< 0.02	< 0.02	< 0.00039 UJ	< 0.00039 UJ
	MW4-ROX-071323	7/13/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.031	< 0.01	< 0.01	< 0.00021	< 0.00021
	MW4-ROX-102023	10/20/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.034	< 0.011	< 0.011	< 0.00022	< 0.00022
	MW4-ROX-011724	1/17/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.034	< 0.011	< 0.011	< 0.00023	< 0.00023
MW-05	MW5-ROX-041423	4/14/2023	0.00024 J	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0097	< 0.0097	< 0.00019	< 0.00019
	MW5-ROX-071723	7/17/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.031	< 0.01	< 0.01	< 0.00021	< 0.00021
	MW5-ROX-101623	10/16/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020 UJ	< 0.00020
	MW5-ROX-010924	1/9/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020	< 0.00020
MW-06A	MW6A-ROX-041123	4/11/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.018 J	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	MW6A-ROX-041123-DUP	4/11/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020	< 0.00020
	MW6A-ROX-071123	7/11/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020 H UJ	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020 H UJ
	MW6A-ROX-101023	10/10/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00026	0.00022	< 0.00019	0.000045 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0095	< 0.0095	< 0.00019	< 0.00019
	MW6A-ROX-010924	1/9/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00021	< 0.00021	< 0.00021	0.000035 J	< 0.00021	< 0.00021	0.000063 J	< 0.00021	< 0.031	< 0.01	< 0.01	0.000077 J	< 0.00021
MW-06B	MW6B-ROX-041123	4/11/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	0.00013 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.018 J	< 0.0099	< 0.0099	< 0.00020	< 0.00020
	MW6B-ROX-071123	7/11/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.00021 H UJ	< 0.00021	< 0.00021 H UJ	< 0.00021	< 0.00021	< 0.031	< 0.01	< 0.01	< 0.00021	< 0.00021
	MW6B-ROX-071123-DUP	7/11/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.031	< 0.01	< 0.01	< 0.00021	< 0.00021
	MW6B-ROX-101023	10/10/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00011 J	0.00010 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	< 0.0094	< 0.0094	< 0.00019	< 0.00019
	MW6B-ROX-010924	1/9/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00022	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.032	< 0.011	< 0.011	< 0.00021	< 0.00021
MW-06C	MW6C-ROX-041123	4/11/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
	MW6C-ROX-071123	7/11/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.031	< 0.01	< 0.01	< 0.00020	< 0.00020
	MW6C-ROX-101023	10/10/2023	< 0.0010	< 0.0010 UJ	< 0.0010 UJ	< 0.0050	< 0.0050 UJ	< 0.01	< 0.00019	< 0.00019	< 0.00019	0.000043 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	< 0.0095	< 0.0095	< 0.00019	< 0.00019
	MW6C-ROX-010924	1/9/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.031	< 0.01	< 0.01	< 0.00021	< 0.00021
MW-06D	MW6D-ROX-041123	4/11/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0097	< 0.0097	< 0.00019	< 0.00019
	MW6D-ROX-071223	7/12/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	MW6D-ROX-100923	10/9/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	MW6D-ROX-010924	1/9/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
MW-07	MW7-ROX-040723	4/7/2023	< 1	< 1	< 1	< 5	< 5	< 10	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.02 J	< 0.01	< 0.01	< 0.00020	< 0.00020
	MW7-ROX-040723-DUP	4/7/2023	< 1	< 1	< 1	< 5	< 5	< 10	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.021 J	< 0.01	< 0.01	< 0.00020	< 0.00020
	MW7-ROX-071323	7/13/2023	< 5	< 5	< 5	< 25	< 25	< 50	0.00016 J	< 0.00021	0.000055 J	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.03	< 0.011	< 0.011	< 0.00021	< 0.00021
	MW7-ROX-071323-DUP	7/13/2023	< 5	< 5	< 5	< 25	< 25	< 50	< 0.00020	< 0.00020	0.000049 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020	< 0.00020
	MW7-ROX-102023	10/20/2023	< 5	< 5	< 5	< 25	< 25	< 50	< 0.00022	0.00015 J	0.000087 J	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.033	< 0.011	< 0.011	< 0.00022	< 0.00022
	MW7-ROX-102023-DUP	10/20/2023	< 5	< 5	< 5	< 25	< 25	< 50	< 0.00022	0.00016 J	0.000058 J	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.033	< 0.011	< 0.011	< 0.00022	< 0.00022
	MW7-ROX-011724	1/17/2024	< 2 UJ	< 2 UJ	< 2 UJ	< 10 UJ	< 10 UJ	< 20 UJ	0.00026	0.00012 J	< 0.00024	< 0.00024	< 0.00024	< 0.00024	< 0.00024	< 0.00024	< 0.036	< 0.012	< 0.012	< 0.00024	< 0.00024
	MW7-ROX-011724-DUP	1/17/2024	< 2 UJ	< 2 UJ	< 2 UJ	< 10 UJ	< 10 UJ	< 20 UJ	0.00030	0.00013 J	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.034	< 0.011	< 0.011	< 0.00023	< 0.00023

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TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs						SVOCs												
			Trichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene
Screening Values (mg/L)			0.005 [1]	0.07 [3]	0.07 [3]	10 [1]		10 [1]	0.42 [1]	0.42 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]	0.006 [1]	1.4 [2]	0.012 [1]	0.0003 [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-09	MW9-ROX-041023	4/10/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0097	0.0022 J	< 0.00019	< 0.00019
	MW9-ROX-071823	7/18/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
	MW9-ROX-101623	10/16/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020 UJ	< 0.00020
	MW9-ROX-010524	1/5/2024	< 0.0010	< 0.0010	< 0.0010	0.00075 J	< 0.0050	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.032	< 0.011	< 0.011	< 0.00021	< 0.00021
MW-10	MW10-ROX-040623	4/6/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.031	< 0.01	< 0.01	< 0.00020	< 0.00020
	MW10-ROX-071823	7/18/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	MW10-ROX-101323	10/13/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020 UJ	< 0.00020
	MW10-ROX-010524	1/5/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.032	< 0.011	< 0.011	< 0.00021	< 0.00021
MW-11	MW11-ROX-040623	4/6/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	MW11-ROX-071223	7/12/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020	< 0.00020
	MW11-ROX-100623	10/6/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.017	< 0.0058	< 0.0058	< 0.00012	< 0.00012
	MW11-ROX-010524	1/5/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.031	< 0.01	< 0.01	< 0.00021	< 0.00021
MW-12	MW12-ROX-040723	4/7/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029 UJ	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	MW12-ROX-071223	7/12/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
	MW12-ROX-101023	10/10/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	0.000052 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	< 0.0094	< 0.0094	< 0.00019	< 0.00019
	MW12-ROX-011124	1/11/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	0.00013 J	< 0.00019 UJ	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0097	< 0.0097	< 0.00019	< 0.00019
MW-13	MW13-ROX-041323	4/13/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020	< 0.00020
	MW13-ROX-071423	7/14/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00099 UJ	< 0.00099 UJ	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020	< 0.00020
	MW13-ROX-101823	10/18/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00034	< 0.00020	0.00010 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020	< 0.00020
	MW13-ROX-011024	1/10/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00024	0.00038	< 0.00020 UJ	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020	< 0.00020
MW-14	MW14-ROX-041223	4/12/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0097	< 0.0097	< 0.00019	< 0.00019
	MW14-ROX-071723	7/17/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00022 UJ	< 0.00022 UJ	< 0.00022 UJ	< 0.00022 UJ	< 0.00022 UJ	< 0.00022 UJ	< 0.00022 UJ	< 0.00022 UJ		< 0.011 UJ	< 0.011 UJ	< 0.00022 UJ	< 0.00022 UJ
	MW14-ROX-100923	10/9/2023	< 0.0010	< 0.0010	< 0.0010	0.00066 J	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	MW14-ROX-011724	1/17/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00022	0.000070 J	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.033	< 0.011	< 0.011	< 0.00022	< 0.00022
MW-16	MW16-ROX-041023	4/10/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	MW16-ROX-071123	7/11/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020	< 0.00020
	MW16-ROX-101823	10/18/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
	MW16-ROX-101823-DUP	10/18/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	MW16-ROX-010824	1/8/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.031	< 0.01	< 0.01	< 0.00021	< 0.00021
MW-22	MW22-ROX-041823	4/18/2023	< 0.002	0.18	0.056	0.32	0.011	0.33	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	MW22-ROX-071323	7/13/2023	< 0.002	0.071	0.029	0.17	0.0065 J	0.17	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
	MW22-ROX-101623	10/16/2023	< 0.0010	0.049	0.035	0.13	0.0061	0.14	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020 UJ	< 0.00020
	MW22-ROX-011224	1/12/2024	< 0.0050	0.16	0.13	0.76	0.039	0.8	0.00010 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	MW22-ROX-011224-DUP	1/12/2024	< 0.0050	0.13	0.11	0.65	0.033	0.68	0.00011 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0096	< 0.0096	< 0.00019	< 0.00019
MW-23	MW23-ROX-041223	4/12/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.019 J	< 0.01	< 0.01	< 0.00020	< 0.00020
	MW23-ROX-071423	7/14/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020	< 0.00020
	MW23-ROX-101023	10/10/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	0.000046 JB	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0095	< 0.0095	< 0.00019	< 0.00019
	MW23-ROX-011124	1/11/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	0.00014 J	< 0.00020 UJ	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0095	< 0.0095	< 0.00020	< 0.00020
MW-24	MW24-ROX-041323	4/13/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0095	< 0.0095	< 0.00019	< 0.00019
	MW24-ROX-071023	7/10/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	MW24-ROX-101223	10/12/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	0.00012 J	< 0.00020	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020 UJ	< 0.00020
	MW24-ROX-010924	1/9/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0097	< 0.0097	< 0.00019	< 0.00019
MW-25	MW25-ROX-040723	4/7/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
	MW25-ROX-071323	7/13/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.031	< 0.01	< 0.01	< 0.00021	< 0.00021
	MW25-ROX-102023	10/20/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.033	< 0.011	< 0.011	< 0.00022	< 0.00022
	MW25-ROX-011824	1/18/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.035	< 0.012	< 0.012	< 0.00023	< 0.00023
MW-26	MW26-ROX-041023	4/10/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0097	< 0.0097	< 0.00019	< 0.00019
	MW26-ROX-071023	7/10/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0097	< 0.0097	< 0.00019	< 0.00019
	MW26-ROX-100523	10/5/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.017	< 0.0057	< 0.0057	< 0.00011	< 0.00011
	MW26-ROX-010524	1/5/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020	< 0.00020

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs						SVOCs												
			Trichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene
Screening Values (mg/L)			0.005 [1]	0.07 [3]	0.07 [3]	10 [1]		10 [1]	0.42 [1]	0.42 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]	0.006 [1]	1.4 [2]	0.012 [1]	0.0003 [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-27	MW27-ROX-041023	4/10/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	MW27-ROX-071823	7/18/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.031	< 0.01	0.00026 J	< 0.00021	< 0.00021
	MW27-ROX-101823	10/18/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	MW27-ROX-010824	1/8/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	< 0.0095	< 0.0095	< 0.00019	< 0.00019
MW-28	MW28-ROX-041423	4/14/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	MW28-ROX-071223	7/12/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0097	< 0.0097	< 0.00019	< 0.00019
	MW28-ROX-101223	10/12/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020 UJ	< 0.00020
	MW28-ROX-010524	1/5/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.033	< 0.011	< 0.011	< 0.00022	< 0.00022
P-54	P54-ROX-041223	4/12/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020	< 0.00020
	P54-ROX-041223-DUP	4/12/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0097	< 0.0097	< 0.00019	< 0.00019
	P54-ROX-071223	7/12/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
	P54-ROX-100623	10/6/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.000036 J	< 0.00011	< 0.00011	< 0.017	< 0.0057	< 0.0057	< 0.00011	< 0.00011
	P54-ROX-010824	1/8/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020	< 0.00020
P-56	P56-ROX-042023	4/20/2023	< 0.001	0.035	0.011	0.07	0.0016 J	0.072	0.00054	< 0.00020	0.00014 J*+ J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
	P56-ROX-071023	7/10/2023		0.021	0.0068	0.039	0.0011 J	0.04	0.00044	< 0.00020	0.000091 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
	P56-ROX-101823	10/18/2023	< 0.0010	< 0.0010	< 0.0010	0.0015 J	< 0.0050	< 0.01	0.00043	< 0.00021	0.000072 J	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.031	< 0.01	< 0.01	< 0.00021	< 0.00021
	P56-ROX-011024	1/10/2024	< 0.0010	< 0.0010	< 0.0010	0.0025 J	< 0.0050	0.0025 J	0.00067	< 0.00019	0.00011 J J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	< 0.0095	< 0.0095	< 0.00019	< 0.00019
P-57	P57-ROX-041923	4/19/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	0.00019 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020	< 0.00020
	P57-ROX-071323	7/13/2023	< 0.0020 U	< 0.0020	< 0.0020	0.0015 J	< 0.01	< 0.02	0.00021 J	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.033	< 0.011	< 0.011	< 0.00022	< 0.00022
	P57-ROX-071323-DUP	7/13/2023	< 0.0020	< 0.0020	< 0.0020	0.0019 J	< 0.01	< 0.02	0.00022	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020	< 0.00020
	P57-ROX-101723	10/17/2023	< 0.0010	< 0.0010	< 0.0010	0.00075 J	< 0.0050	< 0.01	0.00022	< 0.00020	0.00014 J	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020	< 0.00020
	P57-ROX-011124	1/11/2024	< 0.0010	< 0.0010	< 0.0010	0.00067 J	< 0.0050	< 0.01	0.00032	< 0.00021	0.00017 J J	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.032	< 0.011	< 0.011	< 0.00021	< 0.00021
	P57-ROX-011124-DUP	1/11/2024	< 0.0010	< 0.0010	< 0.0010	0.00082 J	< 0.0050	< 0.01	0.00032	< 0.00021	0.00016 J J	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.032	< 0.011	< 0.011	< 0.00021	< 0.00021
P-58	P58-ROX-041923	4/19/2023	< 1	< 1	< 1	< 5	< 5	< 10	< 0.00020	< 0.00020	< 0.00020	0.00040	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	0.00060	< 0.00020
	P58-ROX-071823	7/18/2023	< 1	< 1	< 1	< 5	< 5	< 10	0.00062	< 0.00020	0.00019 J	0.00014 J	0.000099 J	0.000053 J	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	0.00014 J	< 0.00020
	P58-ROX-071823-DUP	7/18/2023	< 1	< 1	< 1	< 5	< 5	< 10	0.00053	< 0.00020	0.000097 J	0.000065 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	P58-ROX-101723	10/17/2023	< 1 UJ	< 1 UJ	< 1 UJ	< 5 UJ	< 5 UJ	< 10 UJ	0.00046	< 0.00020	0.00018 J	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	0.000043 J	< 0.00020
	P58-ROX-011224	1/12/2024	< 1	< 1	< 1	< 5	< 5	< 10	0.00058	< 0.00021	0.00036	0.00034	0.00029	0.00016 J	0.00013 J	< 0.00021	< 0.031	< 0.01	< 0.01	0.00056	0.000071 J
	P58-ROX-011224-DUP	1/12/2024	< 1	< 1	< 1	< 5	< 5	< 10	0.00060	< 0.00020	0.00046	0.00033	0.00028	0.00018 J	0.00012 J	< 0.00020	< 0.031	< 0.01	< 0.01	0.00061	0.000087 J
P-59	P59-ROX-042023	4/20/2023	< 0.01	0.032	0.019	0.088	< 0.05	0.091 J	< 0.00099	< 0.00099	< 0.00099	< 0.00099	< 0.00099	< 0.00099	< 0.00099	< 0.00099	< 0.06	< 0.02	< 0.02	< 0.00099	< 0.00099
	P59-ROX-071823	7/18/2023	< 0.0050	0.0090	0.0095	0.052	< 0.025	0.054	0.00039	< 0.00020	< 0.00020	0.000091 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.031	< 0.01	< 0.01	0.000082 J	< 0.00020
	P59-ROX-101823	10/18/2023	< 0.01	0.037	0.031	0.12	< 0.05	0.12	0.00056	< 0.00021	0.00029	< 0.00021 U	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.031	< 0.01	< 0.01	0.000068 J	< 0.00021
	P59-ROX-011224	1/12/2024	< 0.01	0.031	0.032	0.12	< 0.05	0.12	0.00045	< 0.00021	0.00023	0.000075 J	< 0.00021	0.000050 J	0.000037 J	< 0.00021	< 0.032	< 0.011	< 0.011	0.000084 J	< 0.00021
P-74	P74-ROX-041723	4/17/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	P74-ROX-071223	7/12/2023	< 0.0010	0.0016	< 0.0010	0.0064	0.00068 J	0.0071 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
	P74-ROX-101723	10/17/2023	< 0.0050	< 0.0050	< 0.0050	0.011 J	< 0.025	0.011 J	< 0.00020	0.000075 J	< 0.00020	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	P74-ROX-101723-DUP	10/17/2023	< 0.0050	< 0.0050	< 0.0050	0.01 J	< 0.025	0.01 J	< 0.00020 H UJ	< 0.00020 H UJ	< 0.00020 H UJ	0.00019 J H J	0.000091 J H J	0.00015 J H J	0.000048 J H J	0.000092 J H J	< 0.03	< 0.0098 H UJ	< 0.0099	0.000096 J H J	0.00011 J H J
P-93A	P93A-ROX-041923	4/19/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020	< 0.00020
	P93A-ROX-071123	7/11/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.031	< 0.01	< 0.01	< 0.00021	< 0.00021
	P93A-ROX-101823	10/18/2023	0.00047 J	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.031	< 0.01	< 0.01	< 0.00020	< 0.00020
	P93A-ROX-011024	1/10/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	0.00013 J	< 0.00019 UJ	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	< 0.0094	< 0.0094	< 0.00019	< 0.00019
P-93B	P93B-ROX-042023	4/20/2023	< 2	< 2	< 2	< 10	< 10	< 20	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	0.0054 J	< 0.0099	< 0.00020	< 0.00020
	P93B-ROX-071823	7/18/2023	< 1 UJ	< 1 UJ	< 1 UJ	< 5 UJ	< 5 UJ	< 10 UJ	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
	P93B-ROX-101923	10/19/2023	< 5	< 5	< 5	< 25	< 25	< 50	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.032	< 0.011	< 0.011	< 0.00021	< 0.00021
	P93B-ROX-011224	1/12/2024	< 2.5	< 2.5	< 2.5	< 13	< 13	< 25	< 0.00021	0.00010 J	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.032	< 0.011	< 0.011	< 0.00021	< 0.00021
P-93C	P93C-ROX-041923	4/19/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
	P93C-ROX-071423	7/14/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.031	< 0.01	< 0.01	< 0.00021	< 0.00021
	P93C-ROX-101623	10/16/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00021	0.00018 J	< 0.00021	< 0.00020 U	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.031	< 0.01	< 0.01	< 0.00021	< 0.00021
	P93C-ROX-011124	1/11/2024	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 2.5 UJ	< 2.5 UJ	< 5 UJ	0.00012 J	0.00033	< 0.00021 UJ	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.031	< 0.01	< 0.01	< 0.00021	< 0.00021

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs						SVOCs												
			Trichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene
Screening Values (mg/L)			0.005 [1]	0.07 [3]	0.07 [3]	10 [1]		10 [1]	0.42 [1]	0.42 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]	0.006 [1]	1.4 [2]	0.012 [1]	0.0003 [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
P-93D	P93D-ROX-042123	4/21/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020	< 0.00020
	P93D-ROX-071123	7/11/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
	P93D-ROX-101623	10/16/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.031	< 0.01	< 0.01	< 0.00020 U	< 0.00020
	P93D-ROX-011024	1/10/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	0.00016 J	< 0.00019 UJ	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0095	< 0.0095	< 0.00019	< 0.00019
P-114R	P114R-ROX-041323	4/13/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	P114R-ROX-071423	7/14/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00048	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.031	< 0.0099	< 0.0099	< 0.00020	< 0.00020
	P114R-ROX-101823	10/18/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00099	< 0.00020	0.000085 J	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0099 H UJ	< 0.0098	< 0.00020	< 0.00020
	P114R-ROX-011024	1/10/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00076	0.00026	< 0.00020 UJ	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0095	< 0.0095	< 0.00020	< 0.00020
ROST-3-MW	ROST3MW-ROX-041123	4/11/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	ROST3MW-ROX-071723	7/17/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.031	< 0.01	< 0.01	< 0.00021	< 0.00021
	ROST3MW-ROX-071723-DUP	7/17/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
	ROST3MW-ROX-100623	10/6/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.000024 J	< 0.00011	< 0.00011	< 0.017	< 0.0057	< 0.0057	< 0.00011	< 0.00011
	ROST3MW-ROX-010824	1/8/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00014 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019 UJ	< 0.00019	< 0.029	< 0.0096 UJ	< 0.0096 UJ	< 0.00019	< 0.00019
ROST-4-PZ(C)	ROST4PZ(C)-ROX-041723	4/17/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	0.00059	0.00016 J	0.00043	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	0.019 J	< 0.0096	< 0.0096	< 0.00019	< 0.00019
	ROST4PZC-ROX-071123	7/11/2023	< 0.0010	0.0057	0.00067 J	0.023	0.0017 J	0.024	0.00069	< 0.00021	0.00032	0.000036 J	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.031	< 0.01	< 0.01	< 0.00021	< 0.00021
	ROST4PZ(C)-ROX-101623	10/16/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00057	< 0.00019	0.00025	< 0.00019 U	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0097	< 0.0097	< 0.00019	< 0.00019
	ROST4PZ(C)-ROX-101623-DUP	10/16/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00060	< 0.00019	0.00024	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0096	< 0.0096	< 0.00019 UJ	< 0.00019
	ROST4PZ(C)-ROX-010824	1/8/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00010 J	< 0.00020	0.00014 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.031	< 0.01	< 0.01	< 0.00020	< 0.00020
ROST-4-PZ(E)	ROST4PZ(E)-ROX-041823	4/18/2023	< 0.001	0.061	0.0013	0.031	0.0058	0.037	0.0016	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0098	< 0.0098	0.00016 J	< 0.00020
	ROST4PZ(E)-ROX-041823-DUP	4/18/2023	< 0.001	0.057	0.0014	0.032	0.0062	0.038	0.0013	0.00038	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0097	< 0.0097	< 0.00019	< 0.00019
	ROST4PZ(E)-ROX-071223	7/12/2023	< 0.0010	0.016	< 0.0010	0.0063	0.0012 J	0.0075 J	0.0013	< 0.00020	0.0010	0.000067 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	0.000042 J	< 0.00020
	ROST4PZ(E)-ROX-101323	10/13/2023	< 0.0010	0.01	< 0.0010	0.0048 J	< 0.0050	0.0053 J	0.00048	< 0.00020	0.00082	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020 U	< 0.00020
	ROST4PZE-ROX-011124	1/11/2024	< 0.0010	0.01	< 0.0010	0.0054	0.00061 J	0.0060 J	0.00082	< 0.00020	0.0015 J	0.000085 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	0.00011 J	< 0.00020
ROST-4-PZ(G)	ROST4PZ(G)-ROX-041423	4/14/2023	< 0.001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	ROST4PZ(G)-ROX-071023	7/10/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
	ROST4PZ(G)-ROX-101223	10/12/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.00020 UJ	< 0.00020
	ROST4PZ(G)-ROX-010824	1/8/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.031	< 0.01	< 0.01	< 0.00021	< 0.00021
T-12	T12-ROX-042023	4/20/2023	< 0.01	< 0.01	0.0094 J	0.04 J	< 0.05	0.044 J	0.00023	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
	T12-ROX-071423	7/14/2023	< 0.01	< 0.01	< 0.01	0.028 J	< 0.05	0.028 J	0.00024	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.00020	< 0.00020
	T12-ROX-101923	10/19/2023	< 0.01	< 0.01	< 0.01	0.042 J	< 0.05	0.045 J	0.00029	< 0.00020	0.00014 J	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.00020	< 0.00020
	T12-ROX-011124	1/11/2024	< 0.01	< 0.01	< 0.01	0.031 J	< 0.05	0.034 J	0.00037	< 0.00020	0.00015 J J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.031	< 0.01	< 0.01	< 0.00020	< 0.00020

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TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs																		
			Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Dimethyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Hexachlorobenzene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3&4-Methylphenol	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)			**0.007** [3]	**5.6** [1]	**0.14** [2]		**0.14** [2]	**0.28** [1]	**0.28** [1]	**0.00006** [2]		**0.00043** [1]	**0.49** [3]	**0.028** [1]	**0.35** [1]	**0.14** [3]	**0.0032** [2]	**0.001** [1]	**0.21** [3]	**0.1** [1]	**0.21** [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-01	MW1-ROX-040623	4/6/2023	< 0.01	< 0.01 U	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	MW1-ROX-071023	7/10/2023	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020 UJ
	MW1-ROX-100523	10/5/2023	< 0.0057	< 0.0057	< 0.0057	< 0.0057	< 0.0057	0.000049 J	< 0.00011	< 0.0057	< 0.0057	< 0.00011	< 0.00011	< 0.00011	< 0.0057	< 0.011 UJ	< 0.0057	< 0.011	< 0.00011	< 0.0057 UJ	< 0.00011
	MW1-ROX-010524	1/5/2024	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
MW-02	MW2-ROX-041823	4/18/2023	< 0.0098	< 0.0098 U	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	0.0095	0.026	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW2-ROX-071823	7/18/2023	< 0.01	0.00062 J	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	0.0090	0.017	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	MW2-ROX-101323	10/13/2023	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099 UJ	< 0.00020	< 0.00099 UJ	< 0.0099	< 0.0099	< 0.00020	0.0082	0.015	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
	MW2-ROX-011124	1/11/2024	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020 UJ	< 0.00020	< 0.0098	< 0.0098	< 0.00020	0.0069	0.0091	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
MW-03	MW3-ROX-041723	4/17/2023	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
	MW3-ROX-041723-DUP	4/17/2023	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.0096	< 0.00019	< 0.00019	< 0.00019	< 0.0096	< 0.019	< 0.0096	< 0.019	< 0.00019	< 0.0096	< 0.00019
	MW3-ROX-071023	7/10/2023	< 0.01	0.00065 J	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020 UJ	< 0.00020 UJ	< 0.01	< 0.01	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020 UJ
	MW3-ROX-101223	10/12/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098 UJ	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW3-ROX-101223-DUP	10/12/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098 UJ	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW3-ROX-010924	1/9/2024	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
	MW3-ROX-010924-DUP	1/9/2024	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
MW-04	MW4-ROX-040723	4/7/2023	< 0.02	< 0.02 U	< 0.02	< 0.02	< 0.02	< 0.00039 UJ	< 0.00039 UJ	< 0.02	< 0.02	< 0.00039 UJ	< 0.00039 UJ	< 0.00039 UJ	< 0.02	< 0.039	< 0.02	< 0.039	< 0.00039 UJ	< 0.02	< 0.00039 UJ
	MW4-ROX-071323	7/13/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.0010	< 0.00021	< 0.00021	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.01	< 0.02	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021 UJ
	MW4-ROX-102023	10/20/2023	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00022	< 0.00022	< 0.011	< 0.011	< 0.00022	< 0.00022	< 0.00022	< 0.011	< 0.022	< 0.011	< 0.022	< 0.00022	< 0.011	< 0.00022
	MW4-ROX-011724	1/17/2024	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00023	< 0.00023	< 0.011	< 0.011	< 0.00023	< 0.00023	< 0.00023	< 0.011	< 0.023	< 0.011	< 0.023	< 0.00023	< 0.011	< 0.00023
MW-05	MW5-ROX-041423	4/14/2023	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
	MW5-ROX-071723	7/17/2023	< 0.01	0.00027 J	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.01	< 0.00021	0.00017 J	0.00026	< 0.01	< 0.019	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021
	MW5-ROX-101623	10/16/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 UJ	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	MW5-ROX-010924	1/9/2024	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
MW-06A	MW6A-ROX-041123	4/11/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW6A-ROX-041123-DUP	4/11/2023	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
	MW6A-ROX-071123	7/11/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020 H UJ	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020 UJ
	MW6A-ROX-101023	10/10/2023	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019 U	< 0.00019	< 0.0095	< 0.0095	< 0.00019	< 0.00019	< 0.00019	< 0.0095	< 0.019	< 0.0095	< 0.019	< 0.00019	< 0.0095	< 0.00019
	MW6A-ROX-010924	1/9/2024	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.000073 J	< 0.00021	< 0.01	< 0.01	0.000043 J	< 0.00021	< 0.00021	< 0.01	< 0.021	< 0.01	< 0.021	0.00011 J	< 0.01	0.000091 J
MW-06B	MW6B-ROX-041123	4/11/2023	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
	MW6B-ROX-071123	7/11/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.01	< 0.00021 H UJ	< 0.00021	< 0.00021	< 0.01	< 0.02	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021 UJ
	MW6B-ROX-071123-DUP	7/11/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.01	< 0.02	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021 UJ
	MW6B-ROX-101023	10/10/2023	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.00019 U	< 0.00019	< 0.0094	< 0.0094	< 0.00019	< 0.00019	< 0.00019	< 0.0094	< 0.019	< 0.0094	< 0.019	< 0.00019	< 0.0094	< 0.00019
	MW6B-ROX-010924	1/9/2024	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.011	< 0.00021	< 0.00021	< 0.00021	< 0.011	< 0.021	< 0.011	< 0.021	< 0.00021	< 0.011	< 0.00021
MW-06C	MW6C-ROX-041123	4/11/2023	< 0.01	< 0.01 U	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	MW6C-ROX-071123	7/11/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020 UJ	< 0.00020 UJ	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020 UJ
	MW6C-ROX-101023	10/10/2023	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019 U	< 0.00019	< 0.0095	< 0.0095	0.000032 J	< 0.00019	< 0.00019	< 0.0095	< 0.019	< 0.0095	< 0.019	< 0.00019	< 0.0095	< 0.00019
	MW6C-ROX-010924	1/9/2024	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.01	< 0.021	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021
MW-06D	MW6D-ROX-041123	4/11/2023	< 0.0097	< 0.0097 U	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
	MW6D-ROX-071223	7/12/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.019	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020 UJ
	MW6D-ROX-100923	10/9/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW6D-ROX-010924	1/9/2024	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
MW-07	MW7-ROX-040723	4/7/2023	< 0.01	0.00042 J	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	0.00097	0.0013 J	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	0.082 J	< 0.00020
	MW7-ROX-040723-DUP	4/7/2023	< 0.01	0.00073 J	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	0.0011	0.0018 J	< 0.01	0.00073 J	< 0.01	< 0.02	< 0.00020	0.13 J	< 0.00020
	MW7-ROX-071323	7/13/2023	< 0.011	0.00044 J	< 0.011	< 0.011	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.01	< 0.00021	0.00088	0.0013	< 0.011	< 0.02	< 0.011	< 0.021	0.00011 J	0.12 J	< 0.00021 UJ
	MW7-ROX-071323-DUP	7/13/2023	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.01	< 0.00020	0.000095 J	< 0.01	< 0.01	< 0.00020	0.00087	0.0013	< 0.0099	< 0.02	< 0.0099	< 0.02	0.00011 J	0.084 J	< 0.00020 UJ
	MW7-ROX-102023	10/20/2023	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00022 U	< 0.00022	< 0.011	< 0.011	< 0.00022	0.0011	0.0015	< 0.011	0.00055 J	< 0.011	< 0.022	0.00013 J	0.11	< 0.00022
	MW7-ROX-102023-DUP	10/20/2023	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00022	< 0.00022	< 0.011	< 0.011	< 0.00022	0.0011	0.0015	< 0.011	0.00045 J	< 0.011	< 0.022	0.00014 J	0.082	< 0.00022
	MW7-ROX-011724	1/17/2024	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.00024	0.00014 J	< 0.012	< 0.012	< 0.00024	0.0013	0.0017	< 0.012	< 0.024	< 0.012	< 0.024	0.00024	0.095	< 0.00024
	MW7-ROX-011724-DUP	1/17/2024	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00023	0.00016 J	< 0.011	< 0.011	< 0.00023	0.0012	0.0016	< 0.011	< 0.023	< 0.011	< 0.023	0.00024	0.088	< 0.00023

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TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs																		
			Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Dimethyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Hexachlorobenzene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3&4-Methylphenol	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)			**0.007** [3]	**5.6** [1]	**0.14** [2]		**0.14** [2]	**0.28** [1]	**0.28** [1]	**0.00006** [2]		**0.00043** [1]	**0.49** [3]	**0.028** [1]	**0.35** [1]	**0.14** [3]	**0.0032** [2]	**0.001** [1]	**0.21** [3]	**0.1** [1]	**0.21** [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-09	MW9-ROX-041023	4/10/2023	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
	MW9-ROX-071823	7/18/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.019	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	MW9-ROX-101623	10/16/2023	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099 UJ	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
	MW9-ROX-010524	1/5/2024	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.011	< 0.00021	< 0.00021	0.000093 J	< 0.011	< 0.021	< 0.011	< 0.021	< 0.00021	< 0.011	< 0.00021
MW-10	MW10-ROX-040623	4/6/2023	< 0.01	0.00033 J	< 0.01	< 0.01	0.0034 J	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	MW10-ROX-071823	7/18/2023	< 0.0098	0.00031 J	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW10-ROX-101323	10/13/2023	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099 UJ	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
	MW10-ROX-010524	1/5/2024	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.011	< 0.00021	< 0.00021	< 0.00021	< 0.011	< 0.021	< 0.011	< 0.021	< 0.00021	< 0.011	< 0.00021
MW-11	MW11-ROX-040623	4/6/2023	< 0.0098	0.00044 J	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW11-ROX-071223	7/12/2023	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020 UJ
	MW11-ROX-100623	10/6/2023	< 0.0058	< 0.0058	< 0.0058	< 0.0058	< 0.0058	< 0.00012	< 0.00012	< 0.0058	< 0.0058	< 0.00012	< 0.00012 UJ	< 0.00012 UJ	< 0.0058	< 0.012 UJ	< 0.0058	< 0.012	< 0.00012	< 0.0058 UJ	< 0.00012
	MW11-ROX-010524	1/5/2024	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.01	< 0.021	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021
MW-12	MW12-ROX-040723	4/7/2023	< 0.0098	0.00064 J	< 0.0098 UJ	< 0.0098	0.0027 J	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02 UJ	< 0.0098	< 0.02	< 0.00020	< 0.0098 UJ	< 0.00020
	MW12-ROX-071223	7/12/2023	< 0.01	0.00078 J	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020 UJ
	MW12-ROX-101023	10/10/2023	< 0.0094	0.00028 J	< 0.0094	0.00049 J	< 0.0094	< 0.00019 U	< 0.00019	< 0.0094	< 0.0094	0.000073 J	< 0.00019	< 0.00019	< 0.0094	< 0.019	< 0.0094	< 0.019	< 0.00019	< 0.0094	< 0.00019
	MW12-ROX-011124	1/11/2024	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	0.000034 J J	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
MW-13	MW13-ROX-041323	4/13/2023	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
	MW13-ROX-071423	7/14/2023	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00099 UJ	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099 UJ	< 0.00020
	MW13-ROX-101823	10/18/2023	< 0.0099	< 0.0099	< 0.0099 UJ	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099 UJ	< 0.02 UJ	< 0.0099	< 0.02 UJ	< 0.00020	< 0.0099 UJ	< 0.00020
	MW13-ROX-011024	1/10/2024	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020 UJ	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
MW-14	MW14-ROX-041223	4/12/2023	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
	MW14-ROX-071723	7/17/2023	< 0.011 UJ	< 0.011 UJ		< 0.011 UJ	< 0.0097 UJ	< 0.00022 UJ	< 0.00022 UJ	< 0.0097 UJ	< 0.0097 UJ	< 0.00022 UJ	< 0.00022 UJ	< 0.00022 UJ	< 0.011		< 0.011	< 0.022	< 0.00022 UJ		< 0.00022 UJ
	MW14-ROX-100923	10/9/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	0.0018 J	0.0011 J	< 0.0098	< 0.02	< 0.00020	0.0047 J	< 0.00020
	MW14-ROX-011724	1/17/2024	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00022	< 0.00022	< 0.011	< 0.011	< 0.00022	< 0.00022	< 0.00022	< 0.011	< 0.022	< 0.011	< 0.022	< 0.00022	< 0.011	< 0.00022
MW-16	MW16-ROX-041023	4/10/2023	< 0.0098	0.00043 J	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW16-ROX-071123	7/11/2023	< 0.0099	0.00061 J	< 0.0099	< 0.0099	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020 UJ
	MW16-ROX-101823	10/18/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	MW16-ROX-101823-DUP	10/18/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020 U	< 0.00020	< 0.0098	< 0.0098	< 0.00020 U	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW16-ROX-010824	1/8/2024	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.01	< 0.021	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021
MW-22	MW22-ROX-041823	4/18/2023	< 0.0098	0.00069 J	0.0043 J	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	0.01	0.011	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW22-ROX-071323	7/13/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	0.0059	0.0073	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	MW22-ROX-101623	10/16/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098 UJ	< 0.00020	0.00014 J	< 0.0098	< 0.0098	< 0.00020	0.0037	0.0039	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW22-ROX-011224	1/12/2024	< 0.0098	< 0.0098	0.01 J	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	0.012	0.017	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW22-ROX-011224-DUP	1/12/2024	< 0.0096	< 0.0096	0.011 J	< 0.0096	< 0.0096	< 0.00019	0.000090 J	< 0.0096	< 0.0096	< 0.00019	0.013	0.018	< 0.0096	< 0.019	< 0.0096	< 0.019	< 0.00019	< 0.0096	< 0.00019
MW-23	MW23-ROX-041223	4/12/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	0.000090 J J	0.000077 J J	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	MW23-ROX-071423	7/14/2023	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
	MW23-ROX-101023	10/10/2023	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019 U	< 0.00019	< 0.0095	< 0.0095	0.000044 J	< 0.00019	< 0.00019	< 0.0095	< 0.019	< 0.0095	< 0.019	< 0.00019	< 0.0095	< 0.00019
	MW23-ROX-011124	1/11/2024	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00020 UJ	< 0.00020	< 0.0095	< 0.0095	< 0.00020	< 0.00020	< 0.00020	< 0.0095	< 0.019	< 0.0095	< 0.019	< 0.00020	< 0.0095	< 0.00020
MW-24	MW24-ROX-041323	4/13/2023	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.00019	< 0.0095	< 0.0095	< 0.00019	< 0.00019	< 0.00019	< 0.0095	< 0.019	< 0.0095	< 0.019	< 0.00019	< 0.0095	< 0.00019
	MW24-ROX-071023	7/10/2023	< 0.0098	< 0.0098 U	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.019	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020 UJ
	MW24-ROX-101223	10/12/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW24-ROX-010924	1/9/2024	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
MW-25	MW25-ROX-040723	4/7/2023	< 0.01	0.00062 J	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	MW25-ROX-071323	7/13/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.01	< 0.02	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021 UJ
	MW25-ROX-102023	10/20/2023	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00022	< 0.00022	< 0.011	< 0.011	< 0.00022	< 0.00022	< 0.00022	< 0.011	< 0.022	< 0.011	< 0.022	< 0.00022	< 0.011	< 0.00022
	MW25-ROX-011824	1/18/2024	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.00023	< 0.00023	< 0.012	< 0.012	< 0.00023	< 0.00023	< 0.00023	< 0.012	< 0.023	< 0.012	< 0.023	< 0.00023	< 0.012	< 0.00023
MW-26	MW26-ROX-041023	4/10/2023	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
	MW26-ROX-071023	7/10/2023	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019 UJ
	MW26-ROX-100523	10/5/2023	< 0.0057	< 0.0057	< 0.0057	< 0.0057	< 0.0057	< 0.00011	< 0.00011	< 0.0057	< 0.0057	< 0.00011	< 0.00011	< 0.00011	< 0.0057	< 0.011 UJ	< 0.0057	< 0.011	< 0.00011	< 0.0057 UJ	< 0.00011
	MW26-ROX-010524	1/5/2024	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099 UJ	< 0.00020

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs																		
			Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Dimethyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Hexachlorobenzene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3&4-Methylphenol	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)			**0.007** [3]	**5.6** [1]	**0.14** [2]		**0.14** [2]	**0.28** [1]	**0.28** [1]	**0.00006** [2]		**0.00043** [1]	**0.49** [3]	**0.028** [1]	**0.35** [1]	**0.14** [3]	**0.0032** [2]	**0.001** [1]	**0.21** [3]	**0.1** [1]	**0.21** [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-27	MW27-ROX-041023	4/10/2023	< 0.0098	0.00031 J	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW27-ROX-071823	7/18/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.01	< 0.02	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021
	MW27-ROX-101823	10/18/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW27-ROX-010824	1/8/2024	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.00019	< 0.0095	< 0.0095	< 0.00019	< 0.00019	< 0.00019	< 0.0095	< 0.019	< 0.0095	< 0.019	< 0.00019	< 0.0095	< 0.00019
MW-28	MW28-ROX-041423	4/14/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW28-ROX-071223	7/12/2023	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.02	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019 UJ
	MW28-ROX-101223	10/12/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 UJ	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	MW28-ROX-010524	1/5/2024	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00022	< 0.00022	< 0.011	< 0.011	< 0.00022	< 0.00022	< 0.00022	< 0.011	< 0.022	< 0.011	< 0.022	< 0.00022	< 0.011	< 0.00022
P-54	P54-ROX-041223	4/12/2023	< 0.0099	< 0.0099 U	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
	P54-ROX-041223-DUP	4/12/2023	< 0.0097	< 0.0097 U	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
	P54-ROX-071223	7/12/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.019	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020 UJ
	P54-ROX-100623	10/6/2023	< 0.0057	< 0.0057	< 0.0057	< 0.0057	< 0.0057	< 0.00011	< 0.00011	< 0.0057	< 0.0057	0.000020 J	< 0.00011 UJ	< 0.00011 UJ	< 0.0057	< 0.011 UJ	< 0.0057	< 0.011	< 0.00011	< 0.0057 UJ	< 0.00011
	P54-ROX-010824	1/8/2024	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
P-56	P56-ROX-042023	4/20/2023	0.00047 J	< 0.01 U	< 0.01	< 0.01	< 0.01	< 0.00020	0.00052	< 0.01	< 0.01	< 0.00020	0.019	0.018	< 0.01	< 0.02	< 0.01	< 0.02	0.0011	< 0.01	< 0.00020
	P56-ROX-071023	7/10/2023	0.00049 J	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	0.00022	< 0.01	< 0.01	< 0.00020	0.0088	0.0074	< 0.01	< 0.02	< 0.01	< 0.02	0.00063	< 0.01	< 0.00020 UJ
	P56-ROX-101823	10/18/2023	0.00025 J	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021	0.00023	< 0.01	< 0.01	< 0.00021	0.0032	0.0017	< 0.01	< 0.021	< 0.01	< 0.021	0.00036	< 0.01	< 0.00021
	P56-ROX-011024	1/10/2024	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019 UJ	0.00034	< 0.0095	< 0.0095	< 0.00019	0.0068	0.0048	< 0.0095	< 0.019	< 0.0095	< 0.019	0.00052	< 0.0095	< 0.00019
P-57	P57-ROX-041923	4/19/2023	0.00048 J	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	0.00071	< 0.0099	< 0.0099	< 0.00020	0.034	0.029	< 0.0099	< 0.02	< 0.0099	< 0.02	0.00045	0.0069 J	< 0.00020
	P57-ROX-071323	7/13/2023	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00022	0.00033	< 0.011	< 0.011	< 0.00022	0.018	0.022	< 0.011	< 0.02	< 0.011	< 0.022	0.00030	0.0079 J	< 0.00022
	P57-ROX-071323-DUP	7/13/2023	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	0.00041	< 0.0099	< 0.0099	< 0.00020	0.022	0.026	< 0.0099	< 0.02	< 0.0099	< 0.02	0.00034	0.0072 J	< 0.00020
	P57-ROX-101723	10/17/2023	0.00051 J	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020 U	0.00038	< 0.0099	< 0.0099	< 0.00020 U	0.021	0.014	< 0.0099	< 0.02	< 0.0099	< 0.02	0.00033	0.0061 J	< 0.00020
	P57-ROX-011124	1/11/2024	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00021 UJ	0.00054	< 0.011	< 0.011	< 0.00021	0.027	0.022	< 0.011	< 0.022	< 0.011	< 0.022	0.00040	< 0.011	< 0.00021
	P57-ROX-011124-DUP	1/11/2024	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00021 UJ	0.00051	< 0.011	< 0.011	< 0.00021	0.025	0.019	< 0.011	< 0.021	< 0.011	< 0.021	0.00037	< 0.011	< 0.00021
P-58	P58-ROX-041923	4/19/2023	0.0018 J	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	0.0019	< 0.0098	< 0.0098	< 0.00020	0.093	0.045	< 0.0098	< 0.02	< 0.0098	< 0.02	0.0018	0.72	0.00076
	P58-ROX-071823	7/18/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.000069 J	0.0014	< 0.01	< 0.01	< 0.00020	0.065 J	0.034	< 0.01	< 0.02	< 0.01	< 0.02	0.0012	0.51 J	0.00032
	P58-ROX-071823-DUP	7/18/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	0.0011	< 0.0098	< 0.0098	< 0.00020	0.038 J	0.027	< 0.0098	< 0.02	< 0.0098	< 0.02	0.00080	0.25 J	0.000069 J
	P58-ROX-101723	10/17/2023	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020 U	0.0010	< 0.0099	< 0.0099	< 0.00020 U	0.035	0.025	< 0.0099	< 0.02	0.00044 J	< 0.02	0.00079	0.22	0.00013 J
	P58-ROX-011224	1/12/2024	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.00020 J	0.0014	< 0.01	< 0.01	0.000073 J	0.058	0.019	< 0.01	< 0.021	< 0.01	< 0.021	0.0021	0.31	0.00088
	P58-ROX-011224-DUP	1/12/2024	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.00019 J	0.0014	< 0.01	< 0.01	0.000070 J	0.058	0.019	< 0.01	< 0.02	< 0.01	< 0.02	0.0021	0.28	0.00094
P-59	P59-ROX-042023	4/20/2023	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.00099	< 0.00099	< 0.02	< 0.02	< 0.00099	0.0099	0.014	< 0.02	< 0.04	< 0.02	< 0.04	< 0.00099	0.016 J	< 0.00099
	P59-ROX-071823	7/18/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.000086 J	0.00022	< 0.01	< 0.01	< 0.00020	0.0099	0.013	< 0.01	< 0.04	< 0.01	< 0.02	0.00059	< 0.01	0.00029
	P59-ROX-101823	10/18/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021 U	0.00040	< 0.01	< 0.01	< 0.00021	0.0098	0.013	< 0.01	< 0.021	< 0.01	0.0088 J*1	0.00065	0.013	0.00043
	P59-ROX-011224	1/12/2024	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	0.00014 J	0.00025	< 0.011	< 0.011	< 0.00021	0.0082	0.011	< 0.011	< 0.021	< 0.011	< 0.021	0.00071	0.017	0.00036
P-74	P74-ROX-041723	4/17/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	P74-ROX-071223	7/12/2023	< 0.01	0.0010 J	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	0.00020	0.00017 J	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020 UJ
	P74-ROX-101723	10/17/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020 U	< 0.00020	< 0.0098	< 0.0098	< 0.00020 U	0.00043	0.00042	< 0.0098	0.0014 J	< 0.0098	< 0.02	< 0.00020	0.02	< 0.00020
	P74-ROX-101723-DUP	10/17/2023	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020 H UJ	< 0.00020 H UJ	< 0.0099	< 0.0099	0.00011 J H J	0.00027 H J	0.00026 H J	< 0.0099	0.0024 J	< 0.0099	< 0.02	< 0.00020 H UJ	0.023	< 0.00020 H UJ
P-93A	P93A-ROX-041923	4/19/2023	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
	P93A-ROX-071123	7/11/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.01	< 0.02	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021 UJ
	P93A-ROX-101823	10/18/2023	< 0.01	0.00034 J	< 0.01	< 0.01	< 0.01	< 0.00020 U	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	P93A-ROX-011024	1/10/2024	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.00019 UJ	< 0.00019	< 0.0094	< 0.0094	< 0.00019	0.000075 J	< 0.00019	< 0.0094	< 0.019	< 0.0094	< 0.019	< 0.00019	< 0.0094	< 0.00019
P-93B	P93B-ROX-042023	4/20/2023	< 0.0099	< 0.0099 U	0.0036 J	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	0.0010 J	< 0.0099	< 0.02	< 0.00020	0.38	< 0.00020
	P93B-ROX-071823	7/18/2023	< 0.01	< 0.01	0.0036 J	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	0.000085 J	0.000090 J	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	0.24	< 0.00020
	P93B-ROX-101923	10/19/2023	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00021 U	< 0.00021	< 0.011	< 0.011	< 0.00021	0.00015 J	0.00014 J	< 0.011	< 0.021	< 0.011	< 0.021	< 0.00021	0.2	< 0.00021
	P93B-ROX-011224	1/12/2024	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.011	< 0.00021	0.00022	0.00017 J	< 0.011	< 0.021	< 0.011	< 0.021	< 0.00021	0.2	< 0.00021
P-93C	P93C-ROX-041923	4/19/2023	< 0.01	< 0.01	< 0.01	< 0.01 U	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	P93C-ROX-071423	7/14/2023	< 0.01	0.00029 J	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.01	< 0.02	< 0.01	< 0.021	< 0.00021	< 0.01 UJ	< 0.00021
	P93C-ROX-101623	10/16/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 UJ	< 0.00021	< 0.00021	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.01	< 0.021	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021
	P93C-ROX-011124	1/11/2024	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021 UJ	< 0.00021	< 0.01	< 0.01	< 0.00021	< 0.00021	0.000095 J	< 0.01	< 0.021	< 0.01	< 0.021	< 0.00021	0.063	< 0.00021

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs																	
			Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Dimethyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Hexachlorobenzene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3&4-Methylphenol	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)			**0.007** [3]	**5.6** [1]	**0.14** [2]		**0.14** [2]	**0.28** [1]	**0.28** [1]	**0.00006** [2]		**0.00043** [1]	**0.49** [3]	**0.028** [1]	**0.35** [1]	**0.14** [3]	**0.0032** [2]	**0.001** [1]	**0.21** [3]	**0.1** [1]	**0.21** [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																	
P-93D	P93D-ROX-042123	4/21/2023	< 0.0099	< 0.0099 U	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
	P93D-ROX-071123	7/11/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020 UJ	< 0.00020 UJ	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020 UJ
	P93D-ROX-101623	10/16/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 UJ	< 0.00020 U	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	0.000043 J
	P93D-ROX-011024	1/10/2024	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019 UJ	< 0.00019	< 0.0095	< 0.0095	< 0.00019	< 0.00019	< 0.00019	< 0.0095	< 0.019	< 0.0095	< 0.019	< 0.00019	< 0.0095	< 0.00019
P-114R	P114R-ROX-041323	4/13/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	P114R-ROX-071423	7/14/2023	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099		< 0.0099	< 0.02	< 0.00020	< 0.0099 UJ	< 0.00020
	P114R-ROX-101823	10/18/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020 U	< 0.00020	< 0.0098	< 0.0098	< 0.00020	0.00025	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	P114R-ROX-011024	1/10/2024	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	0.000065 J J	< 0.00020	< 0.0095	< 0.0095	< 0.00020	0.00022	< 0.00020	< 0.0095	< 0.019	< 0.0095	< 0.019	< 0.00020	< 0.0095	< 0.00020
ROST-3-MW	ROST3MW-ROX-041123	4/11/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	ROST3MW-ROX-071723	7/17/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.01	< 0.02	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021
	ROST3MW-ROX-071723-DUP	7/17/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	ROST3MW-ROX-100623	10/6/2023	< 0.0057	< 0.0057	< 0.0057	< 0.0057	< 0.0057	< 0.00011	< 0.00011	< 0.0057	< 0.0057	< 0.00011	0.000072 J	< 0.00011	< 0.0057	< 0.011 UJ	< 0.0057	< 0.011	< 0.00011	< 0.0057 UJ	< 0.00011
	ROST3MW-ROX-010824	1/8/2024	< 0.0096 UJ	< 0.0096 UJ	< 0.0096	< 0.0096 UJ	< 0.0096 UJ	< 0.00019	0.00015 J	< 0.0096 UJ	< 0.0096 UJ	< 0.00019	0.00029 J	< 0.00019 UJ	< 0.0096 UJ	< 0.019 UJ	< 0.0096 UJ	< 0.019 UJ	0.000087 J	< 0.0096 UJ	< 0.00019
ROST-4-PZ(C)	ROST4PZ(C)-ROX-041723	4/17/2023	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.00019	0.00065	< 0.0096	< 0.0096	< 0.00019	0.0017	< 0.00019	< 0.0096	< 0.019	< 0.0096	< 0.019	0.00069	< 0.0096	0.00025
	ROST4PZC-ROX-071123	7/11/2023	0.00060 J	< 0.01	< 0.01	< 0.01	< 0.01	0.00011 J	0.00059	< 0.01	< 0.01	< 0.00021	0.014	0.0016	< 0.01	< 0.019	< 0.01	< 0.021	0.0015	< 0.01	0.000070 J J
	ROST4PZ(C)-ROX-101623	10/16/2023	0.00054 J	< 0.0097	< 0.0097	< 0.0097	< 0.0097 UJ	< 0.00019 U	0.00057	< 0.0097	< 0.0097	< 0.00019	0.0081	0.00018 J	< 0.0097	< 0.019	< 0.0097	< 0.019	0.0010	< 0.0097	< 0.00019
	ROST4PZ(C)-ROX-101623-DUP	10/16/2023	0.00060 J	< 0.0096	< 0.0096	< 0.0096	< 0.0096 UJ	< 0.00019	0.00061	< 0.0096	< 0.0096	< 0.00019	0.0094	0.00028	< 0.0096	< 0.019	< 0.0096	< 0.019	0.0012	< 0.0096	< 0.00019
	ROST4PZ(C)-ROX-010824	1/8/2024	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	0.00017 J	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	0.000057 J
ROST-4-PZ(E)	ROST4PZ(E)-ROX-041823	4/18/2023	0.0014 J	< 0.0098	< 0.0098	< 0.0098	< 0.0098	0.00022	0.0017	< 0.0098	< 0.0098	< 0.00020	0.056	0.021	< 0.0098	< 0.02	< 0.0098	< 0.02	0.0047	< 0.0098	0.00042
	ROST4PZ(E)-ROX-041823-DUP	4/18/2023	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	0.0014	< 0.0097	< 0.0097	< 0.00019	0.055	0.02	< 0.0097	< 0.019	< 0.0097	< 0.019	0.0039	< 0.0097	0.00029
	ROST4PZ(E)-ROX-071223	7/12/2023	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099	0.00026	0.0011	< 0.0099	< 0.0099	< 0.00020	0.02	0.0041	< 0.0099	< 0.019	< 0.0099	< 0.02	0.0051	< 0.0099	0.00048
	ROST4PZ(E)-ROX-101323	10/13/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098 UJ	< 0.00020	0.00059 B	< 0.0098	< 0.0098	< 0.00020	0.0079	0.0032	< 0.0098	< 0.02	< 0.0098	< 0.02	0.0042	< 0.0098	0.00013 J
	ROST4PZE-ROX-011124	1/11/2024	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.00037 J	0.00064	< 0.01	< 0.01	< 0.00020	0.0092	0.0026	< 0.01	< 0.02	< 0.01	< 0.02	0.0047	< 0.01	0.00049
ROST-4-PZ(G)	ROST4PZ(G)-ROX-041423	4/14/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	ROST4PZ(G)-ROX-071023	7/10/2023	< 0.01	0.00029 J	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020 UJ
	ROST4PZ(G)-ROX-101223	10/12/2023	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099 UJ	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
	ROST4PZ(G)-ROX-010824	1/8/2024	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.01	< 0.021	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021
T-12	T12-ROX-042023	4/20/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	0.0010 J	< 0.00020	0.022	0.031	< 0.01	< 0.02	< 0.01	< 0.02	0.00048	0.036	< 0.00020
	T12-ROX-071423	7/14/2023	< 0.01	0.0011 J	< 0.01	< 0.01	< 0.01	< 0.00020	0.00023	< 0.01	< 0.01	< 0.00020	0.015	0.023	< 0.01	< 0.02	< 0.01	< 0.02	0.00042	0.05 J	< 0.00020
	T12-ROX-101923	10/19/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020 U	0.00029	< 0.0098	< 0.0098	< 0.00020	0.016	0.022	< 0.0098	0.00065 J	< 0.0098	< 0.02	0.00050	0.049	< 0.00020
	T12-ROX-011124	1/11/2024	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.000037 J J	0.00028	< 0.01	< 0.01	< 0.00020	0.016	0.024	< 0.01	< 0.021	< 0.01	< 0.021	0.00052	0.03	0.000039 J

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-66, and P-68, contained LNAPL; therefore, these wells were not sampled. Well P-74 was inaccessible during the 1Q24 quarterly sampling event due to construction activities in the WRR.

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

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

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

H = Analyzed or extracted out of holding time criteria.

F1 = Indicates MS/MSD 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.

Analytes that were non-detect across all sampling locations during the four quarter reporting period are not presented on the Analytical table.

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:

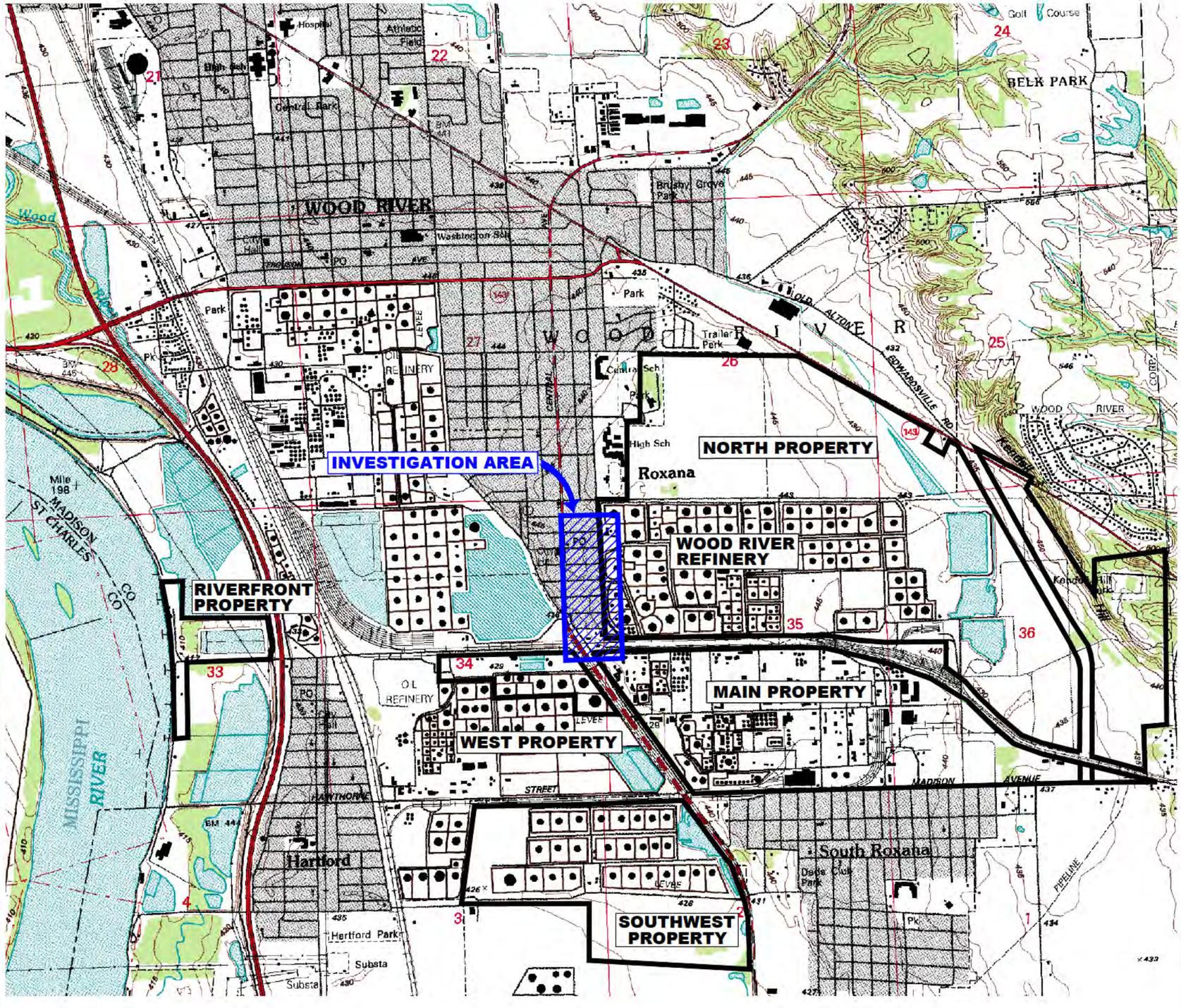
Plan View Model Output – The data input for the plan view model was not limited by depth and was modeled in two dimensions (2D). Regardless of sample depth, benzene concentrations were modeled on a flat horizontal plane.

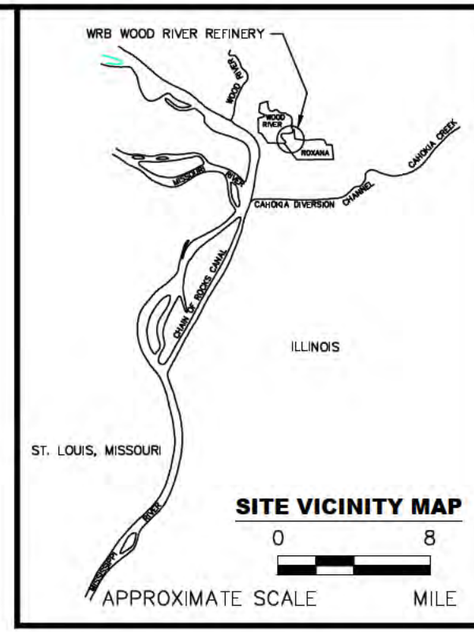
Inward Kriging / Boundary Cut-off – This method of Kriging limits the horizontal extent of data modeling to the extent of the data on the x/y plane in a convex hull.

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. 60721927
AECOM		
DRN. BY:gds April 2024 DSGN. BY:mar CHKD. BY:wmp	Investigation Area Location Map	FIG. NO. 1

File: C:\USERS\PADUREANUO\AECOM\EC GIS SERVICES - DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 1Q24 GW RPT\WORKSPACE\PART II\FIGURE 2 GROUNDWATER MONITORING WELL SAMPLING LOCATIONS.DWG Last edited: Feb. 12, 24 @ 5:48 PM by: padureanuo

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
VILLAGE OF ROXANA
HIGHWAY 111 (S. CENTRAL AVE)
CHAFFER AVE
1ST STREET
2ND STREET
RAND AVENUE
NORTH PROPERTY
WEST PROPERTY
MAIN PROPERTY
BP
1986 APPROXIMATE BENZENE RELEASE SITE
2020 APPROXIMATE BUCKEYE PIPELINE GASOLINE RELEASE SITE

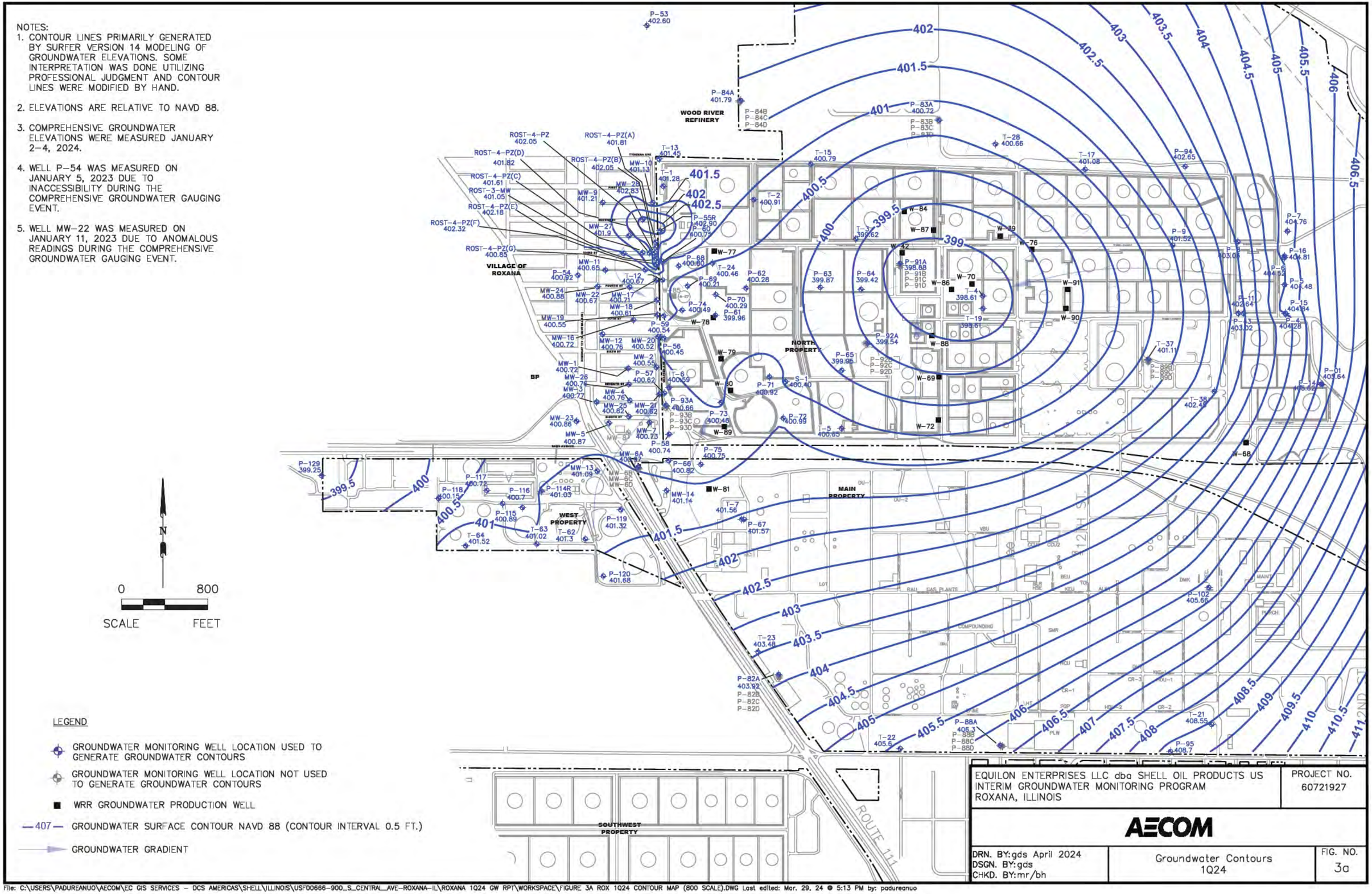
PZ-1(101)
PZ-1(85)
MW-9 *
MW-10 *
MW-28 *
MW-27 *
P-55R *
ROST-4-PZ(A)
ROST-4-PZ(B)
ROST-4-PZ(C) *
ROST-4-PZ
P-60-11
ROST-3-MW *
ROST-4-PZ(D)
P-60-S
P-60-12
ROST-4-PZ(E) *
ROST-4-PZ(F)
P-60
ROST-4-PZ(G) *
P-68 *
P-60-13
MW-11 *
P-54 *
MW-17
T-12 *
MW-24 *
MW-22 *
P-69
MW-18
P-74 *
MW-19
P-59 *
P-61
MW-16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

A-31 A-32 A-34 A-28 A-33 A-27 A-22
T-24
F-76 F-77 F-78 F-73 F-74 F-75
P-70

0 200
SCALE FEET
N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60721927
AECOM		
DRN. BY:gds April 2024 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 JANUARY 2–4, 2024.
4. WELL P–54 WAS MEASURED ON JANUARY 5, 2023 DUE TO INACCESSIBILITY DURING THE COMPREHENSIVE GROUNDWATER GAUGING EVENT.
5. WELL MW–22 WAS MEASURED ON JANUARY 11, 2023 DUE TO ANOMALOUS READINGS DURING THE COMPREHENSIVE GROUNDWATER GAUGING EVENT.



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. 60721927

AECOM

DRN. BY:gds April 2024
DSGN. BY:gds
CHKD. BY:mr/bh

Groundwater Contours 1Q24

FIG. NO. 3a

File: C:\USERS\PADUREANUO\AECOM\EC GIS SERVICES – DCS AMERICAS\SHELL\ILLINOIS\USF00666–900_S_CENTRAL_AVE–ROXANA–IL\ROXANA 1Q24 GW RPT\WORKSPACE\FIGURE 3A ROX 1Q24 CONTOUR MAP (800 SCALE).DWG Last edited: Mar. 29, 24 @ 5:13 PM by: padureanuo

File: C:\USERS\PADUREANUO\AECOM\EC GIS SERVICES - DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 1Q24 GW RPT\WORKSPACE\FIGURE 3B GW CONTOURS 1Q24 WF.DWG Last edited: Jan. 31, 24 @ 10:41 PM by: padureanuo

LEGEND

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

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 JANUARY 2–4, 2024.
4. WELL P–54 WAS MEASURED ON JANUARY 5, 2023 DUE TO INACCESSIBILITY DURING THE COMPREHENSIVE GROUNDWATER GAUGING EVENT.
5. WELL MW–22 WAS MEASURED ON JANUARY 11, 2023 DUE TO ANOMALOUS READINGS DURING THE COMPREHENSIVE GROUNDWATER GAUGING EVENT.

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
VILLAGE OF ROXANA
BP
PUBLIC WORKS YARD
NORTH PROPERTY
WEST PROPERTY
MAIN PROPERTY
WOOD RIVER REFINERY
1986 APPROXIMATE BENZENE RELEASE SITE
RAND AVENUE
2020 APPROXIMATE BUCKEYE PIPELINE GASOLINE RELEASE SITE

401.5 402 402.5 400.5 400.5 401 401.5 402

T-13 401.45; T-1 401.28; T-2 400.91; MW-9 401.21; PZ-1(101); PZ-1(85); MW-10 401.13; MW-28 402.83; ROST-4-PZ(A) 401.81; ROST-4-PZ(B) 402.05; P-55R 402.90; MW-27 401.9; ROST-4-PZ(D) 401.82; ROST-4-PZ(C) 401.61; ROST-4-PZ 402.05; ROST-3-MW 401.05; ROST-4-PZ(E) 402.18; ROST-4-PZ(F) 402.32; P-60 400.75; W-77; P-54 400.92; MW-11 400.65; ROST-4-PZ(G) 400.85; T-12 400.67; MW-17 400.71; P-68 400.80; T-24 400.46; P-62 400.28; MW-24 400.88; MW-22 400.67; P-69 400.21; W-85; P-70 400.29; MW-18 400.61; P-74 400.49; P-59 400.54; W-78; P-61 399.96; MW-19 400.55; MW-16 400.72; PZ-2(84); PZ-2(70.5); P-56 400.45; MW-12 400.76; MW-20 400.52; GP-2-PZ; MW-2 400.55; W-79; MW-1 400.72; T-6 400.59; P-71 400.92; S-1 400.40; MW-26 400.76; P-57 400.62; MW-4 400.76; MW-21 400.62; W-80; P-73 400.46; MW-3 400.77; P-93A 400.66; P-93B; P-93C; P-93D; MW-25 400.82; MW-23 400.86; MW-5 400.87; MW-7 400.73; P-72 400.99; P-58 400.74; W-89; MW-8; MW-6A 400.97; MW-6B; MW-6C; MW-6D; P-66 400.82; P-75 400.75; MW-13 401.09; P-117 400.72; P-114R 401.03; MW-14 401.14; W-81; P-116 400.7; P-115 400.89; P-119 401.32; T-7 401.56; P-67 401.57; T-64 401.52; T-63 401.02; T-62 401.3

A-147; A-32; A-31; A-58; A-57; A-34; A-28; A-33; A-37; A-27; A-35; A-16; A-30; A-22; A-29; F-50; F-76; F-77; F-78; F-73; F-74; F-75

0 300 SCALE FEET N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60721927
AECOM		
DRN. BY: gds April 2024 DSGN. BY: gds CHKD. BY: mr/bh	Groundwater Contours 1Q24– West Fenceline	FIG. NO. 3b

File: C:\USERS\PADUREMUJO\AECOM\EC GIS SERVICES - DCS AMERICAS\SHELL\ILLINOIS\USFO0695-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 1Q24 GW RPT\WORKSPACE\PART II\FIGURE 4A THICKNESS OF LNAPL (WEST FENCLINE) 1Q24.DWG Last edited: Feb. 20, 24 @ 11:22 AM by padureanu

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 JANUARY 2–4, 2024.

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
1986 APPROXIMATE BENZENE RELEASE SITE
2020 APPROXIMATE BUCKEYE PIPELINE GASOLINE RELEASE SITE
PUBLIC WORKS YARD
NORTH PROPERTY
MAIN PROPERTY
WEST PROPERTY
WOOD RIVER REFINERY
BP

P-84A P-84B P-84C P-84D
T-13 T-1 T-2 T-24 T-12 T-6 T-7
A-32 A-31 A-58 A-57 A-34 A-28 A-33 A-37 A-27 A-35 A-16 A-30 A-22 A-29
F-50 F-76 F-77 F-78 F-73 F-74 F-75
MW-9 MW-10 MW-28 MW-27 MW-11 MW-17 MW-24 MW-22 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-5 MW-7 MW-23 MW-6A MW-6B MW-6C MW-6D MW-13 MW-14
ROST-4-PZ(A) ROST-4-PZ(B) ROST-4-PZ(C) ROST-4-PZ(D) ROST-4-PZ(E) ROST-4-PZ(F) ROST-4-PZ(G) ROST-4-PZ ROST-3-MW
P-55R 0.01 0.02
P-54 P-60 P-68 0.01 0.07 P-69 W-85 P-70 N/A P-74 P-59 P-56 P-57 P-73 P-93A P-93B P-93C P-93D P-58 P-66 1.03 1.0 P-75 P-72 P-71 S-1 0.01 0.02 P-67
R-77 W-77 1.0
P-62 1.28 1.0
P-61 2.25* R-78 W-78 1.0
W-79 P-79
R-80 W-80
R-89 W-89
R-81 W-81
P-117 P-114R P-116 P-115 P-119

0 300
SCALE FEET
N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60721927
AECOM		
DRN. BY:gds April 2024 DSGN. BY: mr CHKD. BY:bh	1Q24 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 JANUARY 2–4, 2024.

VILLAGE OF ROXANA

NORTH PROPERTY

WEST PROPERTY

SOUTHWEST PROPERTY

MAIN PROPERTY

RAND AVE

MAIN OFFICE ROAD

ILLINOIS TERMINAL RAILROAD

0 800

SCALE FEET

N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60721927
AECOM	
DRN. BY: gds April 2024 DSGN. BY: mr CHKD. BY: bh	1Q24 Thickness of LNAPL
	FIG. NO. 4b

File: C:\USERS\PADUREANUO\AECOM\EC GIS SERVICES - DCS AMERICAS\SHELL\ILLINOIS\US00666-900 S CENTRAL AVE-ROXANA-IL\ROXANA 1Q24 GW RPT\WORKSPACE\PART II\FIGURE 5 1Q24 GROUNDWATER ANALYTICAL RESULTS SUMMARY.DWG Last edited: Feb. 20, 24 @ 11:27 AM by: poduregnuo

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
1,2,4-Trimethylbenzene	0.07
1,3,5-Trimethylbenzene	0.07
Benzo(a)anthracene	0.00013
Benzo(a)pyrene	0.0002
Phenol	0.1

3. MULTIPLE RESULTS (e.g., 680 / 1,000) 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-66 AND P-68 WERE NOT SAMPLED DURING 1Q24 DUE TO THE PRESENCE OF LNAPL.
6. WELL P-74 WAS INACCESSIBLE DURING THE QUARTERLY SAMPLING EVENT DUE TO CONSTRUCTION ACTIVITIES.

Sample Location	T-12
Sampled 1/11/2024	Result (mg/L)
Benzene	1.3

Sample Location	MW-22
Sampled 1/12/2024	Result (mg/L)
Benzene	0.13 / 0.12
1,2,4-Trimethylbenzene	0.16 / 0.13
1,3,5-Trimethylbenzene	0.13 / 0.11

Sample Location	P-59
Sampled 1/12/2024	Result (mg/L)
Benzene	1.6

Sample Location	P-93A	P-93B	P-93C
Sampled 1/10, 1/12, 1/11/2024	Result (mg/L)	Result (mg/L)	Result (mg/L)
Benzene	0.055	690	490
Phenol		0.2	

Sample Location	P-57
Sampled 1/11/2024	Result (mg/L)
Benzene	0.037 / 0.041

Sample Location	MW-7
Sampled 1/17/2024	Result (mg/L)
Benzene	680 / 1000

Sample Location	MW-25
Sampled 1/8/2024	Result (mg/L)
Benzene	0.053

Sample Location	P-58
Sampled 1/12/2024	Result (mg/L)
Benzene	240 / 250
Benzo(a)anthracene	0.00034 / 0.00033
Benzo(a)pyrene	0.00029 / 0.00028
Phenol	0.31 / 0.28

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

SCALE 0 200 FEET

N

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

PROJECT NO. 60721927

AECOM

DRN. BY:gds April 2024
DSGN. BY:mr
CHKD. BY:bh

1Q24
Groundwater Monitoring Well
Analytical Exceedances

FIG. NO. 5

File: C:\USERS\PADURECANUO\AECOM\EC GIS SERVICES - DCS AMERICAS\SHELL\ILLINOIS\USF00686-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 1Q24 GW RPT\WORKSPACE\PART I\FIGURE 6 1Q24 DISSOLVED PHASE BENZENE CONCENTRATIONS IN GROUNDWATER.DWG Last edited: Feb. 20, 24 @ 11:48 AM by: paduracanuo

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. 680 / 1,000) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
6. CONTOUR LINES IN AREA OF P-55R AND P-66 ADJUSTED BASED ON AVAILABLE 1Q24 AND HISTORICAL ANALYTICAL DATA FROM WELLS IN THE AREA.
7. J = THE RESULT IS ESTIMATED.
8. AT WELL CLUSTER LOCATIONS, THE HIGHEST VALUE WAS USED FOR CONTOURING PURPOSES.
9. WELL P-74 WAS INACCESSIBLE DURING THE QUARTERLY SAMPLING EVENT DUE TO CONSTRUCTION ACTIVITIES.

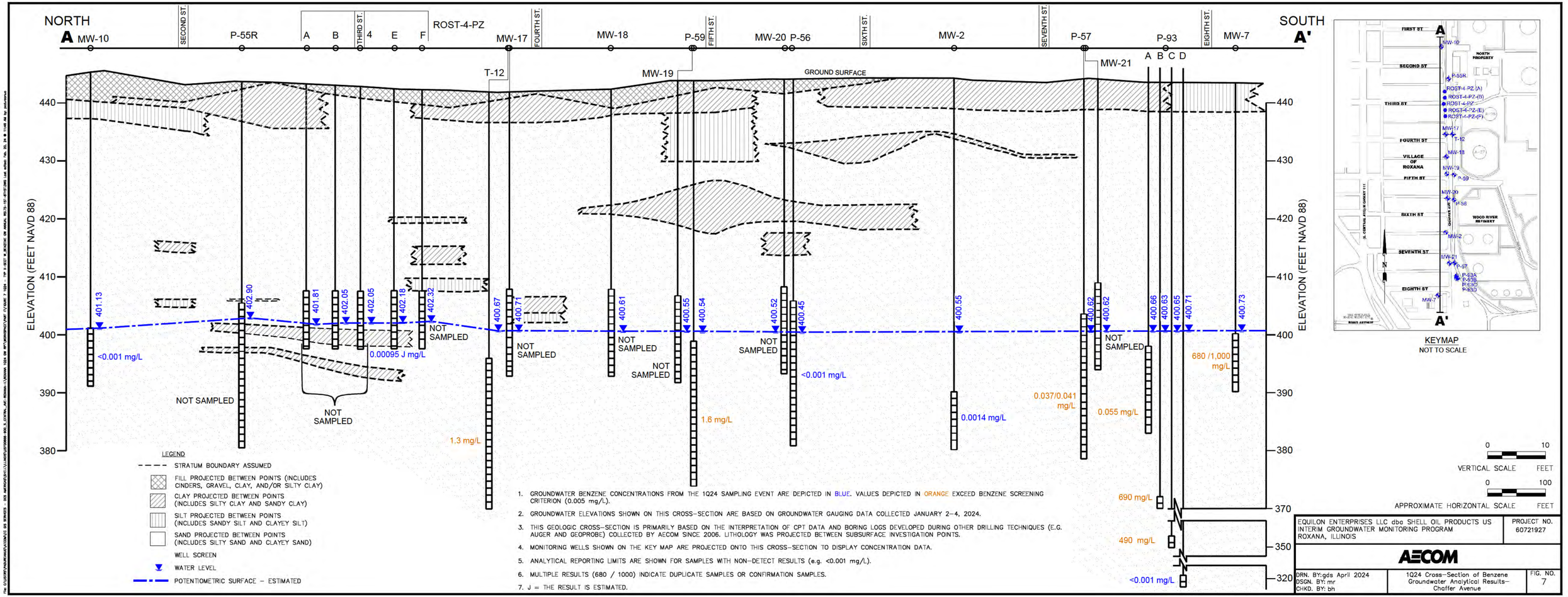
BP

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

PZ-1(101)
PZ-1(85)
MW-9 <0.001
MW-10 <0.001
MW-28 <0.001
MW-27 <0.001
ROST-4-PZ(A)
ROST-4-PZ(C) <0.001
ROST-4-PZ(B)
ROST-3-MW <0.001
ROST-4-PZ(D)
ROST-4-PZ(E) 0.00095 J
ROST-4-PZ(F)
ROST-4-PZ(G) <0.001
MW-11 <0.001
P-54 <0.001
MW-24 <0.001
MW-22 0.13 / 0.12
MW-18
MW-17
MW-19
MW-16 <0.001
MW-12 <0.001
PZ-2(84)
PZ-2(70.5)
MW-20
MW-01 <0.001
MW-2 0.0014
MW-26 <0.001
MW-21
MW-3 <0.001/<0.001
MW-4 <0.001
MW-25 0.053
MW-23 <0.001
MW-5 <0.001
MW-8
MW-7 680 /1,000
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
P-55R 0.02
P-60-11
P-60-S
P-60
P-60-12
P-60-13
P-68 0.07
P-59 1.60
P-56 <0.001
P-57 0.037 / 0.041
P-58 240 / 250
P-66 1.03
P-61 2.25*
T-24 1.86
T-12 1.30
P-93A 0.055
P-93B 690
P-93C 490
P-93D <0.001
P-69
P-70
P-74
P-73
P-75
R-77 W-77
R-78 W-78
R-79 W-79
R-80 W-80
R-81 W-81
R-85 W-85
R-89 W-89
A-34
A-33
A-28
A-27
A-22
F-76
F-77
F-78
F-73
F-74
F-75
0.01
1.0
0.05
0.5
5
50
500
0.005

0 200 SCALE FEET

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60721927
AECOM	
DRN. BY:gds April 2024 DSGN. BY:mr CHKD. BY:bh	1Q24 Dissolved Phase Benzene Concentrations in Groundwater
	FIG. NO. 6



1. GROUNDWATER BENZENE CONCENTRATIONS FROM THE 1Q24 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 JANUARY 2–4, 2024.
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 (680 / 1000) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
7. J = THE RESULT IS ESTIMATED.

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. 60721927

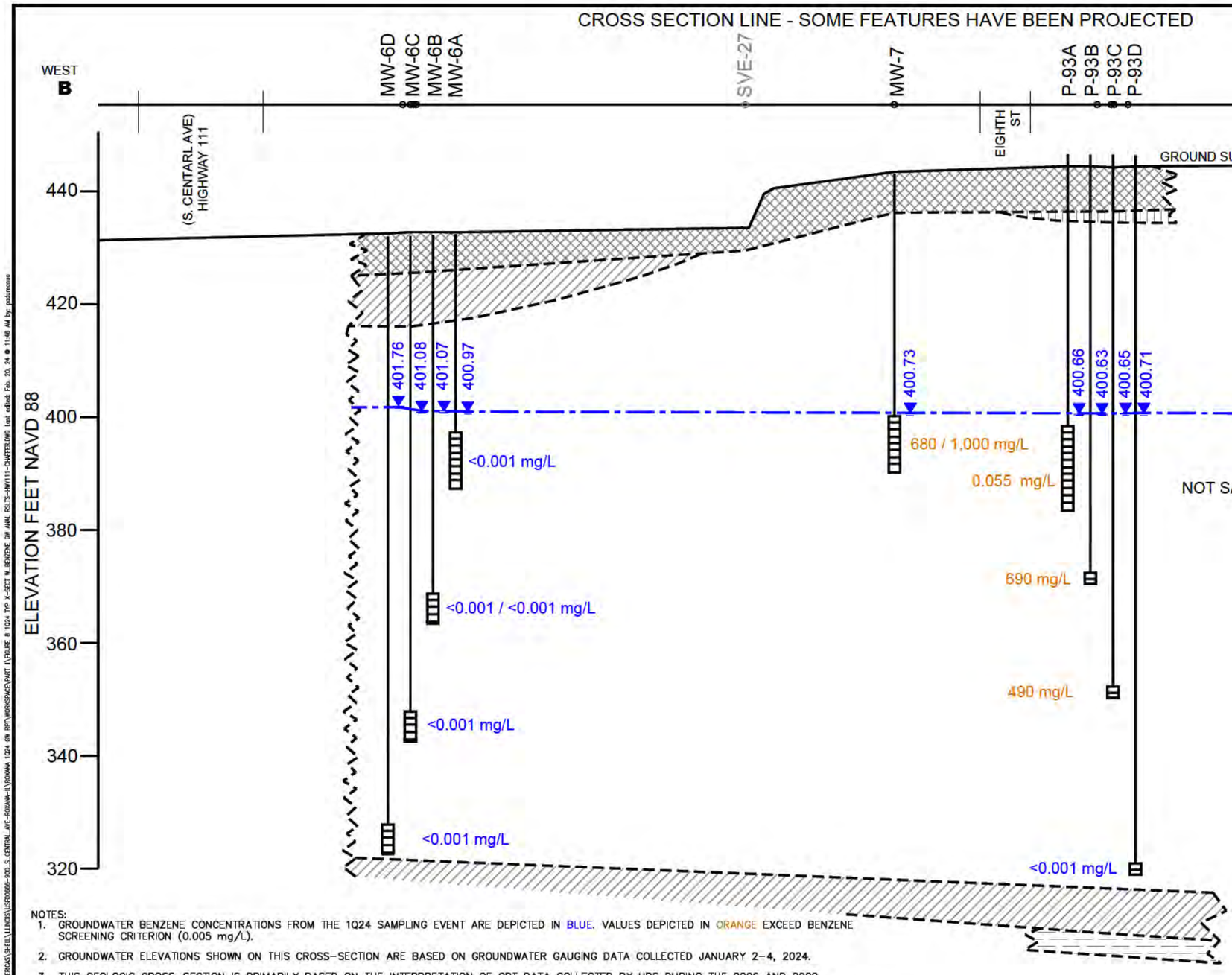
AECOM

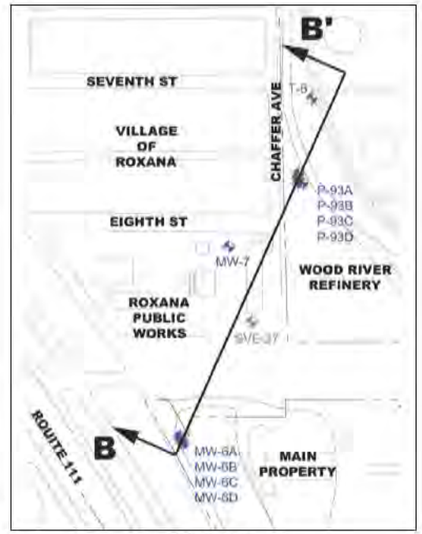
DRN. BY: gds April 2024
DSGN. BY: mr
CHKD. BY: bh

1Q24 Cross-Section of Benzene Groundwater Analytical Results– Chaffer 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

VERTICAL SCALE 0 20 FEET

HORIZONTAL SCALE 0 100 FEET

NOTES:

1. GROUNDWATER BENZENE CONCENTRATIONS FROM THE 1Q24 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 JANUARY 2-4, 2024.
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 (680 / 1000) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60721927
AECOM	
DRN. BY:gds April 2024 DSGN. BY:mr CHKD. BY:bh	1Q24 Cross-Section of Benzene Groundwater Analytical Results-Roxana Public Works Yard
	FIG. NO. 8

File: C:\USERS\VNOVEMKY\DESKTOP\GIS SERVICES - DOS_AMERICAS\SHELL\ILLINOIS\GIS\60666-805_S_CENTRAL_AVE-ROXANA-IL\ROXANA 1Q24 GW RPT\WORKSPACES\PART A\FIGURE 8 1Q24 TYP X-SECT W_BENZENE GW ANALYTICAL RSLTS-HWY111-CHAFFEE.DWG Last edited: Feb. 20, 24 @ 11:48 AM by: pdolmeno

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 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.

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).

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.

During an October 14, 2021 conference call among representatives of IEPA, SOPUS and AECOM, a high-level technical discussion of the Program was presented, primarily focused on routine monitoring activities and to introduce the potential impact observed from the Buckeye pipeline release.

On March 18, 2022, AECOM, on behalf of Shell, submitted Additional Information Supplemental to the Proposed Groundwater Management Zone in response to phone conversations with IEPA in December 2021 through February 2022 (AECOM, 2022b).

On August 22, 2022, IEPA approved with conditions the Public Works Yard (PWY) Steam Enhanced Extraction (SEE) Workplan. The PWY SEE Workplan was submitted to IEPA on January 31, 2022, and provided the system design as well as the plan and schedule for construction, operation, post-shutdown monitoring, and decommissioning for the proposed SEE system at the Roxana old PWY.

- In a September 21, 2022 meeting attended by AECOM, Shell, McMillan-McGee, and IEPA, comments pertaining to the IEPA's August 22, 2022 letter were discussed, including additional PWY sampling.

On October 12, 2022, AECOM, on behalf of Shell, requested the due date for the 4th Quarter 2022 (4Q22) Report for the Roxana Interim Groundwater Monitoring Program be pushed back approximately two weeks to January 30, 2023 from January 15, 2023. The modified due date was proposed to allow for a two-week delayed start to sampling

during the 4Q22 groundwater event to avoid simultaneous operations at the WRR. The 4Q22 Roxana Interim Groundwater Monitoring Report hardcopy was mailed to IEPA on January 27, 2023, and was submitted electronically on January 30, 2023.

Condition 2 of IEPA's August 22, 2022 letter stated that a Roxana Public Works Yard (PWY) Steam Enhanced Extraction (SEE) - Final Design Report and Construction Work Plan (FDRCWP) was due within 90 days of the date of the letter (i.e. November 20, 2022). On October 14, 2022, AECOM, on behalf of Shell, requested the due date for the FDRCWP be extended to December 20, 2022 to allow for adequate preparation.

On December 16, 2022, AECOM, on behalf of Shell, submitted the Roxana PWY SEE – FDRCWP (2022d) to IEPA in fulfillment of Phase II of the Corrective Measures Program (CMP); the Roxana PWY SEE – FDRCWP describes the additional sampling discussed in the September 21, 2022 meeting that will be collected prior to, and during, the construction of the SEE system. The Roxana PWY SEE – FDRCWP responded to conditions in IEPA's August 22, 2022 letter.

On January 30, 2023, AECOM, on behalf of Shell, submitted Additional Information to Log No. B-43R-CA-109 (PWY SEE – Response to 8/22/22 Letter & FDRCWP) (AECOM, 2023) in response to questions and specific requests by IEPA during a virtual discussion on January 5, 2023, to help facilitate IEPA review and respond to the Roxana Public Works Yard (PWY) Steam Enhanced Extraction (SEE) – Final Design Report and Construction Work Plan (FDRCWP) (AECOM, 2022d). The PWY SEE FDRCWP was submitted to IEPA by AECOM, on behalf of Shell, on December 16, 2022 to satisfy Phase II of the Corrective Measures Program (CMP) and respond to conditions in IEPA's August 22, 2022 letter. The IEPA August 22, 2022 letter approved, with conditions, the PWY SEE Workplan, which was submitted to IEPA by AECOM, on behalf of Shell, on January 31, 2022. A meeting on September 21, 2022 was held with AECOM, Shell, McMillan-McGee and IEPA to discuss comments pertaining to IEPA's August 22, 2022 letter, including additional PWY sampling.

On January 30, 2023, AECOM, on behalf of Shell, also submitted the Application for Water Pollution Control Permit to IEPA for the PWY SEE system. This was submitted after receipt of IEPA's July 11, 2022 contained-in concurrence letter. On March 2, 2022, AECOM, on behalf of Shell, submitted the Contained-In Determination Request Form to IEPA that was inadvertently left out of the Contained-In Determination submitted February 21, 2022. The February 21, 2022 Contained-In Determination stated groundwater generated during operation of the proposed SEE system is expected to no longer contain hazardous waste after treatment.

On February 23, 2023, AECOM, on behalf of Shell, submitted the Former Public Works Yard (FPWY) Class V Injection Well Inventory Form for the PWY SEE system.

On April 4, 2023, IEPA approved with conditions the FPWY Construction and Operation of Steam Enhanced Extraction Pretreatment System permit. The operational portion of this permit expires February 28, 2028.

On May 5, 2023, IEPA approved with conditions the PWY Final Design Report and Construction Work Plan (FDRCWP) for in-situ thermal remediation (ISTR), specifically Steam Enhanced Extraction (SEE), to reduce and remediate benzene as well as other VOCs present in the treatment target zone (TIZ) of SEE at the PWY.

On July 6, 2023, AECOM, on behalf of Shell, requested the due dates of Roxana Interim Groundwater Monitoring Reports be pushed back approximately two weeks to allow for more time for adequate compilation and quality review of the analytical samples and site data after the end of each quarter prior to report submittals.

On July 6, 2023, AECOM, on behalf of Shell, also submitted a notification of water production well W-85 damage and subsequent outage. The notice included a proposal of a replacement water production well location(s) and costs.

On August 1, 2023, IEPA responded to the AECOM letter dated July 6, 2023, *Notice of Water Production Well W-85 Damage*, requesting the frequency for groundwater monitoring, well gauging, and reporting increased to a monthly schedule until a replacement for W-85 is installed and "capable of operating and contributing to the required combined minimum pumping rate of 3,000 gallons per minute."

On August 3, 2023, AECOM, on behalf of Shell, submitted a response to the IEPA letter dated May 5, 2023. The May 5, 2023, letter was in response to the Final Design Report and Construction Work Plan (FDRCWP) dated December

16, 2023; as well as a smaller submittal with additional information supplementing the FDRCWP, dated January 30, 2023.

On August 10, 2023, a virtual meeting was held between IEPA, Shell, and AECOM to clarify and discuss the conditions of the IEPA August 1, 2023 letter.

On August 11, 2023, AECOM on behalf of Shell, submitted a Class 1* Permit Modification in accordance with Condition IV(K)(2) of Shell's RCRA Post-Closure Permit, issued September 23, 2010, and most recently modified October 31, 2022. The Class 1* Permit Modification included further discussion of well W-85 notification timeline, W-85 removal, and proposal for new water production well W-92.

Appendix B

Low Flow Groundwater Sampling Data Sheets

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: C.McDavid, T.Jenkins

DATE: 01-05-24 WEATHER: partly cloudy, 30°F

MONITORING WELL ID: MW-1 SAMPLE ID: MW1-ROX-010524

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): 42.12 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): 48.80 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): 17.01 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	1047	42.15	clear	none	15.1	1.06	0.924 (mS/cm) uS/cm	6.49	136.95	0
300	1048	42.15	↓	↓	15.2	0.82	0.925 (mS/cm) uS/cm	6.50	134.98	0
600	1049	42.15	↓	↓	15.1	0.67	0.924 (mS/cm) uS/cm	6.52	132.27	0
900	1050	↓	↓	↓	15.1	0.57	0.923 (mS/cm) uS/cm	6.53	130.49	0
1200	1051				15.4	0.51	0.923 (mS/cm) uS/cm	6.54	128.38	0
1560	1052				15.4	0.46	0.922 (mS/cm) uS/cm	6.56	126.44	0
1800	1053				15.5	0.41	0.921 (mS/cm) uS/cm	6.58	124.54	0
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

C.McDavid 01-05-24

Start Time: 10:47 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 49549/049551

Stop Time: 10:53 Average Purge Rate (mL/min): 300 Date Calibrated: 01-05-24

SAMPLING DATA

Sample Date: 01-05-24 Sample Time: 11:00 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: CM

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 1Q24 GW **PROJECT NUMBER:** 60721927 - 3.1.1/2/3 **FIELD PERSONNEL:** C McDavid, T. Jenkins

DATE: 01-11-24 **WEATHER:** Cloudy, 43°F

MONITORING WELL ID: MW-2 **SAMPLE ID:** MW2-ROX-011124

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): 43.41 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		Ambient PID/FID Reading: 0.0 ppm
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	
Screen Length: 10 ft		Wellbore PID/FID Reading: 94.6 ppm
Water Column Height (not including NAPL): 16.79 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	1328	43.41	strong	clear	16.2	1.16	0.890 mS/cm uS/cm	7.35	77.63	0
300	1329	43.41	↓	↓	16.6	0.97	0.880 mS/cm uS/cm	7.30	69.15	0
600	1330	43.41	↓	↓	17.8	0.65	0.875 mS/cm uS/cm	7.26	61.34	0
900	1331	↓	↓	↓	18.2	0.52	0.876 mS/cm uS/cm	7.24	54.45	0
1200	1332	↓	↓	↓	18.3	0.44	0.887 mS/cm uS/cm	7.24	48.31	0
1500	1333	↓	↓	↓	18.1	0.39	0.888 mS/cm uS/cm	7.25	42.99	0
1800	1334	↓	↓	↓	18.2	0.36	0.887 mS/cm uS/cm	7.25	38.16	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			

CMcDavid 01-11-24

Start Time: 13:28 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 49549/049551

Stop Time: 13:34 Average Purge Rate (mL/min): 300 Date Calibrated: 01-11-24

SAMPLING DATA

Sample Date: 01-11-24 Sample Time: 13:45 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: CM

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: C.McDavid, T.Jenkins

DATE: 01-09-24 WEATHER: cloudy, 41°F

MONITORING WELL ID: MW-3 SAMPLE ID: MW3-ROX-010924

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): 29.25 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): 34.67 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): 15.75 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	1232	29.25	clear	mild	16.0	0.63	1.156 (mS/cm) uS/cm	6.77	107.35	0
300	1233	29.25	↓	↓	16.3	0.48	1.157 (mS/cm) uS/cm	6.77	103.72	0
600	1234	29.25			16.4	0.40	1.159 (mS/cm) uS/cm	6.78	100.42	0
900	1235				16.4	0.35	1.160 (mS/cm) uS/cm	6.79	97.25	0
1200	1236	↓	↓	↓	16.5	0.31	1.161 (mS/cm) uS/cm	6.79	94.44	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			

C.McDavid 01-09-24

Start Time: 12:32 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 21B050 / 24957-1

Stop Time: 12:36 Average Purge Rate (mL/min): 300 Date Calibrated: 01-09-24

SAMPLING DATA

Sample Date: 01-09-24 Sample Time: 12:45 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 ☒ Initials: CM

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: C.McDavid / M.Massa

DATE: 01-17-24 WEATHER: Clear 18°F

MONITORING WELL ID: MW-4 SAMPLE ID: MW4-ROX-011724

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): 40.69 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: 1.3 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 14.70 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	1040	40.68	clear	slight	14.3	1.65	1.015 (mS/cm) uS/cm	6.29	169.97	0
300	1041	40.69			14.5	1.17	1.020 (mS/cm) uS/cm	6.42	159.90	0
600	1042	40.69			15.1	0.95	1.027 (mS/cm) uS/cm	6.49	151.62	0
900	1043	↓			15.5	0.69	1.032 (mS/cm) uS/cm	6.54	145.96	0
1200	1044				15.6	0.59	1.039 (mS/cm) uS/cm	6.58	141.20	0
1500	1045				15.5	0.52	1.045 (mS/cm) uS/cm	6.62	136.97	0
1800	1046				15.6	0.46	1.046 (mS/cm) uS/cm	6.65	133.19	0
2100	1047		↓	↓	15.7	0.42	1.041 (mS/cm) uS/cm	6.67	129.98	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			

CMcDavid 01-17-24

Start Time: 10:40 Elapsed Time (min): 7 Water Quality Meter ID & SN: YSI ProDSS -- 19S19104955

Stop Time: 10:47 Average Purge Rate (mL/min): 300 Date Calibrated: 01-17-24

SAMPLING DATA

Sample Date: 01-17-24 Sample Time: 10:55 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: CM

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 1Q24 GW **PROJECT NUMBER:** 60721927 - 3.1.1/2/3 **FIELD PERSONNEL:** C. Mydvid, T. Jenkins

DATE: 01-09-24 **WEATHER:** rain, 40°F

MONITORING WELL ID: MW-5 **SAMPLE ID:** MW5-ROX-010924

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): 28.88 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 (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 15.42 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	1030	29.89	clear	mild	15.4	1.31	0.980 (mS/cm) uS/cm	6.58	108.67	0
300	1031	29.89	↓	↓	15.5	0.84	0.984 (mS/cm) uS/cm	6.59	105.76	0
600	1032	29.89	↓	↓	15.5	0.64	0.986 (mS/cm) uS/cm	6.60	103.90	0
900	1033	↓	↓	↓	15.9	0.52	0.985 (mS/cm) uS/cm	6.62	101.24	0
1200	1034	↓	↓	↓	16.1	0.44	0.988 (mS/cm) uS/cm	6.62	99.20	0
1500	1035	↓	↓	↓	16.1	0.37	0.992 (mS/cm) uS/cm	6.63	97.17	0
1800	1036	↓	↓	↓	16.5	0.33	0.994 (mS/cm) uS/cm	6.64	94.93	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			

CM 01-09-24

Start Time: 10:30 **Elapsed Time (min):** 6 **Water Quality Meter ID & SN:** YSI ProDSS -- 21B050 ~~21F1~~ 21B050

Stop Time: 10:36 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 01-09-24

SAMPLING DATA

Sample Date: 01-09-24 **Sample Time:** 10:45 **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 ☒ **Initials:** CM

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: J. Mayer E. Chalfant

DATE: 01/09/24 WEATHER: 38°, Rain

MONITORING WELL ID: MW-6A SAMPLE ID: MW6A-ROX-010924

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		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 30.96 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): 33.85 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): 13.22 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	1128	30.95	Cloudy	none	15.08	9.97	0.085 (mS/cm) uS/cm	8.32	-14.38	154.69
300	1129	30.95	〃	〃	14.73	9.97	0.079 (mS/cm) uS/cm	8.28	-15.46	137.11
600	1130	30.95			14.87	9.92	0.075 (mS/cm) uS/cm	8.27	-16.50	122.02
900	1131				15.27	9.83	0.074 (mS/cm) uS/cm	8.25	-17.05	108.20
1200	1132				14.92	9.70	0.075 (mS/cm) uS/cm	8.25	-15.15	91.5
1500	1133				14.71	9.68	0.074 (mS/cm) uS/cm	8.25	-14.46	84.6
1800	1134				15.00	9.57	0.075 (mS/cm) uS/cm	8.23	-13.21	79.9
2100	1135				14.70	9.53	0.075 (mS/cm) uS/cm	8.20	-11.41	83.4
2400	1136				14.45	9.45	0.075 (mS/cm) uS/cm	8.20	-10.36	79.9
2700	1137				13.93	9.40	0.076 (mS/cm) uS/cm	8.21	-10.18	83.42
3000	1138				14.00	9.34	0.076 (mS/cm) uS/cm	8.21	-9.56	79.92
3300	1139				14.22	9.27	0.076 (mS/cm) uS/cm	8.20	-9.96	78.62
3600	1140				14.79	9.21	0.077 (mS/cm) uS/cm	8.19	-9.75	75.37
4800	1144				15.70	8.72	0.082 (mS/cm) uS/cm	8.11	-8.31	50.02
5100	1145				16.03	8.65	0.084 (mS/cm) uS/cm	8.10	-8.39	46.62
5400	1146				16.09	8.55	0.086 (mS/cm) uS/cm	8.09	-8.13	43.85

Start Time: 1128 Elapsed Time (min): 18 Water Quality Meter ID & SN: YSI ProDSS -- 19S419/04955

Stop Time: 1146 Average Purge Rate (mL/min): 300 Date Calibrated: 01/09/24

SAMPLING DATA

Sample Date: 01/09/24 Sample Time: 1155 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: JOC

COMMENTS:

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

Estimated Total Purge Volume: 5700 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: ROXANA 1Q24 GW PROJECT NUMBER: 60721927-3.1.2 FIELD PERSONNEL: J. Mayer E. Chalfant

DATE: 01/09/24 MONITORING WELL ID: MW6A SAMPLE ID: MW6A-ROX-010924

				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)
5700	1147	30.95	Cloudy	None	16.00	8.54	0.686 (mS/cm) uS/cm	8.09	-8.10	44.01
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm		

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: J. Mayer E. Chalfant

DATE: 01/09/24 WEATHER: 38°, Overcast

MONITORING WELL ID: MW-6B SAMPLE ID: MW6B-ROX-010924

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	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): 31.01 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): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 64.05 ft		
Screen Length: 5 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): 38.37 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

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	1240	31.01	clear	none	15.93	2.66	0.750 mS/cm uS/cm	6.93	63.12	0
300	1241	31.01			15.75	1.68	0.777 mS/cm uS/cm	6.97	48.74	
600	1242				15.69	1.01	0.782 mS/cm uS/cm	7.01	37.49	
900	1243				16.16	0.67	0.784 mS/cm uS/cm	7.06	19.38	
1200	1244				16.18	0.53	0.786 mS/cm uS/cm	7.09	7.72	
1500	1245				16.47	0.41	0.786 mS/cm uS/cm	7.12	-6.24	
1800	1246				16.59	0.33	0.786 mS/cm uS/cm	7.14	-14.71	
2100	1247				16.73	0.31	0.786 mS/cm uS/cm	7.15	-20.99	
2400	1248				16.75	0.27	0.787 mS/cm uS/cm	7.16	-30.19	
2700	~~1250~~ 1249				16.80	0.24	0.788 mS/cm uS/cm	7.18	-38.34	
3000	1250				16.85	0.23	0.788 mS/cm uS/cm	7.18	-43.28	
3300	1251				17.08	0.21	0.787 mS/cm uS/cm	7.19	-48.44	
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

40C 01/09/24

Start Time: 1240 Elapsed Time (min): 11 min Water Quality Meter ID & SN: YSI ProDSS - 19549/049551

Stop Time: 1251 Average Purge Rate (mL/min): 300 Date Calibrated: 01/09/24

SAMPLING DATA

Sample Date: 01/09/24 Sample Time: 1255 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: GOC

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: J. Mayer E. Chalfant

DATE: 01/09/24 WEATHER: 38°, Rain

MONITORING WELL ID: MW-6C SAMPLE ID: MW6C - ROX - 010924

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): 30.80 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): 54.48 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	1033	30.82	Clear	none	16.06	2.21	0.650 mS/cm uS/cm	6.81	35.70	0.0
300	1034	30.82			15.65	1.11	0.766 mS/cm uS/cm	6.94	16.22	
600	1035	30.82			15.56	0.75	0.807 mS/cm uS/cm	7.04	-6.87	
900	1036				15.56	0.61	0.815 mS/cm uS/cm	7.10	-20.58	
1200	1037				15.61	0.52	0.820 mS/cm uS/cm	7.14	-38.58	
1500	1038				15.50	0.45	0.823 mS/cm uS/cm	7.16	-52.27	
1800	1039				15.28	0.39	0.825 mS/cm uS/cm	7.18	-65.53	
2100	1040				15.38	0.36	0.824 mS/cm uS/cm	7.19	-76.56	
2400	1041				15.19	0.33	0.825 mS/cm uS/cm	7.19	-85.21	
2700	1042				15.20	0.31	0.824 mS/cm uS/cm	7.20	-93.29	
3000	1043				15.36	0.30	0.824 mS/cm uS/cm	7.20	-97.98	
3300	1044				15.70	0.27	0.823 mS/cm uS/cm	7.20	-103.72	
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

GOC 01/09/24

Start Time: 1038 Elapsed Time (min): 11 min Water Quality Meter ID & SN: YSI ProDSS -- 49549/049551

Stop Time: 1044 Average Purge Rate (mL/min): 300 Date Calibrated: 01/09/24

SAMPLING DATA

Sample Date: 01/09/24 Sample Time: 1050 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: GOC

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: E. Chalfant J. Mayer

DATE: 01/09/24 WEATHER: 38°, Rain ~~Sleet~~

MONITORING WELL ID: MW-6D SAMPLE ID: MW6D-ROX-010924

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 104.22 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 110.05 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): 30.66 ft		
Depth to LNAPL/DNAPL (btoc): NE ft		Ambient PID/FID Reading: 0.0 ppm
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): 79.39 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	0938	30.69	Clear	none	15.39	0.71	1.303 mS/cm uS/cm	6.63	66.63	87.1
300	0939	30.69			13.82	0.58	1.305 mS/cm uS/cm	6.74	55.31	91.4
600	0940	30.69			14.19	0.53	1.304 mS/cm uS/cm	6.85	45.23	89.6
900	0941				14.87	0.51	1.294 mS/cm uS/cm	6.89	40.25	87.7
1200	0942				15.08	0.49	1.306 mS/cm uS/cm	6.93	33.49	84.9
1500	0943				14.90	0.44	1.307 mS/cm uS/cm	6.98	22.30	77.46
1800	0944				15.17	0.40	1.304 mS/cm uS/cm	7.01	10.65	70.22
2100	0945				15.29	0.36	1.303 mS/cm uS/cm	7.03	1.14	69.75
2400	0946				15.17	0.32	1.306 mS/cm uS/cm	7.04	-10.33	63.50
2700	0947				15.24	0.32	1.302 mS/cm uS/cm	7.01	-18.08	65.59
3000	0948				15.33	0.30	1.302 mS/cm uS/cm	7.01	-27.22	49.67
3300	0949				15.26	0.29	1.305 mS/cm uS/cm	7.09	-32.59	47.37
3600	0950				14.98	0.28	1.306 mS/cm uS/cm	7.09	-37.82	44.0
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

GOC 01/09/24

Start Time: 0938 Elapsed Time (min): 12 Water Quality Meter ID & SN: YSI ProDSS -- 19549/M9551

Stop Time: 0950 Average Purge Rate (mL/min): 300 Date Calibrated: 01/09/24

SAMPLING DATA

Sample Date: 01/09/24 Sample Time: 0955 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: GOC

COMMENTS:

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

Estimated Total Purge Volume: 3600 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: C.McDaniel, M.Marsja

DATE: 01-17-24 WEATHER: clear, 33°F

MONITORING WELL ID: MW-7 SAMPLE ID: MW7-ROX-011724

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): 42.58 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): 42.92 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: 0.2 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 10.34 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	1407	42.61	clear	strong	16.4	0.99	1.063 (mS/cm) uS/cm	6.65	87.81	0
300	1408	42.61			16.4	0.70	1.062 (mS/cm) uS/cm	6.63	87.76	0
600	1409	42.61			16.6	0.54	1.058 (mS/cm) uS/cm	6.64	87.96	0
900	1410	↓			16.7	0.45	1.050 (mS/cm) uS/cm	6.64	87.03	0
1200	1411				16.5	0.39	1.041 (mS/cm) uS/cm	6.65	86.54	0
1500	1412				16.7	0.35	1.033 (mS/cm) uS/cm	6.66	86.02	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			

Checked 01-17-24

Start Time: 14:07 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -- 19519/049551

Stop Time: 14:12 Average Purge Rate (mL/min): 300 Date Calibrated: 01-17-24

SAMPLING DATA

Sample Date: 01-17-24 Sample Time: 14:20 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 ☒ Initials: CM

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: J. Mayer E. Chalfant

DATE: 1/5/24 WEATHER: 34°, Clear

MONITORING WELL ID: MW-9 SAMPLE ID: MW9 - ROX - 010524

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
Total Well Depth (btoc): 56.37 ft	
Depth to Water (btoc): 44.07 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): 46.04 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
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

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 (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	1043	44.09	clear	slight	14.91	0.90666	1.028 mS/cm uS/cm	6.82	21.55	24.80
300	1044	44.09			14.87	0.6529	1.023 mS/cm uS/cm	6.86	12.73	24.16
600	1045	44.09			15.63	0.48004	1.019 mS/cm uS/cm	6.90	-4.09	26.07
900	1046				15.38	0.44162	1.023 mS/cm uS/cm	6.92	-6.05	24.95
1200	1047				16.10	0.36345	1.025 mS/cm uS/cm	6.94	-18.34	18.14
1500	1048				16.43	0.30965	1.026 mS/cm uS/cm	6.95	-32.73	10.37
1800	1049				16.43	0.29064	1.026 mS/cm uS/cm	6.96	-38.66	9.23
2100	1050				16.43	0.2799	1.026 mS/cm uS/cm	6.96	-41.30	6.84
2400	1051				16.34	0.25576	1.026 mS/cm uS/cm	6.97	-47.01	2.46
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

EC

01/05/24

Start Time: 1043 Elapsed Time (min): 8 min Water Quality Meter ID & SN: YSI ProDSS -- 21B050/218083

Stop Time: 1051 Average Purge Rate (mL/min): 300 mL/min Date Calibrated: 01/05/24

SAMPLING DATA

Sample Date: 1043 Sample Time: 1055 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: EC

COMMENTS:

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

Estimated Total Purge Volume: 2400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: J. Mayer ; E. Chalfant

DATE: 01/05/24 WEATHER: 34°, clear

MONITORING WELL ID: MW-10 SAMPLE ID: MW10-ROX-[redacted]0105 24

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): 43.93 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): 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 (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 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

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	1142	43.95	clear	None	15.26	0.942	1.301 mS/cm uS/cm	7.04	-58.55	49.92
300	1144	43.95			15.25	0.715	1.298 mS/cm uS/cm	7.05	-71.04	46.65
600	1144	43.95			15.00	0.604	1.302 mS/cm uS/cm	7.06	-79.88	47.15
900	1145				14.25	0.559	1.292 mS/cm uS/cm	7.07	-85.73	29.88
1200	1146				14.05	0.504	1.299 mS/cm uS/cm	7.08	-89.74	23.98
1500	1147				14.05	0.456	1.304 mS/cm uS/cm	7.08	-93.32	23.10
							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			

EOC 01/05/24

Start Time: 1142 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -- [redacted] 21B050/21B083

Stop Time: 1147 Average Purge Rate (mL/min): 200 mL/min Date Calibrated: 01/05/24

SAMPLING DATA

Sample Date: 01/05/24 Sample Time: 1155 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: EC

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: C. McDavid, T. Jenkins

DATE: 01-05-24 WEATHER: cloudy, 39°F

MONITORING WELL ID: MW-11 SAMPLE ID: MW11-ROX-010524

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): 51.99 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 41.72 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 46.86 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 (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 10.27 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	1341	41.72	clear	V. slight	14.6	0.81	1.415 (mS/cm) uS/cm	6.59	123.12	9.46
300	1342	41.73	↓	↓	14.7	0.66	1.416 (mS/cm) uS/cm	6.61	119.34	5.57
600	1343	41.73			14.4	0.56	1.422 (mS/cm) uS/cm	6.63	116.38	3.82
900	1344	41.73			14.6	0.49	1.417 (mS/cm) uS/cm	6.65	113.50	2.67
1200	1345	↓			14.8	0.44	1.421 (mS/cm) uS/cm	6.66	110.88	2.18
1500	1346				14.8	0.40	1.425 (mS/cm) uS/cm	6.67	108.78	2.04
							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			

CM 01-05-24

Start Time: 13:41 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -- 19549/049551

Stop Time: 13:46 Average Purge Rate (mL/min): 300 Date Calibrated: 01-05-24

SAMPLING DATA

Sample Date: 01-05-24 Sample Time: 13:50 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: CM

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: C. McDavid, T. Jenkins

DATE: 01-11-24 WEATHER: partly cloudy, 33°F

MONITORING WELL ID: MW-12 SAMPLE ID: MW12-R0X-011124

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): 52.25 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 42.00 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 47.13 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 (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 10.25 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	0913	42.00	clear	none	17.2	0.63	0.913 (mS/cm) uS/cm	6.52	133.08	0
300	0944	42.00	↓	↓	17.5	0.57	0.912 (mS/cm) uS/cm	6.55	129.98	0
600	0945	42.00			17.6	0.51	0.913 (mS/cm) uS/cm	6.58	126.25	0
900	0946	↓			17.5	0.48	0.912 (mS/cm) uS/cm	6.61	123.76	0
1200	0947				17.4	0.45	0.911 (mS/cm) uS/cm	6.64	121.32	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			

CMcDavid 01-11-24

Start Time: 09:43 Elapsed Time (min): 7 Water Quality Meter ID & SN: YSI ProDSS -- 19599/19551

Stop Time: 09:47 Average Purge Rate (mL/min): 300 Date Calibrated: 01-11-24

SAMPLING DATA

Sample Date: 01-11-24 Sample Time: 09:55 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: ~~none~~ (CM) EB

VOA Vials, No Headspace ☒ Initials: CM

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: C.McDavid, T.Jenkins

DATE: 01-10-24 WEATHER: cloudy, 27°F

MONITORING WELL ID: MW-13 SAMPLE ID: MW13-ROX-011024

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): 35.05 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 29.35 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 32.20 ft btoc	
Depth to LNAPL/DNAPL (btoc): NE ft		Ambient PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 24.80 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): 5.70 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	0934	29.35	cloudy	moderate	18.1	1.12	0.964 (mS/cm) uS/cm	6.39	136.80	51.03
300	0935	29.35	↓	↓	18.3	0.74	0.962 (mS/cm) uS/cm	6.42	132.42	37.37
600	0936	29.35			17.9	0.55	0.966 (mS/cm) uS/cm	6.45	128.55	29.26
900	0937	↓			18.1	0.45	0.964 (mS/cm) uS/cm	6.48	125.02	25.62
1200	0938				18.0	0.40	0.965 (mS/cm) uS/cm	6.50	122.07	21.46
1500	0939				18.2	0.35	0.965 (mS/cm) uS/cm	6.51	119.40	15.60
1800	0940	↓	↓	↓	18.2	0.31	0.963 (mS/cm) uS/cm	6.52	117.08	9.19
							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			

CM Downed 01-10-24

Start Time: 09:34 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 19599/099551

Stop Time: 09:40 Average Purge Rate (mL/min): 300 Date Calibrated: 01-10-24

SAMPLING DATA

Sample Date: 01-10-24 Sample Time: 09:50 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: CM

COMMENTS:

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

Came out almost black initially, let run for 5-10 min before starting

Estimated Total Purge Volume: 1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: C.McDavid, M.Massa

DATE: 01-17-24 WEATHER: clear, 29°F

MONITORING WELL ID: MW-14 SAMPLE ID: MW14-ROX-011724

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): 44.00 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 33.47 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 38.74 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: 49.3 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 10.53 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	1250	33.49	clear	moderate	15.0	2.14	1.067 (mS/cm) uS/cm	6.60	52.90	0
300	1251	33.49			15.5	1.39	1.073 (mS/cm) uS/cm	6.51	57.00	0
600	1252	33.49			15.6	1.01	1.075 (mS/cm) uS/cm	6.47	55.95	0
900	1253				15.6	0.80	1.076 (mS/cm) uS/cm	6.46	57.50	0
1200	1254				15.9	0.68	1.078 (mS/cm) uS/cm	6.46	58.63	0
1500	1255				15.9	0.59	1.078 (mS/cm) uS/cm	6.47	59.66	0
1800	1256				16.3	0.52	1.080 (mS/cm) uS/cm	6.47	60.97	0
2100	1257				16.5	0.46	1.081 (mS/cm) uS/cm	6.48	61.32	0
2400	1258				16.5	0.43	1.080 (mS/cm) uS/cm	6.49	61.91	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			

CMcDavid 01-17-24

Start Time: 12:50 Elapsed Time (min): 8 Water Quality Meter ID & SN: YSI ProDSS -- 19A101099551

Stop Time: 12:58 Average Purge Rate (mL/min): 300 Date Calibrated: 01-17-24

SAMPLING DATA

Sample Date: 01-17-24 Sample Time: 13:05 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 ☒ Initials: CM

COMMENTS:

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

Estimated Total Purge Volume: 2400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: J. Mayer E. Chalfant

DATE: 01/08/24 WEATHER: 32° Overcast

MONITORING WELL ID: MW-16 SAMPLE ID: MW16-ROX-010824

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: 45.34 ft btoc
Depth to Water (btoc): 42.95 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
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	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	Volume of Flow Through Cell : 320* mL
Water Column Height (not including NAPL): 4.77 ft	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)
300	1147	42.95	clear	none	13.62	1.94	0.804 mS/cm uS/cm	6.94	-12.13	-21.4
600	1148	42.95			13.56	1.37	0.803 mS/cm uS/cm	6.95	-27.91	-23.4
900	1149				13.79	0.89	0.799 mS/cm uS/cm	6.96	-45.21	-25.1
1200	1150				14.18	0.71	0.795 mS/cm uS/cm	6.97	-56.69	-25.7
1500	1151				14.84	0.56	0.792 mS/cm uS/cm	6.97	-66.95	-25.5
1800	1152				15.76	0.45	0.794 mS/cm uS/cm	6.97	-77.63	-24.0
2100	1153				15.98	0.39	0.796 mS/cm uS/cm	6.97	-82.22	-24.0
2400	1154				15.89	0.34	0.797 mS/cm uS/cm	6.96	-86.89	-25.0
2700	1155	↓	↓	↓	15.27	0.30	0.799 mS/cm uS/cm	6.97	-91.29	-25.6
							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: 1147 Elapsed Time (min): 12 min Water Quality Meter ID & SN: YSI ProDSS -21B050/21B083

Stop Time: 1155 Average Purge Rate (mL/min): 300 Date Calibrated: 01/08/24

SAMPLING DATA

Sample Date: 01/08/24 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: NS

VOA Vials, No Headspace ☑ Initials: EOL

COMMENTS:

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

Estimated Total Purge Volume: 2700 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: C.McDavid, T.Jenkins

DATE: 01-12-24 WEATHER: light rain, 47°F

MONITORING WELL ID: MW-22 SAMPLE ID: MW22-ROX-011224

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): 48.68 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 41.98 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 45.08 ft btoc	
Depth to LNAPL/DNAPL (btoc): NE ft		Ambient PID/FID Reading: 0.0 ppm
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 (WHIEVER IS DEEPER): ft btoc	
Screen Length: 10 ft		Wellbore PID/FID Reading: 16.5 ppm
Water Column Height (not including NAPL): 7.20 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)	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	0944	41.94	clear	strong	18.1	3.15	0.012 mS/cm uS/cm	6.24	130.95	0
300	0945	—	↓	↓	17.6	7.90	0.007 mS/cm uS/cm	6.41	124.94	0
0 ~~600~~	~~0946~~ 1041	41.98	cloudy	strong	17.0	0.99	1.105 mS/cm uS/cm	6.64	117.80	34.14
300 ~~900~~	~~0947~~ 1042	41.98	↓	↓	17.0	0.70	1.110 mS/cm uS/cm	6.66	115.82	31.17
600 ~~1200~~	~~0948~~ 1043	41.98	↓	↓	16.9	0.57	1.113 mS/cm uS/cm	6.68	113.69	30.63
900	1044	↓	↓	↓	17.0	0.49	1.116 mS/cm uS/cm	6.69	112.45	29.35
1200	1045	↓	↓	↓	17.3	0.43	1.127 mS/cm uS/cm	6.70	111.18	21.56
1500	1046	↓	↓	↓	17.4	0.38	1.126 mS/cm uS/cm	6.72	109.66	16.67
							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			

~~CM 01-12-24~~

Start Time: ~~09:44~~ 10:41 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -- 19A19019551

Stop Time: 10:46 Average Purge Rate (mL/min): 300 Date Calibrated: 01-12-24

SAMPLING DATA

Sample Date: 01-12-24 Sample Time: 11:00 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace [X] Initials: CM

COMMENTS:

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

Trouble w/ pump, lost water as soon as purge started

Estimated Total Purge Volume: 1500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: C.Mcraven, T.Jenkins

DATE: 01-11-24 WEATHER: clear, 37°F

MONITORING WELL ID: MW-23 SAMPLE ID: MW23-ROX-011124

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): 39.27 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 30.97 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 35.07 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 (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 8.90 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	1049	30.97	clear	moderate	18.8	0.40	0.915 (mS/cm) uS/cm	6.51	117.06	15.38
300	1056	30.97	↓	↓	18.3	0.35	0.928 (mS/cm) uS/cm	6.52	116.59	10.63
600	1057	↓	↓	↓	18.4	0.32	0.924 (mS/cm) uS/cm	6.52	115.96	9.77
900	1052	↓	↓	↓	18.7	0.30	0.926 (mS/cm) uS/cm	6.53	115.17	8.96
1200	1053	↓	↓	↓	18.3	0.26	0.927 (mS/cm) uS/cm	6.53	114.54	7.31
							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			

CM 01-11-24

Start Time: 10:49 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 19599/049551

Stop Time: 10:53 Average Purge Rate (mL/min): 300 Date Calibrated: 01-11-24

SAMPLING DATA

Sample Date: 01-11-24 Sample Time: 11:00 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 ☒ Initials: CM

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: C.McDavid, T. Jenkins

DATE: 01-09-24 WEATHER: rain, 37°F

MONITORING WELL ID: MW-24 SAMPLE ID: MW24-ROX-010924

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): 49.86 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 41.62 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 45.74 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 39.61 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): 8.24 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	0920	42.64	clear	none	15.4	0.59	1.747 mS/cm uS/cm	6.41	140.33	4.79
300	0921	42.64	↓	↓	15.7 ~~15.7~~	0.52 ~~0.59~~	1.748 mS/cm uS/cm	6.45	136.12 ~~140.33~~	~~4.39~~ 1.43
600	0922	42.64			15.8	0.46	1.752 mS/cm uS/cm	6.49	132.63	0
900	0923	↓			15.9	0.41	1.752 mS/cm uS/cm	6.50	129.80	0
1200	0924				15.8	0.37	1.750 mS/cm uS/cm	6.52	127.53	0
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

C.McDavid 01-09-24

Start Time: 09:20 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 23B050 ~~21A105F~~

Stop Time: 09:24 Average Purge Rate (mL/min): 300 Date Calibrated: 01-09-24

SAMPLING DATA

Sample Date: 01-09-24 Sample Time: 09:35 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: CM

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 1Q24 GW **PROJECT NUMBER:** 60721927 - 3.1.1/2/3 **FIELD PERSONNEL:** C. Maynard, M. Massa

DATE: ~~01-17-24~~ 01-18-24 **WEATHER:** cloudy ~~clear~~ 25°F

MONITORING WELL ID: MW-25 **SAMPLE ID:** MW25-ROX-011824

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): 45.84 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 37.82 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 41.83 ft btoc	Ambient PID/FID Reading: 0-0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 35.59 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: 58.3 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 8.02 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	0939	37.83	clear	slight	16.1	0.83	0.942 (mS/cm) uS/cm	6.29	136.51	0
300	0940	37.83	↓	↓	16.1	0.606	0.945 (mS/cm) uS/cm	6.32	131.91	0
600	0941	37.83	↓	↓	16.2	0.56	0.945 (mS/cm) uS/cm	6.36	127.86	0
900	0942	↓	↓	↓	16.6	0.46	0.945 (mS/cm) uS/cm	6.38	124.05	0
1200	0943	↓	↓	↓	16.8	0.43	0.946 (mS/cm) uS/cm	6.41	120.43	0
1500	0944	↓	↓	↓	16.9	0.39	0.954 (mS/cm) uS/cm	6.44	117.25	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			

~~CM~~ 01-18-24

Start Time: 09:39 **Elapsed Time (min):** 5 **Water Quality Meter ID & SN:** YSI ProDSS -- 19599/1049551

Stop Time: 09:44 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 01-18-24

SAMPLING DATA

Sample Date: 01-18-24 **Sample Time:** 09:55 **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:** CM

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: C.McDonald, T.Jenkins

DATE: 01-05-24 WEATHER: cloudy, 36°F

MONITORING WELL ID: MW-26 SAMPLE ID: MW26-ROX-010524

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): 48.40 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 40.52 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 44.46 ft btoc	
Depth to LNAPL/DNAPL (btoc): NF ft		Ambient PID/FID Reading: 0.0 ppm
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 (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 7.98 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	

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	1211	40.50	clear	none	14.7	1.16	0.956 (mS/cm) uS/cm	6.65	132.13	11.33
300	1212	40.50			15.2	0.95	0.950 (mS/cm) uS/cm	6.64	130.95	11.04
600	1213	40.50			15.6	0.69	0.941 (mS/cm) uS/cm	6.605	129.37	10.40
900	1214				15.5	0.59	0.990 (mS/cm) uS/cm	6.606	128.34	9.01
1200	1215				15.5	0.50	0.931 (mS/cm) uS/cm	6.606	127.22	8.55
1500	1216				15.8	0.47	0.921 (mS/cm) uS/cm	6.606	126.27	7.75
1800	1217				16.3	0.43	0.915 (mS/cm) uS/cm	6.606	125.17	6.83
							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			

CM 01-05-24

Start Time: 12:11 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 19549/049551

Stop Time: 12:17 Average Purge Rate (mL/min): 300 Date Calibrated: 01-05-24

SAMPLING DATA

Sample Date: 01-05-24 Sample Time: 12:30 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: CM

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: C.McDavid, M.Massa

DATE: 01-08-24 WEATHER: cloudy, 30°F

MONITORING WELL ID: MW-27 SAMPLE ID: MW27-ROX-010824

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): 50.04 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 41.79 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 45.92 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 39.79 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): 8.25 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	0853	41.99	clear	none	14.7	7.53	0.713 mS/cm uS/cm	6.43	134.68	6.98
300	0854	42.03			15.0	7.51	0.715 mS/cm uS/cm	6.51	130.13	6.13
600	0855	42.08			15.2	7.36	0.719 mS/cm uS/cm	6.57	126.81	3.75
900	0856	42.13			15.5	7.11	0.723 mS/cm uS/cm	6.62	123.92	0.76
1200	0857	42.20			15.7	6.87	0.726 mS/cm uS/cm	6.65	121.36	0
1500	0858	42.21			15.6	6.72	0.729 mS/cm uS/cm	6.69	119.16	0
2100	0900	42.23			15.5	6.37	0.734 mS/cm uS/cm	6.73	116.07	0
2400	0901	42.25			15.5	6.16	0.737 mS/cm uS/cm	6.75	114.94	0
2700	0902	—			15.7	5.94	0.742 mS/cm uS/cm	6.75	113.93	0
3000	0903	—			15.9	5.71	0.745 mS/cm uS/cm	6.76	113.23	0
3300	0904	42.28			15.8	5.49	0.748 mS/cm uS/cm	6.77	112.27	0.33
3600	0905	—			15.8	5.34	0.750 mS/cm uS/cm	6.77	111.65	1.96
5700	0912	42.20			15.1	4.82	0.763 mS/cm uS/cm	6.80	108.93	0
6000	0913	42.15			15.0	4.82	0.762 mS/cm uS/cm	6.81	108.67	0
6300	0914	42.18			14.6	4.82	0.764 mS/cm uS/cm	6.81	108.58	0
6600	0915	42.18			15.2	4.78	0.760 mS/cm uS/cm	6.80	108.38	0

Start Time: 08:53 Elapsed Time (min): 22 Water Quality Meter ID & SN: YSI ProDSS -- 19549 | 19551

Stop Time: 09:15 Average Purge Rate (mL/min): 300 Date Calibrated: 01-08-24

SAMPLING DATA

Sample Date: 01-08-24 Sample Time: 09:25 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: CM

COMMENTS:

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

solinst error between 0901-0904, no readings taken

DO too high, not stabilizing within 0.2, let sit 0905-0912; DO results suspect Estimated Total Purge Volume: 6600 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: J. Mayer ; E. Chalfant

DATE: 01/05/24 WEATHER: 34° ; overcast

MONITORING WELL ID: MW-28 SAMPLE ID: MW28-ROX-010524

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): 43.86 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 40.77 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): ft		
Depth to Top of Screen (btoc): 33.61 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): 42.31 ft btoc	Wellbore PID/FID Reading: 0.0 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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (STABLE: over 4 readings)	DO (mg/L) (Monitor Temp. +/-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))
~~1335~~ 0	1335	40.80	Cloudy	none	16.75	2.843	1,605 mS/cm uS/cm	6.98	-42.30	305.86
300	1336	40.80	cloudy	none	16.35	2.083	1,596 mS/cm uS/cm	6.98	-56.63	240.35
2400	1343	40.80	clear	none	17.35	1.104	1,640 mS/cm uS/cm	6.98	-80.27	4.59
2700	1344	↓	↓	↓	17.28	1.152	1,652 mS/cm uS/cm	6.98	-80.73	3.82
3000	1345				17.03	1.174	1,658 mS/cm uS/cm	6.98	-80.66	-1.97
3300	1346				17.19	1.168	1,685 mS/cm uS/cm	6.97	-80.97	5.64
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			
							mS/cm uS/cm			

EOL 01/05/24

Start Time: 1335 Elapsed Time (min): 11 Water Quality Meter ID & SN: YSI ProDSS -- 21B050/21B083

Stop Time: 1346 Average Purge Rate (mL/min): 300 mL/min Date Calibrated: 01/05/24

SAMPLING DATA

Sample Date: 01/05/24 Sample Time: 1350 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: QC

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 1Q24 GW **PROJECT NUMBER:** 60721927 - 3.1.1/2/3 **FIELD PERSONNEL:** C.McDavid, T. Jenkins

DATE: 01-08-24 **WEATHER:** Cloudy, 39°F

MONITORING WELL ID: P-54 **SAMPLE ID:** P54-ROX-010824

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): 63.00 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): 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): 46.68 ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 21.32 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	1220	41.69	clear	none	14.6	2.67	1.274 (mS/cm) uS/cm	6.68	131.06	1.28
300	1221	41.69			14.9	2.76	1.276 (mS/cm) uS/cm	6.67	129.63	0
600	1222	41.69			14.6	2.64	1.274 (mS/cm) uS/cm	6.67	128.30	0
900	1223				14.8	2.57	1.274 (mS/cm) uS/cm	6.68	127.07	0
1200	1224				14.7	2.54	1.267 (mS/cm) uS/cm	6.68	126.09	0
1500	1225				14.8	2.60	1.260 (mS/cm) uS/cm	6.68	125.23	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			

CMD 01-08-24

Start Time: 12:20 **Elapsed Time (min):** 5 **Water Quality Meter ID & SN:** YSI ProDSS -- 19549/19955

Stop Time: 12:25 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 01-03-24

SAMPLING DATA

Sample Date: 01-08-24 **Sample Time:** 12:35 **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 ☒ **Initials:** CM

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: E.Chatfant, J.Mayer

DATE: 01-12-24 WEATHER: Windy, 47°F

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): 40.97 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): 40.96 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: 141.5 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 9.71 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			

CHATOANTE 01-12-24

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/QC Samples:

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: M. Massa, C. Chalfant

DATE: 01/10/24 WEATHER: 30°, overcast

MONITORING WELL ID: P56 SAMPLE ID: P56-ROX-011024

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): 45.74 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): 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): 50.74 ft btoc	Wellbore PID/FID Reading: 20.4 ppm	
Screen Length: 25 ft			
Water Column Height (not including NAPL): 20.08 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	0921	45.75	clear	strong	14.56	1.29	1.142 mS/cm uS/cm	6.78	81.82	0
300	0922	45.75			15.59	0.75	1.150 mS/cm uS/cm	6.94	63.44	
600	0923	45.75			16.33	0.52	1.195 mS/cm uS/cm	7.04	46.61	
900	0925	45.75			13.80	3.95	1.200 mS/cm uS/cm	6.96	414.57	
1200	0926				16.47	1.31	1.186 mS/cm uS/cm	7.08	32.36	
1500	0927				17.17	0.58	1.204 mS/cm uS/cm	7.17	20.22	
1800	0928				17.06	0.410	1.207 mS/cm uS/cm	7.20	13.61	
2100	0929				16.87	0.28	1.206 mS/cm uS/cm	7.22	5.34	
2400	0930				16.85	0.24	1.207 mS/cm uS/cm	7.23	-0.36	
2700	0931				16.89	0.21	1.206 mS/cm uS/cm	7.24	-5.74	
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

GDC 01/10/24

Start Time: 0921 Elapsed Time (min): 10 Water Quality Meter ID & SN: YSI ProDSS -- 21805O/218083

Stop Time: 0931 Average Purge Rate (mL/min): 300 Date Calibrated: 01/10/24

SAMPLING DATA

Sample Date: 01/10/24 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: NS

VOA Vials, No Headspace ☒ Initials: GDC

COMMENTS:

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

Estimated Total Purge Volume: 2700 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q24 GW | PROJECT NUMBER: 60721927 - 3.1.1/2/3 | FIELD PERSONNEL: J. Mayer & E. Chalfant

DATE: 01/11/24 | WEATHER: 39°, Clear

MONITORING WELL ID: P-57 | SAMPLE ID: P57-R20X-011124 ; P57-R20X-011124-DUP

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): 54.19 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 46.64 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 50.41 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NR ft		
Depth to Top of Screen (btoc): 44.19 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): 7.55 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	1039	47.03	clear	slight	16.48	1.44	0.998 mS/cm uS/cm	6.79	-5.51	0
300	1040	47.00			16.02	0.65	1.011 mS/cm uS/cm	6.80	-24.57	
600	1041	47.00			15.88	0.49	1.010 mS/cm uS/cm	6.81	-31.25	
900	1042	46.96			15.87	0.45	1.009 mS/cm uS/cm	6.81	-40.54	
1200	1043	47.00			15.72	0.42	1.012 mS/cm uS/cm	6.81	-46.65	
1500	1044	47.00			15.97	0.39	1.005 mS/cm uS/cm	6.82	-50.52	
							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			

EOL 01/11/24

Start Time: 1039 | Elapsed Time (min): 5 | Water Quality Meter ID & SN: YSI ProDSS -- 21B050/21B083

Stop Time: 1044 | Average Purge Rate (mL/min): 300 | Date Calibrated: 01/11/24

SAMPLING DATA

Sample Date: 01/11/24 | Sample Time: 1050 | 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: EOL

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: J. Mayer E. Chalfant

DATE: 01/12/2024 WEATHER: 45°, Rain

MONITORING WELL ID: P-58 SAMPLE ID: PS8 - ROX - 011224 + PS8-ROX-011224-DUP

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		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 44.17 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.6 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 40.21 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 49.17 ft btoc	Wellbore PID/FID Reading: 107.1 ppm	
Screen Length: 25 ft			
Water Column Height (not including NAPL): 21.04 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	1100	44.27	clear	mod.	16.19	1.25	1.701 mS/cm uS/cm	6.78	-41.97	15.1
300	1101	44.27			16.31	0.67	1.732 mS/cm uS/cm	6.81	-57.59	14.7
600	1102	44.27			16.19	0.57	1.733 mS/cm uS/cm	6.82	-62.56	14.6
900	1103				16.26	0.49	1.729 mS/cm uS/cm	6.83	[illegible]	14.5
1200	1104				16.65	0.42	1.724 mS/cm uS/cm	6.84	[illegible]	13.9
1500	1105				17.07	0.35	1.727 mS/cm uS/cm	6.84	-81.56	12.9
1800	1106				17.31	0.31	1.731 mS/cm uS/cm	6.85	-82.95	13.5
							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			

Ea 01/12/24

Start Time: 1100 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 21805O/218083

Stop Time: 1106 Average Purge Rate (mL/min): 300 Date Calibrated: 01/12/24

SAMPLING DATA

Sample Date: 01/12/24 Sample Time: 1110 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 ☑ Initials: AOC

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: J. Mayer ; E. Chalfant

DATE: 01/12/24 WEATHER: 45°, Rain

MONITORING WELL ID: P-59 SAMPLE ID: PS9-ROX-011224

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): 46.27 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 (WHICHEVER IS DEEPER): 52.91 ft btoc	Wellbore PID/FID Reading: 204.7 ppm	
Screen Length: 25 ft			
Water Column Height (not including NAPL): 26.64 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

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	0959	46.28	clear	strong	18.17	2.35	1.534 mS/cm uS/cm	6.51	44.32	3.86
300	1000	46.28			17.99	1.083	1.567 mS/cm uS/cm	6.65	22.86	3.49
600	1001	46.28			17.55	0.79	1.566 mS/cm uS/cm	6.69	11.61	3.35
900	1002				17.16	0.63	1.564 mS/cm uS/cm	6.72	0.31	2.89
1200	1003				17.49	0.53	1.555 mS/cm uS/cm	6.73	-13.13	3.69
1500	1004				17.52	0.48	1.555 mS/cm uS/cm	6.73	-21.45	3.02
1800	1005				17.92	0.39	1.549 mS/cm uS/cm	6.74	-34.99	3.12
2100	1006				18.40	0.32	1.541 mS/cm uS/cm	6.74	-44.24	3.14
2400	1007				18.89	0.27	1.543 mS/cm uS/cm	6.74	-55.58	3.24
2700	1008				18.78	0.24	1.541 mS/cm uS/cm	6.75	-63.05	3.32
3000	[illegible]				18.58	0.23	1.547 mS/cm uS/cm	6.74	-69.77	3.64
3300	1010				18.34	0.21	1.546 mS/cm uS/cm	6.75	-74.07	3.93
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

~~EOC 01/12/24~~

Start Time: 0959 Elapsed Time (min): 11 Water Quality Meter ID & SN: YSI ProDSS -- 21B050/218083

Stop Time: 1010 Average Purge Rate (mL/min): 300 Date Calibrated: 01/12/24

SAMPLING DATA

Sample Date: 01/12/24 Sample Time: 1015 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: EOC

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 1Q24 GW **PROJECT NUMBER:** 60721927 - 3.1.1/2/3 **FIELD PERSONNEL:** C. McDavid, T. Jenkins

DATE: 01-12-24 **WEATHER:** Windy, 47°F

MONITORING WELL ID: P-66 **SAMPLE ID:** ~~P66-ROX-011224~~

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): 36.38 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
Depth to LNAPL/DNAPL (btoc): 35.79 ft		Ambient PID/FID Reading: 0.0 ppm
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 (WHIEVER IS DEEPER): — ft btoc	
Screen Length: 25 ft		Wellbore PID/FID Reading: 2309 ppm
Water Column Height (not including NAPL): 23.34 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)
							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			

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)

C McDavid 01-12-24

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: E. Chalfant, J. Mayer

DATE: 01-12-24 WEATHER: Windy, 47°F

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): 44.90 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): 44.31 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: 219.0 ppm
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): 24.36 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

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			

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)

CHECKED 01-12-24

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 1Q24 GW **PROJECT NUMBER:** 60721927 - 3.1.1/2/3 **FIELD PERSONNEL:** J. Mayer E. Chalfant

DATE: 01/11/24 **WEATHER:** 40°, Clear

MONITORING WELL ID: P-74 **SAMPLE ID:** ~~P74-ROX-011124~~ CM

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		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): — ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
Depth to LNAPL/DNAPL (btoc): — ft		Ambient PID/FID Reading: — ppm
Depth to Top of Screen (btoc): 43.83 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	
Screen Length: 25 ft		Wellbore PID/FID Reading: — ppm
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							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			

CM 01-17-24

Start Time: — Elapsed Time (min): — Water Quality Meter ID & SN: YSI ProDSS -- ~~218050/218083~~ CM

Stop Time: — Average Purge Rate (mL/min): — Date Calibrated: ~~01/11/24~~ CM

SAMPLING DATA

Sample Date: ~~01/11/24~~ CM Sample Time: — Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: EOC

COMMENTS:

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

Inaccessible due to construction activities

Estimated Total Purge Volume: — mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: M. Massa ; E. Chalfant

DATE: 01/10/2024 WEATHER: 30°, Overcast

MONITORING WELL ID: P-93A SAMPLE ID: P93A - ROX - 011024

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): 53.07 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 44.73 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 48.90 ft btoc	
Depth to LNAPL/DNAPL (btoc): NE ft		Ambient PID/FID Reading: 0.0 ppm
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 (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
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): 8.34 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	1120	44.87	clear	none	14.51	1.25	1.162 (mS/cm) uS/cm	6.78	29.45	0
300	1121	↓	↓	↓	15.52	0.60	1.170 (mS/cm) uS/cm	6.76	28.45	↓
600	1122				15.916	0.44	1.171 (mS/cm) uS/cm	6.76	27.16	
900	1123				16.24	0.34	1.172 (mS/cm) uS/cm	6.76	24.96	
1200	1124				16.25	0.30	1.172 (mS/cm) uS/cm	6.76	23.42	
1500	1125				16.91	0.26	1.171 (mS/cm) uS/cm	6.76	21.28	
							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			

SOC 01/10/24

Start Time: 1120 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -- 21B050/21B083

Stop Time: 1125 Average Purge Rate (mL/min): 300 Date Calibrated: 01/10/24

SAMPLING DATA

Sample Date: 01/10/24 Sample Time: 1130 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: SOC

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: J. Mayer ; E. Chalfant

DATE: 01/12/24 WEATHER: 50° ; Rain

MONITORING WELL ID: P-93B SAMPLE ID: P93B-ROX-011224

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): 45.91 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 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 (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 2 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): 75.78 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	1208	45.84	clear	moderate	16.05	1.25	1.365 (mS/cm) uS/cm	6.91	-49.63	14.23
300	1209	45.84			15.34	0.80	1.389 (mS/cm) uS/cm	6.90	-57.26	12.35
600	1210	45.84			14.47	0.55	1.387 (mS/cm) uS/cm	6.92	-63.46	10.42
900	1214				14.96	0.75	1.390 (mS/cm) uS/cm	6.93	-82.69	4.75
1200	1215				15.66	0.44	1.386 (mS/cm) uS/cm	6.93	-84.72	4.47
1500	1216				15.12	0.73	1.387 (mS/cm) uS/cm	6.94	-86.55	4.56
1800	1217				14.76	0.26	1.391 (mS/cm) uS/cm	6.94	-88.73	4.69
2100	1218				14.79	0.20	1.388 (mS/cm) uS/cm	6.94	-91.54	5.55
2400	1219				14.89	0.20	1.386 (mS/cm) uS/cm	6.94	-92.02	5.65
							mS/cm uS/cm			
			EOC 01/12/24				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: 1208 Elapsed Time (min): 11 Water Quality Meter ID & SN: YSI ProDSS -- 21B050/218083

Stop Time: 1219 Average Purge Rate (mL/min): 300 Date Calibrated: 01/12/24

SAMPLING DATA

Sample Date: 01/12/24 Sample Time: 1225 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: EOC

COMMENTS:

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

Estimated Total Purge Volume: 2400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: M. Massa ; E. Chalfant

DATE: 01/11/24 WEATHER: 38°, Overcast

MONITORING WELL ID: P-93C SAMPLE ID: P93C-ROX-011023

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 93.38 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 97.88 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 46.03 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): 92.88 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	Wellbore PID/FID Reading: 115.1 ppm
Screen Length: 5 ft		
Water Column Height (not including NAPL): 51.85 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	0937	46.04	Clear	moderate	15.97	1.79	1.312 (mS/cm) uS/cm	6.52	100.65	0
300	0938	46.04			15.22	0.91	1.390 (mS/cm) uS/cm	6.68	78.36	
600	0939	46.04			14.64	0.62	1.399 (mS/cm) uS/cm	6.73	67.43	
900	0940	↓			14.63	0.52	1.397 (mS/cm) uS/cm	6.77	57.48	
1200	0941				14.48	0.47	1.402 (mS/cm) uS/cm	6.79	51.58	
1500	0942				14.34	0.43	1.401 (mS/cm) uS/cm	6.80	47.27	
1800	0943		↓	↓	14.54	0.39	1.395 (mS/cm) uS/cm	6.81	44.23	↓
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
				EOC 01/11/24			mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 0937 Elapsed Time (min): 7 Water Quality Meter ID & SN: YSI ProDSS -- 21B050/21B083

Stop Time: 0943 Average Purge Rate (mL/min): 300 Date Calibrated: 01/11/24

SAMPLING DATA

Sample Date: 01/11/24 Sample Time: 0945 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: EOC

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: M. Massa ; E. Chalfant

DATE: 01/10/24 WEATHER: 30°, Overcast

MONITORING WELL ID: P-93D SAMPLE ID: P93D-ROX-011024

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): 46.26 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): 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): 81.65 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): 126.66 ft btoc	

PURGE DATA

Pump Type: Dedicated Well Wizard

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	1041	46.26	clear	none	15.69	2.53	0.979 (mS/cm) uS/cm	7.21	37.09	0
300	1042				15.58	1.50	0.990 (mS/cm) uS/cm	7.08	30.43	
600	1043				15.76	1.09	0.998 (mS/cm) uS/cm	7.07	23.53	
900	1044				15.84	0.84	0.992 (mS/cm) uS/cm	7.08	15.98	
1200	1045				15.87	0.69	0.996 (mS/cm) uS/cm	7.08	8.65	
1500	1046				15.79	0.67	0.999 (mS/cm) uS/cm	7.08	4.72	
1800	1047				15.86	0.67	1.00 (mS/cm) uS/cm	7.09	0.20	
							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			

EOC 01/10/24

Start Time: 1041 Elapsed Time (min): 60 Water Quality Meter ID & SN: YSI ProDSS -- 21B050/21B083

Stop Time: 1047 Average Purge Rate (mL/min): 300 Date Calibrated: 01/10/24

SAMPLING DATA

Sample Date: 01/10/2024 Sample Time: 1050 Lab Analysis: VOC, SVOC, PAH

Sample Method: Bladder Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: NS

VOA Vials, No Headspace ☑ Initials: EOC

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: C.McDonald, T.Jenkins

DATE: 01-10-24 WEATHER: cloudy, 30°F

MONITORING WELL ID: P-114R SAMPLE ID: P114R-ROX-011024

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): 33.31 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 28.60 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 30.96 ft btoc	
Depth to LNAPL/DNAPL (btoc): NE ft		Ambient PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 23.01 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	
Screen Length: 10 ft		Wellbore PID/FID Reading: 0.0 ppm
Water Column Height (not including NAPL): 4.71 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	1126	28.64	murky	strong	19.1	0.61	0.903 (mS/cm) uS/cm	6.65	73.27	104.19
300	1129	28.64			18.4	0.45	0.903 (mS/cm) uS/cm	6.67	70.33	113.34
600	1130	—			18.7	0.36	0.901 (mS/cm) uS/cm	6.67	67.17	231.76
11,700 900 (M)	@1134 1207	28.60			19.0	0.57	0.910 (mS/cm) uS/cm	6.69	44.87	93.05
12,000 +1200 (M)	@1137 1218	—			19.1	1.06	0.908 (mS/cm) uS/cm	6.67	33.08	82.37
15,300	1219	—			18.8	0.51	0.908 (mS/cm) uS/cm	6.68	31.19	75.11
16,500	1223	—			19.0	0.70	0.909 (mS/cm) uS/cm	6.68	27.87	59.95
20,400	1236	28.58			19.7	2.03	0.910 (mS/cm) uS/cm	6.67	20.37	51.99
20,700	1237	28.58			18.8	0.94	0.914 (mS/cm) uS/cm	6.68	18.88	38.99
21,000	1238	28.58			18.6	0.54	0.908 (mS/cm) uS/cm	6.69	17.39	31.52
21,300	1239	↓			18.8	0.35	0.907 (mS/cm) uS/cm	6.68	15.69	23.03
21,600	1240				19.3	0.26	0.908 (mS/cm) uS/cm	6.68	13.93	18.91
21,900	1241				18.8	0.22	0.912 (mS/cm) uS/cm	6.69	12.47	18.26
22,200	1242	↓	↓	↓	18.8	0.19	0.911 (mS/cm) uS/cm	6.69	10.99	40.01
							(mS/cm) uS/cm			
			emerson 01-10-24				mS/cm uS/cm			

Start Time: 11:28 Elapsed Time (min): 74 Water Quality Meter ID & SN: YSI ProDSS -- 19599/099551

Stop Time: 12:42 Average Purge Rate (mL/min): 300 Date Calibrated: 01-10-24

SAMPLING DATA

Sample Date: 01-10-24 Sample Time: 12:50 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: CM

COMMENTS:

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

water was extremely cloudy at first, let run 1045min before collecting data

Turb was dropping to be started test, but turb began to climb again & water turned dark Estimated Total Purge Volume: 22,200 mL

paused test 11:30 - 12:36.

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: C. McDonald, M. Massa

DATE: 01-08-24 WEATHER: cloudy, 33°F

MONITORING WELL ID: ROST-3-MW SAMPLE ID: ROST3MW-ROX-010824

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): 48.06 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 41.53 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 44.80 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 (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 6.53 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	1021	41.70	clear	slight	13.8	1.38	1.040 (mS/cm) uS/cm	6.56	115.44	30.54
300	1022	41.70			13.9	0.96	1.043 (mS/cm) uS/cm	6.59	109.07	26.16
600	1023	41.70			14.2	0.74	1.045 (mS/cm) uS/cm	6.60	104.11	19.98
900	1024				14.8	0.60	1.046 (mS/cm) uS/cm	6.60	99.69	18.04
1200	1025				15.2	0.51	1.049 (mS/cm) uS/cm	6.62	95.73	15.06
1500	1026				15.6	0.44	1.050 (mS/cm) uS/cm	6.63	92.15	11.71
1800	1027				15.9	0.39	1.051 (mS/cm) uS/cm	6.64	89.08	9.72
2100	1028				16.1	0.35	1.053 (mS/cm) uS/cm	6.65	86.19	7.02
							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			

CM reviewed 01-08-24

Start Time: 10:21 Elapsed Time (min): 7 Water Quality Meter ID & SN: YSI ProDSS -- 19549/19551

Stop Time: 10:28 Average Purge Rate (mL/min): 300 Date Calibrated: 01-08-24

SAMPLING DATA

Sample Date: 01-08-24 Sample Time: 10:45 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: CM

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: J. Mayer E. Chalfant

DATE: 01/08/24 WEATHER: ~52°, Cloudy

MONITORING WELL ID: ROST-4-PZ(C) SAMPLE ID: ROST4PZC-ROX-010824

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): 41.43 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 42.93 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: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 10.81 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)
300	1020	41.62	Clear	Mod	13.91	1.57	1.128 (mS/cm) uS/cm	6.79	-30.96	30.8
600	1021	41.78			13.64	0.99	1.173 (mS/cm) uS/cm	6.77	-34.91	22.7
900	1022	41.74			13.57	0.606	1.123 (mS/cm) uS/cm	6.77	-40.12	4.9
1200	1023	41.74			13.72	0.53	1.123 mS/cm uS/cm	6.77	-42.96	-2.2
1500	1024	41.74			14.06	0.43	1.121 mS/cm uS/cm	6.77	-45.53	-6.7
1800	1025	41.74			13.98	0.34	1.122 mS/cm uS/cm	6.77	-48.80	-12.8
2100	1026	41.74			14.11	0.33	1.120 mS/cm uS/cm	6.77	-49.08	-13.3
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
				EOC 01/08/24			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: 1020 Elapsed Time (min): 6 min Water Quality Meter ID & SN: YSI ProDSS -- 21805a / 21883

Stop Time: 1838 1026 Average Purge Rate (mL/min): 300 Date Calibrated: 01/08/24

SAMPLING DATA

Sample Date: 01/08/24 Sample Time: 1030 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: N5

VOA Vials, No Headspace ☑ Initials: EOC

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: C.McDavid, T. Jenkins

DATE: 01-11-24 WEATHER: clear, 91°F

MONITORING WELL ID: ROST-4-PZ(E) SAMPLE ID: ROST4PZE-ROX-011124

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): 45.00 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 39.85 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 42.43 ft btoc	Ambient PID/FID Reading: 0.0 ppm
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	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 5.15 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	1156	40.68	Clear	Moderate	20.0	0.96	1.776 (mS/cm) uS/cm	6.82	106.29	0
300	1157	40.94	↓	↓	19.6	0.98	1.781 (mS/cm) uS/cm	6.81	105.41	0
600	1158	41.02			21.2	1.04	1.790 (mS/cm) uS/cm	6.80	104.26	0
900	1159	41.20			20.8	1.15	1.822 (mS/cm) uS/cm	6.80	103.38	0
1200	1200	41.18			21.4	1.15	1.829 (mS/cm) uS/cm	6.80	102.38	0
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

C McDavid 01-11-24

Start Time: 11:56 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 99599/099551

Stop Time: 12:00 Average Purge Rate (mL/min): 300 Date Calibrated: 01-11-24

SAMPLING DATA

Sample Date: 01-11-24 Sample Time: 12:15 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: CM

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 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: J. Mayer E. Chalfant

DATE: 01/08/24 WEATHER: 32°, partly cloudy

MONITORING WELL ID: ROST-4-PZ(G) SAMPLE ID: ROST4PZG-ROX-010824

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): 44.53 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 41.43 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 42.98 ft btoc	
Depth to LNAPL/DNAPL (btoc): N/E ft		Ambient PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 34.28 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: 92.1 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 3.12 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)
300	0918	41.47	clear	slight	14.51	0.74	1.407 mS/cm uS/cm	6.96	15.74	-7.18
600	0919	41.47			14.61	0.63	1.401 mS/cm uS/cm	6.99	5.47	-11.49
900	0920	41.47			15.24	0.49	1.392 mS/cm uS/cm	7.02	-13.76	-13.62
1200	0921				15.50	0.44	1.393 mS/cm uS/cm	7.03	-29.51	-13.47
1500	0922				15.73	0.36	1.395 mS/cm uS/cm	7.05	-50.48	-15.08
1800	0923				16.06	0.32	1.392 mS/cm uS/cm	7.05	-67.28	-15.92
2100	0924				16.05	0.30	1.391 mS/cm uS/cm	7.06	-75.90	-18.12
2400	0925				16.11	0.27	1.391 mS/cm uS/cm	7.06	-84.85	-19.50
2700	0926				16.12	0.25	1.390 mS/cm uS/cm	7.06	-89.09	-20.7
3000	0927				16.43	0.29	1.385 mS/cm uS/cm	7.06	-93.22	-21.60
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

EQL 01/08/24

Start Time: 0918 Elapsed Time (min): 9 Water Quality Meter ID & SN: YSI ProDSS -- 21B050/218083

Stop Time: 0927 Average Purge Rate (mL/min): 300 Date Calibrated: 01/08/24

SAMPLING DATA

Sample Date: 01/08/24 Sample Time: 0930 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: EQL

COMMENTS:

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

Estimated Total Purge Volume: 3000 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q24 GW PROJECT NUMBER: 60721927 - 3.1.1/2/3 FIELD PERSONNEL: J. Mayer ; E. Chalfant

DATE: 01/11/24 WEATHER: 40°, clear

MONITORING WELL ID: T-12 SAMPLE ID: T12-ROX-011124

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): 44.46 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 (WHIEVER IS DEEPER): 51.83 ft btoc
Screen Length: 26 ft	
Water Column Height (not including NAPL): 18.37 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: 12.7 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	1146	44.49	clear	Slight	16.08	~~4.78~~ 1.81	1.709 mS/cm uS/cm	6.90	-25.26	0
300	1147	44.49			16.98	0.99	1.780 mS/cm uS/cm	6.89	-45.17	
600	1148	44.49			17.53	0.70	1.788 mS/cm uS/cm	6.89	-57.92	
900	1149				17.86	0.46	1.795 mS/cm uS/cm	6.90	-70.81	
1200	1150				18.03	0.42	1.791 mS/cm uS/cm	6.90	-76.09	
1500	1151				17.94	0.35	1.797 mS/cm uS/cm	6.90	-83.29	
1800	1152				17.98	0.31	1.797 mS/cm uS/cm	6.91	-90.34	
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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Gal 01/11/24

Start Time: 1146 Elapsed Time (min): ~~30~~ 6 Water Quality Meter ID & SN: YSI ProDSS -- 21B050/21B083

Stop Time: 1152 Average Purge Rate (mL/min): 300 Date Calibrated: 01/11/24

SAMPLING DATA

Sample Date: 01/11/24 Sample Time: 1155 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: GoL

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/Validation Forms and Laboratory Analytical Reports

Roxana Groundwater Quarterly – 1st Quarter 2024 Data Review

Laboratory SDG: 400-249331-1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 2/27/2024

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

Sample Identification	Sample Identification
TB-ROX-010524-8260-A	TB-ROX-010524-8011-A
MW1-ROX-010524-EB	MW1-ROX-010524
MW26-ROX-010524	MW11-ROX-010524
TB-ROX-010524-8011-B	TB-ROX-010524-8260-B
MW9-ROX-010524-EB	MW9-ROX-010524
MW10-ROX-010524	MW28-ROX-010524

1.0 Data Package Completeness

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

Yes, although Methods 8260 and 8011 analyses for trip blanks TB-ROX-010524-8011-B and TB-ROX-010524-8260-B were inadvertently incorrectly requested on the COC, TB-ROX-010524-8011-B was correctly analyzed by Method 8011 and TB-ROX-010524-8260-B was correctly analyzed by Method 8260; no qualification of data was required.

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, the case narrative indicated that several VOC and SVOC MS/MSD recoveries, and/or MS/MSD RPDs, were outside evaluation criteria in samples MW26-ROX-010524 and MW28-ROX-010524. The initial calibration verification (ICV) for 3,3'-dichlorobenzidine, and the continuing calibration verification (CCV) for multiple analytes, were outside were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (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?

Yes

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, samples MW26-ROX-010524 and MW28-ROX-010524 were 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
MW26-ROX-010524 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW26-ROX-010524 MS/MSD	SVOCs	Benzoic acid	143/**155**	10	50-150/40
MW26-ROX-010524 MS/MSD	SVOCs	1,4-Dioxane	**35/39**	14	50-150/40
MW26-ROX-010524 MS/MSD	SVOCs	Phenol	**46**/63	33	50-150/40
MW26-ROX-010524 MS/MSD	SVOCs	Pyridine	**28/31**	13	50-150/40
MW28-ROX-010524 MS/MSD	VOCs	Acrolein	104/69	**40**	38-150/31
MW28-ROX-010524 MS/MSD	VOCs	Benzene	97/70	**32**	56-142/30
MW28-ROX-010524 MS/MSD	VOCs	Carbon disulfide	89/61	**37**	48-150/30
MW28-ROX-010524 MS/MSD	VOCs	Carbon tetrachloride	106/72	**38**	55-145/30
MW28-ROX-010524 MS/MSD	VOCs	Chloroethane	97/62	**44**	50-150/30
MW28-ROX-010524 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**9/0**	NC	10-150/50
MW28-ROX-010524 MS/MSD	VOCs	Chloroform	95/69	**31**	60-141/30
MW28-ROX-010524 MS/MSD	VOCs	1-Chlorohexane	77/**54**	**35**	56-136/30
MW28-ROX-010524 MS/MSD	VOCs	Chloromethane	84/54	**43**	49-148/31
MW28-ROX-010524 MS/MSD	VOCs	Dichlorodifluoromethane	85/51	**49**	16-150/31

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW28-ROX-010524 MS/MSD	VOCs	1,1-Dichloroethane	96/68	**34**	61-144/30
MW28-ROX-010524 MS/MSD	VOCs	1,1-Dichloroethene	94/66	**35**	54-147/30
MW28-ROX-010524 MS/MSD	VOCs	2,2-Dichloropropane	97/68	**36**	42-144/31
MW28-ROX-010524 MS/MSD	VOCs	1,1-Dichloropropene	93/67	**33**	65-136/30
MW28-ROX-010524 MS/MSD	VOCs	Ethylbenzene	85/61	**32**	58-131/30
MW28-ROX-010524 MS/MSD	VOCs	Isopropylbenzene	85/62	**32**	56-133/30
MW28-ROX-010524 MS/MSD	VOCs	m-Xylene & p-Xylene	86/63	**32**	57-130/30
MW28-ROX-010524 MS/MSD	VOCs	p-Chlorotoluene	81/59	**32**	54-133/30
MW28-ROX-010524 MS/MSD	VOCs	1,1,1,2-Tetrachloroethane	97/70	**32**	59-137/30
MW28-ROX-010524 MS/MSD	VOCs	Tetrachloroethene	90/61	**37**	52-133/30
MW28-ROX-010524 MS/MSD	VOCs	Toluene	92/**64**	**36**	65-130/30
MW28-ROX-010524 MS/MSD	VOCs	trans-1,2-Dichloroethene	95/67	**34**	61-143/30
MW28-ROX-010524 MS/MSD	VOCs	1,1,1-Trichloroethane	102/69	**39**	57-142/30
MW28-ROX-010524 MS/MSD	VOCs	Trichloroethene	106/74	**36**	64-136/30
MW28-ROX-010524 MS/MSD	VOCs	Trichlorofluoromethane	92/59	**44**	54-150/30
MW28-ROX-010524 MS/MSD	VOCs	Vinyl acetate	112/72	**43**	26-150/33
MW28-ROX-010524 MS/MSD	VOCs	Vinyl chloride	91/57	**46**	46-150/30
MW28-ROX-010524 MS/MSD	SVOCs	1,4-Dioxane	**40/40**	3	50-150/40
MW28-ROX-010524 MS/MSD	SVOCs	Pyridine	**34/34**	3	50-150/40

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 2-chloroethyl vinyl ether due to acceptable LCS recoveries 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. Analytical data associated with MS/MSD RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW26-ROX-010524	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW26-ROX-010524	SVOCs	1,4-Dioxane	**UJ**
MW26-ROX-010524	SVOCs	Phenol	**UJ**
MW26-ROX-010524	SVOCs	Pyridine	**UJ**
MW28-ROX-010524	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW28-ROX-010524	VOCs	1-Chlorohexane	**UJ**
MW28-ROX-010524	VOCs	Toluene	**UJ**
MW28-ROX-010524	SVOCs	1,4-Dioxane	**UJ**
MW28-ROX-010524	SVOCs	Pyridine	**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 initial calibration verification (ICV) for 3,3'-dichlorobenzidine, and the continuing calibration verification (CCV) for pyridine and 4,6-dinitro-ortho-cresol, were outside evaluation criteria, biased low. Pyridine in samples MW26-ROX-010524 and MW28-ROX-010524 were previously qualified in Section 7.0 of this data review due to MS/MSD outside evaluation criteria; no further qualification of pyridine was required. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW1-ROX-010524	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW1-ROX-010524	SVOCs	Pyridine	**UJ**
MW1-ROX-010524	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW26-ROX-010524	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW26-ROX-010524	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW11-ROX-010524	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW11-ROX-010524	SVOCs	Pyridine	**UJ**
MW11-ROX-010524	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW9-ROX-010524	SVOCs	3,3'-Dichlorobenzidine	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW9-ROX-010524	SVOCs	Pyridine	**UJ**
MW9-ROX-010524	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW10-ROX-010524	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW10-ROX-010524	SVOCs	Pyridine	**UJ**
MW10-ROX-010524	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW28-ROX-010524	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW28-ROX-010524	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**

1.0 VALIDATION OF DBCP AND EDB DATA – SDG 400-249331-1

This section describes the validation for six investigative groundwater samples, two equipment blanks, and two trip blanks that were prepared and analyzed for 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by USEPA SW-846 Method 8011. The samples were analyzed by Eurofins Pensacola Laboratories, in Pensacola, Florida, and submitted as part of the sample delivery group (SDG) 400-249331-1. The samples included as part of this validation are listed below.

Sample Identification	Sample Identification
TB-ROX-010524-8011-A	MW1-ROX-010524-EB
MW1-ROX-010524	MW26-ROX-010524
MW11-ROX-010524	TB-ROX-010524-8011-B
MW9-ROX-010524-EB	MW9-ROX-010524
MW10-ROX-010524	MW28-ROX-010524

Evaluation of the analytical data followed procedures outlined in the USEPA Contract Laboratory National Functional Guidelines for Superfund Organic Methods Data Review (EPA 2020).

Criteria evaluated included the following method performance criteria:

- Data package completeness
- Laboratory case narrative/cooler receipt form
- Holding times and sample preservation
- Initial calibration (ICAL)
- Calibration verification (CV)
- Blank samples
- Laboratory control spike (LCS) samples
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) samples
- Target compound identification and quantification
- Overall data assessment

1.1 Data Package Completeness

The data package was reviewed to make certain it contained the data contractually required in the deliverable. This included checking the data package for the results against the analyses requested on the chain-of custody, along with requested QC documentation for the respective methods. Although Methods 8260 and 8011 analyses for trip blanks TB-ROX-010524-8011-B and TB-ROX-010524-8260-B were inadvertently incorrectly requested on the COC, TB-ROX-010524-8011-B was correctly analyzed by Method 8011 and TB-ROX-010524-8260-B was correctly analyzed by Method 8260; no qualification of data was required.

1.2 Laboratory Case Narrative/Cooler Receipt Form

The laboratory case narrative indicated that the continuing calibration verification (CCV) for 1,2-dibromo-3-chloropropane were outside evaluation criteria, biased high. This issue is discussed further in Section 1.5 of this validation report.

No issues were indicated in the cooler receipt form.

1.3 Holding Times and Sample Preservation

Review of the sample collection and analysis dates involved comparing the sample chain-of-custody, the summary forms, and the raw data forms for accuracy, consistency, and holding time compliance. The samples were received in good condition and were received and maintained at temperatures of ≤ 6ºC. In addition, the samples were analyzed within 14 days of collection. No qualifications to the data were required based on holding times and sample preservation.

1.4 Initial Calibration

An ICAL was established to assess whether the instrument was capable of producing acceptable qualitative and quantitative data for EDB/DBCP analyses. Validated samples included in SDG 400-249331-1 were analyzed using instrument Toto. The ICAL for instrument Toto was established on 09/12/2023. At least five standard concentrations were used to establish the ICAL curve as required by Method 8011.

Review of the ICAL summary forms indicated percent relative standard deviations (%RSDs) were ≤ 20% for target compounds or were determined using linear regression and correlation coefficients (r^2) were greater than 0.990. A recalculation of the weighted linear regression was performed from the raw data and no errors in calculation were noted.

Review of the summary forms indicated that an initial calibration verification (ICV) was performed following the initial calibration. Review of ICV summary forms indicated percent differences (%Ds) were within the evaluation criterion of ≤ 30% for both target compounds. No qualification of data was required.

Summary forms and raw data are provided for the primary column only since all target compounds were reported as non-detect in the samples and did not require confirmation.

1.5 Calibration Verification (CV)

Review of the CV summary forms indicated that all CVs were performed before the start of sample analysis, every ten sample injections, and at the end of sample analysis. %Ds met the evaluation criteria of ≤ 15% for both target compounds with the exceptions summarized in the table below.

CV (Date/Time)	Compound	%D
400-657281/32-A / 01/11/2024 10:16	1,2-Dibromo-3-chloropropane	**16.19**
400-657281/32-A/ 01/11/2024 17:19	1,2-Dibromo-3-chloropropane	**24.5**

The results for the validated samples were non-detect and were associated with a positive %D, indicating a potential high bias; therefore, qualification of data was not required.

Summary forms and raw data are provided for the primary column only since all target compounds were reported as non-detect in the samples and did not require confirmation.

Recalculations of the %D for one target compound was completed for the CV, and no errors in calculation were noted.

1.6 Blank Samples

The purpose of the method blank samples is to evaluate the existence and magnitude of contamination problems emanating from laboratory activities. Method blank samples were analyzed with each analytical batch as required by USEPA SW-846 Method 8011. Also, trip blanks were analyzed to evaluate the existence and magnitude of contamination problems emanating from sample shipment to the laboratory. Equipment blank samples were used to evaluate the efficiency of the decontamination of sampling equipment. Target compounds were reported as non-detect in all blanks. No qualification of data was required.

1.7 Laboratory Control Spike (LCS) Samples

Laboratory control samples were analyzed with each analytical batch to assess the accuracy of the analytical process. LCS/LCSD recoveries and LCS/LCSD RPDs were within evaluation criteria. No qualification of data was required.

Approximately 10% of spiking compound recoveries for the LCS were recalculated and verified using the LCS summary forms, and no calculation or transcription errors were noted.

1.8 Surrogate Spike Recoveries

Surrogate compounds were used to evaluate the overall laboratory sample preparation efficiency on a per sample basis. Surrogate recoveries were within the method acceptance criteria for the validated samples. No qualification of data was required.

Approximately 10% of the recoveries were recalculated and no calculation or transcription errors were noted.

1.9 Matrix Spike/Matrix Spike Duplicate (MS/MSD) Samples

MS/MSD samples are analyzed to assess potential matrix effects. Samples MW26-ROX-010524 and MW28-ROX-010524 were spiked and analyzed for Method 8011. MS/MSD data were within evaluation criteria.

1.10 Target Compound Identification and Quantification

For validation of the compound identification, chromatograms were reviewed to verify the major peaks were identified, and the relative retention time was no greater than 0.06 minutes different from the associated CV retention times. Target compounds were not detected in any of the investigative groundwater samples in this data set.

For the validation of compound quantitation, the LCS results were recalculated from the raw data since all target compounds were non-detect, and no calculation errors were noted. Additionally, the reporting limits (RLs) were verified to determine if RLs were adjusted for dilutions when applicable.

1.11 Overall Data Assessment

Based on the criteria outlined, it is recommended that the results reported for these analyses are accepted for their intended use. Acceptable levels of accuracy and precision based on the method performance criteria were achieved for this SDG.

1.0 VALIDATION OF VOC DATA – 400-249331-1

This section describes the validation for six investigative groundwater samples, two equipment blanks, and two trip blanks which were prepared by USEPA SW-846 Method 5030C and analyzed for Volatile Organic Compounds (VOCs) by USEPA SW-846 Method 8260D. The samples were analyzed by Eurofins Pensacola Laboratories in Pensacola, Florida, and submitted as part of the sample delivery group (SDG) 400-249331-1. The samples included as part of this validation are listed below.

Sample Identification	Sample Identification
TB-ROX-010524-8260-A	MW1-ROX-010524-EB
MW1-ROX-010524	MW26-ROX-010524
MW11-ROX-010524	TB-ROX-010524-8260-B
MW9-ROX-010524-EB	MW9-ROX-010524
MW10-ROX-010524	MW28-ROX-010524

Evaluation of the analytical data followed procedures outlined in the USEPA Contract Laboratory National Functional Guidelines for Superfund Organic Methods Data Review (EPA 2020).

Criteria evaluated included the following method performance criteria:

- Data package completeness
- Laboratory case narrative/cooler receipt form
- Holding times and sample preservation
- GC/MS instrument performance
- Initial calibration (ICAL)
- Calibration verification (CV)
- Blank samples
- Laboratory control spike (LCS) samples
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) samples
- Internal standards
- Target compound identification and quantification
- Overall data assessment

1.1 Data Package Completeness

The data package was reviewed to make certain it contained the data contractually required in the deliverable. This included checking the data package for the results against the analyses requested on the chain-of custody, along with requested QC documentation for the respective methods. Although Methods 8260 and 8011 analyses for trip blanks TB-ROX-010524-8011-B and TB-ROX-010524-8260-B were inadvertently incorrectly requested on the COC, TB-ROX-010524-8011-B was correctly analyzed by Method 8011 and TB-ROX-

010524-8260-B was correctly analyzed by Method 8260; no qualification of data was required.

1.2 Laboratory Case Narrative/Cooler Receipt Form

The laboratory case narrative indicated that several VOC MS/MSD recoveries, and/or MS/MSD RPDs, were outside evaluation criteria in samples MW26-ROX-010524 and MW28-ROX-010524. These issues are addressed further in the appropriate sections of this data review.

Additionally, the laboratory case narrative indicated three (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) of 70 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 issues.

1.3 Holding Times and Sample Preservation

Review of the sample collection and analysis dates involved comparing the sample chain-of-custody, the summary forms and the raw data forms for accuracy, consistency, and holding time compliance. The samples were in good condition and were received and maintained at temperatures of ≤ 6ºC and samples were preserved at a pH < 2.0. Additionally, samples were analyzed within the analysis holding time (14 days).

1.4 GC/MS Instrument Performance

GC/MS instrument performance checks were performed to ensure mass resolution, identification, and instrument sensitivity. Criteria for evaluation of instrument performance included possible transcription/calculation errors, adherence to instrument tuning frequency requirements, mass assignments, and ion abundance criteria. Instrument performance check samples were evaluated against criteria established in USEPA SW-846 Method 8260D.

Based on the summary forms, the ion abundance criteria were within evaluation criteria for all masses. No qualifications to the data were required based on instrument performance criteria.

1.5 Initial Calibration (ICAL)

An ICAL was established to assess whether the instrument was capable of producing acceptable qualitative and quantitative data for volatiles analyses. Validated samples included in 400-249331-1 were analyzed using instrument Einstein. The ICAL for instrument Einstein was established on 12/15/2023. At least five standard concentrations were used to establish the ICAL curves as required by Method 8260D.

The ICAL response factors (RFs) were reviewed and were greater than 0.10 for chloromethane, 0.10 for 1,1-dichloroethane, 0.10 for bromoform, 0.30 for chlorobenzene, and 0.30 for 1,1,2,2-tetrachloroethane. No qualification of data was required.

Review of the initial calibration summary forms indicated %RSDs were $\leq$ 30% for calibration check compounds (CCCs) [1,1-dichloroethene, toluene, chloroform, ethylbenzene, 1,2-dichloropropane, and vinyl chloride], and $\leq$ 20% for non-CCCs.

An initial calibration verification (ICV) was analyzed following the initial calibration. Percent difference (%D) values from comparing ICV RF to the average ICAL RFs were within the laboratory quality control criteria.

A recalculation of the %RSDs and RFs for a compound associated with each internal standard was performed from the raw data and no errors in calculation were noted.

1.6 Calibration Verification (CV)

Review of CV summary forms indicated RFs met the evaluation criteria of greater than 0.10 for chloromethane, 0.10 for 1,1-dichloroethane, 0.10 for bromoform, 0.30 for chlorobenzene, and 0.30 for 1,1,2,2-tetrachloroethane. No qualification of data was required.

Percent differences or percent drifts (%D) met the evaluation criteria of ≤ 20% for target analytes.

Recalculations of the RFs and %Ds for select target compounds were completed for each CV, and no errors in calculation were noted.

1.7 Blank Samples

The purpose of the method blank samples is to evaluate the existence and magnitude of contamination problems emanating from laboratory activities. Method blank samples were analyzed with each analytical batch as required by Method 8260D. The purpose of trip blank samples is to evaluate the existence and magnitude of contamination emanating from field and transport activities. The purpose of equipment blank samples is to evaluate the existence and magnitude of contamination emanating from field activities. Target compounds were reported as non-detect in all blanks. No qualification of data was required.

1.8 Laboratory Control Spike (LCS) Samples

Laboratory control samples were analyzed with each analytical batch to assess the accuracy of the analytical process. LCS data were within evaluation.

Approximately 10% of spiking compound recoveries for the LCS were recalculated and verified using the LCS summary forms, and no calculation or transcription errors were noted.

1.9 Surrogate Spike Recoveries

Surrogate compounds were used to evaluate the overall laboratory sample preparation efficiency on a per sample basis. All surrogate recoveries were within the method acceptance criteria for the validated samples. Approximately 10% of the samples were recalculated, and no calculation or transcription errors were noted.

1.10 Matrix Spike/Matrix Spike Duplicate (MS/MSD) Samples

MS/MSD samples are analyzed to assess potential matrix effects. Sample MW26-ROX-010524 was spiked and analyzed for VOCs. MS/MSD data were within evaluation criteria with the exception summarized in the following table.

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW26-ROX-010524 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW28-ROX-010524 MS/MSD	VOCs	Acrolein	104/69	**40**	38-150/31
MW28-ROX-010524 MS/MSD	VOCs	Benzene	97/70	**32**	56-142/30
MW28-ROX-010524 MS/MSD	VOCs	Carbon disulfide	89/61	**37**	48-150/30

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW28-ROX-010524 MS/MSD	VOCs	Carbon tetrachloride	106/72	**38**	55-145/30
MW28-ROX-010524 MS/MSD	VOCs	Chloroethane	97/62	**44**	50-150/30
MW28-ROX-010524 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**9/0**	NC	10-150/50
MW28-ROX-010524 MS/MSD	VOCs	Chloroform	95/69	**31**	60-141/30
MW28-ROX-010524 MS/MSD	VOCs	1-Chlorohexane	77/**54**	**35**	56-136/30
MW28-ROX-010524 MS/MSD	VOCs	Chloromethane	84/54	**43**	49-148/31
MW28-ROX-010524 MS/MSD	VOCs	Dichlorodifluoromethane	85/51	**49**	16-150/31
MW28-ROX-010524 MS/MSD	VOCs	1,1-Dichloroethane	96/68	**34**	61-144/30
MW28-ROX-010524 MS/MSD	VOCs	1,1-Dichloroethene	94/66	**35**	54-147/30
MW28-ROX-010524 MS/MSD	VOCs	2,2-Dichloropropane	97/68	**36**	42-144/31
MW28-ROX-010524 MS/MSD	VOCs	1,1-Dichloropropene	93/67	**33**	65-136/30
MW28-ROX-010524 MS/MSD	VOCs	Ethylbenzene	85/61	**32**	58-131/30
MW28-ROX-010524 MS/MSD	VOCs	Isopropylbenzene	85/62	**32**	56-133/30
MW28-ROX-010524 MS/MSD	VOCs	m-Xylene & p-Xylene	86/63	**32**	57-130/30
MW28-ROX-010524 MS/MSD	VOCs	p-Chlorotoluene	81/59	**32**	54-133/30
MW28-ROX-010524 MS/MSD	VOCs	1,1,1,2-Tetrachloroethane	97/70	**32**	59-137/30
MW28-ROX-010524 MS/MSD	VOCs	Tetrachloroethene	90/61	**37**	52-133/30
MW28-ROX-010524 MS/MSD	VOCs	Toluene	92/**64**	**36**	65-130/30
MW28-ROX-010524 MS/MSD	VOCs	trans-1,2-Dichloroethene	95/67	**34**	61-143/30
MW28-ROX-010524 MS/MSD	VOCs	1,1,1-Trichloroethane	102/69	**39**	57-142/30
MW28-ROX-010524 MS/MSD	VOCs	Trichloroethene	106/74	**36**	64-136/30
MW28-ROX-010524 MS/MSD	VOCs	Trichlorofluoromethane	92/59	**44**	54-150/30
MW28-ROX-010524 MS/MSD	VOCs	Vinyl acetate	112/72	**43**	26-150/33
MW28-ROX-010524 MS/MSD	VOCs	Vinyl chloride	91/57	**46**	46-150/30

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 2-chloroethyl vinyl ether due to acceptable LCS recoveries 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. Analytical data associated with MS/MSD RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW26-ROX-010524	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW28-ROX-010524	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW28-ROX-010524	VOCs	1-Chlorohexane	**UJ**
MW28-ROX-010524	VOCs	Toluene	**UJ**

Approximately 10% of the recoveries were recalculated, and no calculation or transcription errors were noted.

1.11 Internal Standards

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during each analytical run. IS areas must be within -50% to +100%, and the IS retention times must be within 30 seconds of the IS continuing calibration retention time. IS areas and retention times for the validated samples in this SDG were within evaluation criteria.

The summary forms versus the raw data were verified and no transcription errors were noted.

1.12 Target Compound Identification and Quantification

For validation of the compound identification, method specified compound identification criteria were reviewed in approximately 10% of the samples. No anomalies were noted with the identification of the target compounds in the samples.

For the validation of compound quantitation, approximately 10% of the detected target compounds were recalculated from the raw data, and no calculation errors were noted. Additionally, the reporting limits (RLs) were verified to determine if RLs were adjusted for dilutions. No dilutions were required. No qualification of the data was required, and review of the data indicated the correct RLs were reported.

1.13 Overall Data Assessment

Based on the criteria outlined, it is recommended that the results for these analyses are accepted for their intended use. Acceptable levels of accuracy and precision based on the method performance criteria were achieved for this SDG.

1.0 VALIDATION OF SVOC DATA – SDG 400-249331-1

This section describes the validation for six investigative groundwater samples, and two equipment blanks which were prepared by USEPA SW-846 Method 3510C and analyzed for Semi-Volatile Organic Compounds (SVOCs) by USEPA SW-846 Method 8270E and for Polycyclic Aromatic Hydrocarbons (PAHs) by USEPA SW-846 Method 8270E Low Level. Samples were analyzed by Eurofins Pensacola Laboratories in Pensacola, Florida, and submitted as part of sample delivery group (SDG) 400-249331-1. Samples included as part of this validation are listed below:

Sample Identification	Sample Identification
MW1-ROX-010524-EB	MW1-ROX-010524
MW26-ROX-010524	MW11-ROX-010524
MW9-ROX-010524-EB	MW9-ROX-010524
MW10-ROX-010524	MW28-ROX-010524

Evaluation of the analytical data followed procedures outlined in the USEPA Contract Laboratory National Functional Guidelines for Superfund Organic Methods Data Review (EPA 2020).

Criteria evaluated included the following method performance criteria:

- Data package completeness
- Laboratory case narrative/cooler receipt form
- Holding times and sample preservation
- GC/MS instrument performance
- Initial calibration (ICAL)
- Calibration verification (CV)
- Blank samples
- Laboratory control sample (LCS)
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) samples
- Internal standard areas
- Target compound identification and quantitation
- Overall data assessment

1.1 Data Package Completeness

The data package was reviewed to make certain it contained the data contractually required in the deliverable. This included checking the data package for the results against the analyses requested on the chain-of custody, along with requested QC documentation for the respective methods.

1.2 Laboratory Case Narrative/Cooler Receipt Form

The laboratory case narrative indicated that several SVOC MS/MSD recoveries were outside evaluation criteria in samples MW26-ROX-010524 and MW28-ROX-010524. The initial calibration verifications (ICV) for 3,3'-dichlorobenzidine, and the continuing calibration

verification (CCV) for multiple analytes were outside were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

No issues were indicated in the cooler receipt form.

1.3 Holding Times and Sample Preservation

Review of the sample collection and analysis dates involved comparing the chain-of-custody, the summary forms and the raw data forms for accuracy, consistency, and holding time compliance. The samples were in good condition and were received and maintained at temperatures of ≤ 6°C and were extracted within seven days of collection and analyzed within 40 days of extraction.

1.4 GC/MS Instrument Performance

GC/MS instrument performance checks were performed to ensure mass resolution, identification, and instrument sensitivity. Criteria for evaluation of instrument performance included possible transcription/calculation errors, adherence to instrument tuning frequency requirements, mass assignments, and ion abundance criteria. Instrument performance check samples were evaluated against the laboratory tuning criteria established in Method 8270E.

Based on the raw data, the ion abundance criteria were within evaluation criteria for all masses, therefore; no qualification of the data was required. The raw data forms were checked against the summary forms and no calculation or transcription errors were noted.

1.5 Initial Calibration (ICAL)

An ICAL was established to assess whether the instrument was capable of producing acceptable qualitative and quantitative data for semi-volatile analysis. SVOC samples as part of SDG 400-249331-1 were analyzed using instrument Marianne. PAH samples were analyzed using instrument Chuck and was established on 01/10/2024. The ICALs for instrument Marianne were established on 12/19/2023. ICALs for instruments Marianne and Chuck were established prior to sample analysis and using at least five concentration standards to establish the initial calibration curve as required by Method 8270E and 8270E Low Level. An average response factor (RF) was determined for each target compound, and the RFs were reviewed and verified as greater than the minimum RF as specified in Method 8270E.

Review of the initial calibration summary forms for SVOCs and PAHs indicated target compounds had percent relative standard deviations (%RSDs) $\leq$ the maximum RSD of $\leq$ 20% specified in Method 8270E. Linear regression or quadratic equations were applied to data for select target analytes and the resulting correlation coefficients (r) were greater than 0.990.

An initial calibration verification (ICV) was analyzed following the initial calibration. Percent difference (%D) values from comparing ICV RF to the average ICAL RFs were within the Method 8270E quality control criteria with the following exceptions.

ICV (Date/Time)	Compound	%D
400-654856/20 12/19/2023 18:19	3,3'-Dichlorobenzidine	**-54.8**
Associated samples: MW1-ROX-010524-EB, MW1-ROX-010524, MW26-ROX-010524, MW11-ROX-010524, MW9-ROX-010524-EB, MW9-ROX-010524, MW10-ROX-010524, MW28-ROX-010524		

Analytical data that required qualification based on ICV %D data are included in the table below. Equipment blanks are quality control samples and do not require qualification.

Sample ID	Parameter	Compound	Qualification
MW1-ROX-010524	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW26-ROX-010524	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW11-ROX-010524	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW9-ROX-010524	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW10-ROX-010524	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW28-ROX-010524	SVOCs	3,3'-Dichlorobenzidine	**UJ**

Recalculations of the RFs and %RSD for one compound per internal standard were performed, and no errors in calculation were noted.

1.6 Calibration Verification (CV)

Review of continuing calibration summary forms for SVOCs and PAHs indicated all RFs met the evaluation criteria of greater than the method specified minimum RF for all target compounds. In addition, %Ds met the evaluation criteria of $\leq$ 20% specified in Method 8270E with the exceptions summarized in the table below.

CV (Date/Time)	Compound	%D
400-657097/3 01/09/2024 13:22	Pyridine	**-22.7**
	4,6-Dinitro-ortho-cresol	**-21.3**
Associated samples: MW1-ROX-010524-EB, MW1-ROX-010524, MW26-ROX-010524, MW11-ROX-010524, MW9-ROX-010524-EB, MW9-ROX-010524, MW10-ROX-010524, MW28-ROX-010524		

Recalculations of the RFs and %RSD for one compound per internal standard were performed, and no errors in calculation were noted.

Analytical data that required qualification based on CCV %D data are included in the table below. Pyridine in samples MW26-ROX-010524 and MW28-ROX-010524 were qualified due to MS/MSD outside evaluation criteria; no further qualification of pyridine was required. Equipment blanks are quality control samples and do not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW1-ROX-010524	SVOCs	Pyridine	**UJ**
MW1-ROX-010524	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW26-ROX-010524	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW11-ROX-010524	SVOCs	Pyridine	**UJ**
MW11-ROX-010524	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW9-ROX-010524	SVOCs	Pyridine	**UJ**
MW9-ROX-010524	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW10-ROX-010524	SVOCs	Pyridine	**UJ**
MW10-ROX-010524	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW28-ROX-010524	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**

1.7 Blank Samples

The purpose of method blank samples is to evaluate the existence and magnitude of contamination problems emanating from laboratory activities. Method blank samples were prepared with each preparation batch as required by Method 8270E. Target compounds in the method blank were reported as non-detect. Two equipment blank samples were analyzed to evaluate contamination problems emanating from field activities. Target compounds were reported as non-detect.

1.8 Laboratory Control Spike (LCS) Samples

Laboratory control samples (LCS) and laboratory control sample duplicates (LCSD) were analyzed with each analytical batch to assess the accuracy of the analytical process. LCS/LCSD recoveries and LCS/LCSD RPDs were within evaluation criteria.

Approximately 10% of the laboratory control spike recoveries were recalculated, and the summary forms versus the raw data were verified. No calculation or transcription errors were noted.

1.9 Surrogate Spike Recoveries

Surrogate compounds were used to evaluate the overall laboratory sample preparation efficiency on a per-sample basis. Surrogate recoveries were within the method acceptance criteria for the validated samples.

Approximately 10% of the sample recoveries were recalculated and no calculation or transcription errors were noted.

1.10 Matrix Spike/Matrix Spike Duplicate (MS/MSD) Samples

MS/MSD samples are analyzed to assess potential matrix effects. Sample MW26-ROX-010524 and MW28-ROX-010524 were spiked and analyzed for SVOCs and PAHs. MS/MSD data were within evaluation criteria with the exceptions summarized in the following table.

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW26-ROX-010524 MS/MSD	SVOCs	Benzoic acid	143/**155**	10	50-150/40
MW26-ROX-010524 MS/MSD	SVOCs	1,4-Dioxane	**35/39**	14	50-150/40
MW26-ROX-010524 MS/MSD	SVOCs	Phenol	**46**/63	33	50-150/40
MW26-ROX-010524 MS/MSD	SVOCs	Pyridine	**28/31**	13	50-150/40
MW28-ROX-010524 MS/MSD	SVOCs	1,4-Dioxane	**40/40**	3	50-150/40
MW28-ROX-010524 MS/MSD	SVOCs	Pyridine	**34/34**	3	50-150/40

Analytical data that required qualification based on MS/MSD data are included in the table below. 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
MW26-ROX-010524	SVOCs	1,4-Dioxane	**UJ**
MW26-ROX-010524	SVOCs	Phenol	**UJ**
MW26-ROX-010524	SVOCs	Pyridine	**UJ**
MW28-ROX-010524	SVOCs	1,4-Dioxane	**UJ**
MW28-ROX-010524	SVOCs	Pyridine	**UJ**

Approximately 10% of the recoveries were recalculated, and no calculation or transcription errors were noted.

1.11 Internal Standards

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during each analytical run. Following Method 8270C, the IS areas for the samples and CVs must be within –50% to +100% and retention times must be within 30 seconds of the IS area and retention time of the midpoint of the ICAL or the CCV on days when the ICAL does not precede the samples.

The IS areas for the CVs and the validated samples in this SDG were within evaluation criteria. No qualification of data was required. The summary forms versus the raw data were verified and no transcription errors were noted.

1.12 Target Compound Identification and Quantification

For validation of the compound identification, method specified compound identification criteria were reviewed in approximately 10% of the samples. No anomalies were noted with the identification of the target compounds in the samples.

For the validation of compound quantitation, 10% of the samples were recalculated from the raw data, and no calculation errors were noted. Additionally, the reporting limits (RLs) were verified to determine if RLs were adjusted for dilutions. No qualification of the data was required, and review of the data indicated the correct RLs were reported.

1.13 Overall Data Assessment

Based on the criteria outlined, it is recommended that the results for these analyses are accepted for their intended use. Acceptable levels of accuracy and precision based on the method performance criteria were achieved for this SDG.

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ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
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St. Louis, Missouri 63102
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JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-249331-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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Job ID: 400-249331-1 Eurofins Pensacola

Job Narrative
400-249331-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 1/8/2024 9:59 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 0.1°C

Comment
For page 2 of the COC, TB-ROX-010524-8011-B (400-249331-7) & TB-ROX-010524-8260-B (400-249331-8) are checked for the opposite test. TB-ROX-010524-8011-B (400-249331-7) was analyzed by 8011 and TB-ROX-010524-8260-B (400-249331-8) was analyzed by 8260.

GC/MS VOA
Method 8260D: 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-010524-8260-A (400-249331-1), MW1-ROX-010524-EB (400-249331-3), MW1-ROX-010524 (400-249331-4), MW26-ROX-010524 (400-249331-5), MW11-ROX-010524 (400-249331-6), TB-ROX-010524-8260-B (400-249331-8), MW9-ROX-010524-EB (400-249331-9), MW9-ROX-010524 (400-249331-10) and MW10-ROX-010524 (400-249331-11). 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 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-657335 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260D: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-657335 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: The matrix spike duplicate (MSD) recovery for analytical batch 400-657479 was outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 400-657479 was outside control limits. Sample matrix interference is suspected.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-657479 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260D: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-657479 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following sample was received preserved with hydrochloric acid: MW 28-ROX-010524 (400-249331-12). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

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

GC/MS Semi VOA

Job ID: 400-249331-1 (Continued) Eurofins Pensacola

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-657097 recovered outside acceptance criteria, low biased, for 4,6-Dinitro-2-methylphenol and Pyridine. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-657077 and analytical batch 400-657097 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-654856 was outside method criteria for the following analyte(s): 3,3'-Dichlorobenzidine, 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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 400-657341 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. The associated sample is impacted: (CCV 400-657281/32-A).

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

Sample Summary

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

Job ID: 400-249331-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-249331-1	TB-ROX-010524-8260-A	Water	01/05/24 00:00	01/08/24 09:59
400-249331-2	TB-ROX-010524-8011-A	Water	01/05/24 00:00	01/08/24 09:59
400-249331-3	MW1-ROX-010524-EB	Water	01/05/24 09:40	01/08/24 09:59
400-249331-4	MW1-ROX-010524	Water	01/05/24 11:00	01/08/24 09:59
400-249331-5	MW26-ROX-010524	Water	01/05/24 12:30	01/08/24 09:59
400-249331-6	MW11-ROX-010524	Water	01/05/24 13:50	01/08/24 09:59
400-249331-7	TB-ROX-010524-8011-B	Water	01/05/24 00:00	01/08/24 09:59
400-249331-8	TB-ROX-010524-8260-B	Water	01/05/24 00:00	01/08/24 09:59
400-249331-9	MW9-ROX-010524-EB	Water	01/05/24 09:45	01/08/24 09:59
400-249331-10	MW9-ROX-010524	Water	01/05/24 10:55	01/08/24 09:59
400-249331-11	MW10-ROX-010524	Water	01/05/24 11:55	01/08/24 09:59
400-249331-12	MW28-ROX-010524	Water	01/05/24 13:50	01/08/24 09:59

Detection Summary

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

Job ID: 400-249331-1

Client Sample ID: TB-ROX-010524-8260-A — Lab Sample ID: 400-249331-1

No Detections.

Client Sample ID: TB-ROX-010524-8011-A — Lab Sample ID: 400-249331-2

No Detections.

Client Sample ID: MW1-ROX-010524-EB — Lab Sample ID: 400-249331-3

No Detections.

Client Sample ID: MW1-ROX-010524 — Lab Sample ID: 400-249331-4

No Detections.

Client Sample ID: MW26-ROX-010524 — Lab Sample ID: 400-249331-5

No Detections.

Client Sample ID: MW11-ROX-010524 — Lab Sample ID: 400-249331-6

No Detections.

Client Sample ID: TB-ROX-010524-8011-B — Lab Sample ID: 400-249331-7

No Detections.

Client Sample ID: TB-ROX-010524-8260-B — Lab Sample ID: 400-249331-8

No Detections.

Client Sample ID: MW9-ROX-010524-EB — Lab Sample ID: 400-249331-9

No Detections.

Client Sample ID: MW9-ROX-010524 — Lab Sample ID: 400-249331-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
m-Xylene & p-Xylene	0.75	J	5.0	0.63	ug/L	1		8260D	Total/NA
Toluene	0.90	J	1.0	0.90	ug/L	1		8260D	Total/NA
2-Methylnaphthalene	0.093	J	0.21	0.070	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW10-ROX-010524 — Lab Sample ID: 400-249331-11

No Detections.

Client Sample ID: MW28-ROX-010524 — Lab Sample ID: 400-249331-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.7		1.0	0.22	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-249331-1

Client Sample ID: TB-ROX-010524-8260-A
Date Collected: 01/05/24 00:00
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/11/24 15:16	1
Acrolein	ND		20	3.3	ug/L			01/11/24 15:16	1
Acrylonitrile	ND		10	2.8	ug/L			01/11/24 15:16	1
Benzene	ND		1.0	0.50	ug/L			01/11/24 15:16	1
Bromobenzene	ND		1.0	0.54	ug/L			01/11/24 15:16	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/11/24 15:16	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/11/24 15:16	1
Bromoform	ND		5.0	0.25	ug/L			01/11/24 15:16	1
Bromomethane	ND		1.0	0.98	ug/L			01/11/24 15:16	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/11/24 15:16	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/11/24 15:16	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/11/24 15:16	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/11/24 15:16	1
Chloroethane	ND		1.0	0.76	ug/L			01/11/24 15:16	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/11/24 15:16	1
Chloroform	ND		1.0	0.90	ug/L			01/11/24 15:16	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/11/24 15:16	1
Chloromethane	ND		1.0	0.90	ug/L			01/11/24 15:16	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/11/24 15:16	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/11/24 15:16	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/11/24 15:16	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/11/24 15:16	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/11/24 15:16	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/11/24 15:16	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/11/24 15:16	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/11/24 15:16	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/11/24 15:16	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/11/24 15:16	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 15:16	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 15:16	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 15:16	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/11/24 15:16	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/11/24 15:16	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/11/24 15:16	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/11/24 15:16	1
2-Hexanone	ND		25	1.4	ug/L			01/11/24 15:16	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/11/24 15:16	1
Methylene bromide	ND		5.0	0.22	ug/L			01/11/24 15:16	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/11/24 15:16	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/11/24 15:16	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/11/24 15:16	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/11/24 15:16	1
Naphthalene	ND		5.0	3.0	ug/L			01/11/24 15:16	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/11/24 15:16	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/11/24 15:16	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/11/24 15:16	1
o-Xylene	ND		5.0	0.60	ug/L			01/11/24 15:16	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/11/24 15:16	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/11/24 15:16	1

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

Job ID: 400-249331-1

Client Sample ID: TB-ROX-010524-8260-A
Date Collected: 01/05/24 00:00
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/11/24 15:16	1
Styrene	ND		1.0	1.0	ug/L			01/11/24 15:16	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/11/24 15:16	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/11/24 15:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/11/24 15:16	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/11/24 15:16	1
Toluene	ND		1.0	0.90	ug/L			01/11/24 15:16	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/11/24 15:16	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/11/24 15:16	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/11/24 15:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/11/24 15:16	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/11/24 15:16	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/11/24 15:16	1
Trichloroethene	ND		1.0	0.15	ug/L			01/11/24 15:16	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/11/24 15:16	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/11/24 15:16	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/11/24 15:16	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/11/24 15:16	1
Vinyl acetate	ND		25	0.93	ug/L			01/11/24 15:16	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/11/24 15:16	1
Xylenes, Total	ND		10	1.6	ug/L			01/11/24 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 130*		*01/11/24 15:16*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*01/11/24 15:16*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*01/11/24 15:16*	*1*

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

Job ID: 400-249331-1

Client Sample ID: TB-ROX-010524-8011-A
Date Collected: 01/05/24 00:00
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-2
Matrix: Water

Method: EPA 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		01/10/24 14:08	01/11/24 11:55	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/10/24 14:08	01/11/24 11:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*01/10/24 14:08*	*01/11/24 11:55*	*1*

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

Job ID: 400-249331-1

Client Sample ID: MW1-ROX-010524-EB
Date Collected: 01/05/24 09:40
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/11/24 09:18	1
Acrolein	ND		20	3.3	ug/L			01/11/24 09:18	1
Acrylonitrile	ND		10	2.8	ug/L			01/11/24 09:18	1
Benzene	ND		1.0	0.50	ug/L			01/11/24 09:18	1
Bromobenzene	ND		1.0	0.54	ug/L			01/11/24 09:18	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/11/24 09:18	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/11/24 09:18	1
Bromoform	ND		5.0	0.25	ug/L			01/11/24 09:18	1
Bromomethane	ND		1.0	0.98	ug/L			01/11/24 09:18	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/11/24 09:18	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/11/24 09:18	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/11/24 09:18	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/11/24 09:18	1
Chloroethane	ND		1.0	0.76	ug/L			01/11/24 09:18	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/11/24 09:18	1
Chloroform	ND		1.0	0.90	ug/L			01/11/24 09:18	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/11/24 09:18	1
Chloromethane	ND		1.0	0.90	ug/L			01/11/24 09:18	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/11/24 09:18	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/11/24 09:18	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/11/24 09:18	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/11/24 09:18	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/11/24 09:18	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/11/24 09:18	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/11/24 09:18	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/11/24 09:18	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/11/24 09:18	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/11/24 09:18	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 09:18	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 09:18	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 09:18	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/11/24 09:18	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/11/24 09:18	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/11/24 09:18	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/11/24 09:18	1
2-Hexanone	ND		25	1.4	ug/L			01/11/24 09:18	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/11/24 09:18	1
Methylene bromide	ND		5.0	0.22	ug/L			01/11/24 09:18	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/11/24 09:18	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/11/24 09:18	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/11/24 09:18	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/11/24 09:18	1
Naphthalene	ND		5.0	3.0	ug/L			01/11/24 09:18	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/11/24 09:18	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/11/24 09:18	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/11/24 09:18	1
o-Xylene	ND		5.0	0.60	ug/L			01/11/24 09:18	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/11/24 09:18	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/11/24 09:18	1

Client Sample ID: MW1-ROX-010524-EB

Date Collected: 01/05/24 09:40
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-3

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/11/24 09:18	1
Styrene	ND		1.0	1.0	ug/L			01/11/24 09:18	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/11/24 09:18	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/11/24 09:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/11/24 09:18	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/11/24 09:18	1
Toluene	ND		1.0	0.90	ug/L			01/11/24 09:18	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/11/24 09:18	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/11/24 09:18	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/11/24 09:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/11/24 09:18	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/11/24 09:18	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/11/24 09:18	1
Trichloroethene	ND		1.0	0.15	ug/L			01/11/24 09:18	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/11/24 09:18	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/11/24 09:18	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/11/24 09:18	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/11/24 09:18	1
Vinyl acetate	ND		25	0.93	ug/L			01/11/24 09:18	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/11/24 09:18	1
Xylenes, Total	ND		10	1.6	ug/L			01/11/24 09:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 130*		*01/11/24 09:18*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/11/24 09:18*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*01/11/24 09:18*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.097	ug/L		01/09/24 10:40	01/10/24 17:29	1
Acenaphthylene	ND		0.20	0.043	ug/L		01/09/24 10:40	01/10/24 17:29	1
Anthracene	ND		0.20	0.046	ug/L		01/09/24 10:40	01/10/24 17:29	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		01/09/24 10:40	01/10/24 17:29	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		01/09/24 10:40	01/10/24 17:29	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		01/09/24 10:40	01/10/24 17:29	1
Benzo[g,h,i]perylene	ND		0.20	0.026	ug/L		01/09/24 10:40	01/10/24 17:29	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		01/09/24 10:40	01/10/24 17:29	1
Chrysene	ND		0.20	0.032	ug/L		01/09/24 10:40	01/10/24 17:29	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		01/09/24 10:40	01/10/24 17:29	1
Fluoranthene	ND		0.20	0.033	ug/L		01/09/24 10:40	01/10/24 17:29	1
Fluorene	ND		0.20	0.087	ug/L		01/09/24 10:40	01/10/24 17:29	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		01/09/24 10:40	01/10/24 17:29	1
Phenanthrene	ND		0.20	0.088	ug/L		01/09/24 10:40	01/10/24 17:29	1
Pyrene	ND		0.20	0.038	ug/L		01/09/24 10:40	01/10/24 17:29	1
1-Methylnaphthalene	ND		0.20	0.078	ug/L		01/09/24 10:40	01/10/24 17:29	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		01/09/24 10:40	01/10/24 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*88*		*18 - 147*	*01/09/24 10:40*	*01/10/24 17:29*	*1*
2-Fluorobiphenyl	*80*		*15 - 128*	*01/09/24 10:40*	*01/10/24 17:29*	*1*

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

Job ID: 400-249331-1

Client Sample ID: MW1-ROX-010524-EB
Date Collected: 01/05/24 09:40
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-3
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*80*		*10 - 144*	*01/09/24 10:40*	*01/10/24 17:29*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	8.5	ug/L		01/09/24 10:40	01/09/24 17:49	1
Benzenethiol	ND		9.8	9.7	ug/L		01/09/24 10:40	01/09/24 17:49	1
Benzoic acid	ND		29	23	ug/L		01/09/24 10:40	01/09/24 17:49	1
Benzyl alcohol	ND		9.8	7.1	ug/L		01/09/24 10:40	01/09/24 17:49	1
Bis(2-chloroethoxy)methane	ND		9.8	4.5	ug/L		01/09/24 10:40	01/09/24 17:49	1
Bis(2-chloroethyl)ether	ND		9.8	3.8	ug/L		01/09/24 10:40	01/09/24 17:49	1
bis (2-chloroisopropyl) ether	ND		9.8	1.8	ug/L		01/09/24 10:40	01/09/24 17:49	1
Bis(2-ethylhexyl) phthalate	ND		9.8	8.7	ug/L		01/09/24 10:40	01/09/24 17:49	1
4-Bromophenyl phenyl ether	ND		9.8	8.4	ug/L		01/09/24 10:40	01/09/24 17:49	1
Butyl benzyl phthalate	ND		9.8	5.7	ug/L		01/09/24 10:40	01/09/24 17:49	1
4-Chloroaniline	ND		9.8	4.6	ug/L		01/09/24 10:40	01/09/24 17:49	1
4-Chloro-3-methylphenol	ND		9.8	5.2	ug/L		01/09/24 10:40	01/09/24 17:49	1
2-Chloronaphthalene	ND		9.8	3.7	ug/L		01/09/24 10:40	01/09/24 17:49	1
2-Chlorophenol	ND		9.8	4.0	ug/L		01/09/24 10:40	01/09/24 17:49	1
4-Chlorophenyl phenyl ether	ND		9.8	3.6	ug/L		01/09/24 10:40	01/09/24 17:49	1
Dibenz[a,h]acridine	ND		9.8	2.7	ug/L		01/09/24 10:40	01/09/24 17:49	1
Dibenzofuran	ND		9.8	3.9	ug/L		01/09/24 10:40	01/09/24 17:49	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/09/24 10:40	01/09/24 17:49	1
2,4-Dichlorophenol	ND		9.8	4.2	ug/L		01/09/24 10:40	01/09/24 17:49	1
Diethyl phthalate	ND		9.8	4.3	ug/L		01/09/24 10:40	01/09/24 17:49	1
2,4-Dimethylphenol	ND		9.8	5.1	ug/L		01/09/24 10:40	01/09/24 17:49	1
Dimethyl phthalate	ND		9.8	4.1	ug/L		01/09/24 10:40	01/09/24 17:49	1
Di-n-butyl phthalate	ND		9.8	4.5	ug/L		01/09/24 10:40	01/09/24 17:49	1
4,6-Dinitro-ortho-cresol	ND		9.8	9.8	ug/L		01/09/24 10:40	01/09/24 17:49	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		01/09/24 10:40	01/09/24 17:49	1
2,4-Dinitrotoluene	ND		9.8	5.0	ug/L		01/09/24 10:40	01/09/24 17:49	1
2,6-Dinitrotoluene	ND		9.8	3.8	ug/L		01/09/24 10:40	01/09/24 17:49	1
Di-n-octyl phthalate	ND		9.8	5.9	ug/L		01/09/24 10:40	01/09/24 17:49	1
1,4-Dioxane	ND		9.8	4.2	ug/L		01/09/24 10:40	01/09/24 17:49	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	3.2	ug/L		01/09/24 10:40	01/09/24 17:49	1
Hexachlorobenzene	ND		9.8	9.5	ug/L		01/09/24 10:40	01/09/24 17:49	1
Hexachlorocyclopentadiene	ND		20	4.4	ug/L		01/09/24 10:40	01/09/24 17:49	1
Hexachloroethane	ND		9.8	5.1	ug/L		01/09/24 10:40	01/09/24 17:49	1
Indene	ND		9.8	3.5	ug/L		01/09/24 10:40	01/09/24 17:49	1
Isophorone	ND		9.8	5.1	ug/L		01/09/24 10:40	01/09/24 17:49	1
2-Methylphenol	ND		9.8	3.1	ug/L		01/09/24 10:40	01/09/24 17:49	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		01/09/24 10:40	01/09/24 17:49	1
2-Nitroaniline	ND		9.8	4.9	ug/L		01/09/24 10:40	01/09/24 17:49	1
3-Nitroaniline	ND		9.8	4.6	ug/L		01/09/24 10:40	01/09/24 17:49	1
4-Nitroaniline	ND		9.8	4.0	ug/L		01/09/24 10:40	01/09/24 17:49	1
Nitrobenzene	ND		9.8	4.6	ug/L		01/09/24 10:40	01/09/24 17:49	1
2-Nitrophenol	ND		9.8	4.5	ug/L		01/09/24 10:40	01/09/24 17:49	1
4-Nitrophenol	ND		9.8	3.2	ug/L		01/09/24 10:40	01/09/24 17:49	1
N-Nitrosodimethylamine	ND		9.8	2.2	ug/L		01/09/24 10:40	01/09/24 17:49	1

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

Job ID: 400-249331-1

Client Sample ID: MW1-ROX-010524-EB

Date Collected: 01/05/24 09:40
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-3

Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	2.4	ug/L		01/09/24 10:40	01/09/24 17:49	1
N-Nitrosodiphenylamine	ND		9.8	3.6	ug/L		01/09/24 10:40	01/09/24 17:49	1
Pentachlorophenol	ND		20	12	ug/L		01/09/24 10:40	01/09/24 17:49	1
Phenol	ND		9.8	4.1	ug/L		01/09/24 10:40	01/09/24 17:49	1
Pyridine	ND		9.8	9.8	ug/L		01/09/24 10:40	01/09/24 17:49	1
Quinoline	ND		9.8	2.3	ug/L		01/09/24 10:40	01/09/24 17:49	1
2,4,5-Trichlorophenol	ND		9.8	3.9	ug/L		01/09/24 10:40	01/09/24 17:49	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		01/09/24 10:40	01/09/24 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*21 - 114*	*01/09/24 10:40*	*01/09/24 17:49*	*1*
2-Fluorophenol	*52*		*10 - 105*	*01/09/24 10:40*	*01/09/24 17:49*	*1*
Nitrobenzene-d5	*62*		*16 - 127*	*01/09/24 10:40*	*01/09/24 17:49*	*1*
Phenol-d5	*37*		*10 - 129*	*01/09/24 10:40*	*01/09/24 17:49*	*1*
Terphenyl-d14	*84*		*13 - 150*	*01/09/24 10:40*	*01/09/24 17:49*	*1*
2,4,6-Tribromophenol	*55*		*10 - 150*	*01/09/24 10:40*	*01/09/24 17:49*	*1*

Method: EPA 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		01/10/24 14:08	01/11/24 12:16	1
1,2-Dibromoethane	ND		0.021	0.015	ug/L		01/10/24 14:08	01/11/24 12:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*51 - 149*	*01/10/24 14:08*	*01/11/24 12:16*	*1*

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

Job ID: 400-249331-1

Client Sample ID: MW1-ROX-010524
Date Collected: 01/05/24 11:00
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/11/24 17:36	1
Acrolein	ND		20	3.3	ug/L			01/11/24 17:36	1
Acrylonitrile	ND		10	2.8	ug/L			01/11/24 17:36	1
Benzene	ND		1.0	0.50	ug/L			01/11/24 17:36	1
Bromobenzene	ND		1.0	0.54	ug/L			01/11/24 17:36	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/11/24 17:36	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/11/24 17:36	1
Bromoform	ND		5.0	0.25	ug/L			01/11/24 17:36	1
Bromomethane	ND		1.0	0.98	ug/L			01/11/24 17:36	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/11/24 17:36	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/11/24 17:36	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/11/24 17:36	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/11/24 17:36	1
Chloroethane	ND		1.0	0.76	ug/L			01/11/24 17:36	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/11/24 17:36	1
Chloroform	ND		1.0	0.90	ug/L			01/11/24 17:36	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/11/24 17:36	1
Chloromethane	ND		1.0	0.90	ug/L			01/11/24 17:36	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/11/24 17:36	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/11/24 17:36	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/11/24 17:36	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/11/24 17:36	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/11/24 17:36	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/11/24 17:36	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/11/24 17:36	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/11/24 17:36	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/11/24 17:36	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/11/24 17:36	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 17:36	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 17:36	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 17:36	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/11/24 17:36	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/11/24 17:36	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/11/24 17:36	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/11/24 17:36	1
2-Hexanone	ND		25	1.4	ug/L			01/11/24 17:36	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/11/24 17:36	1
Methylene bromide	ND		5.0	0.22	ug/L			01/11/24 17:36	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/11/24 17:36	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/11/24 17:36	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/11/24 17:36	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/11/24 17:36	1
Naphthalene	ND		5.0	3.0	ug/L			01/11/24 17:36	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/11/24 17:36	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/11/24 17:36	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/11/24 17:36	1
o-Xylene	ND		5.0	0.60	ug/L			01/11/24 17:36	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/11/24 17:36	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/11/24 17:36	1

Client Sample ID: MW1-ROX-010524
Date Collected: 01/05/24 11:00
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/11/24 17:36	1
Styrene	ND		1.0	1.0	ug/L			01/11/24 17:36	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/11/24 17:36	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/11/24 17:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/11/24 17:36	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/11/24 17:36	1
Toluene	ND		1.0	0.90	ug/L			01/11/24 17:36	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/11/24 17:36	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/11/24 17:36	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/11/24 17:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/11/24 17:36	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/11/24 17:36	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/11/24 17:36	1
Trichloroethene	ND		1.0	0.15	ug/L			01/11/24 17:36	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/11/24 17:36	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/11/24 17:36	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/11/24 17:36	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/11/24 17:36	1
Vinyl acetate	ND		25	0.93	ug/L			01/11/24 17:36	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/11/24 17:36	1
Xylenes, Total	ND		10	1.6	ug/L			01/11/24 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*01/11/24 17:36*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*01/11/24 17:36*	*1*
Toluene-d8 (Surr)	*93*		*64 - 132*		*01/11/24 17:36*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.097	ug/L		01/09/24 10:40	01/10/24 17:50	1
Acenaphthylene	ND		0.20	0.043	ug/L		01/09/24 10:40	01/10/24 17:50	1
Anthracene	ND		0.20	0.046	ug/L		01/09/24 10:40	01/10/24 17:50	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		01/09/24 10:40	01/10/24 17:50	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		01/09/24 10:40	01/10/24 17:50	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		01/09/24 10:40	01/10/24 17:50	1
Benzo[g,h,i]perylene	ND		0.20	0.026	ug/L		01/09/24 10:40	01/10/24 17:50	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		01/09/24 10:40	01/10/24 17:50	1
Chrysene	ND		0.20	0.032	ug/L		01/09/24 10:40	01/10/24 17:50	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		01/09/24 10:40	01/10/24 17:50	1
Fluoranthene	ND		0.20	0.033	ug/L		01/09/24 10:40	01/10/24 17:50	1
Fluorene	ND		0.20	0.087	ug/L		01/09/24 10:40	01/10/24 17:50	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		01/09/24 10:40	01/10/24 17:50	1
Phenanthrene	ND		0.20	0.088	ug/L		01/09/24 10:40	01/10/24 17:50	1
Pyrene	ND		0.20	0.038	ug/L		01/09/24 10:40	01/10/24 17:50	1
1-Methylnaphthalene	ND		0.20	0.078	ug/L		01/09/24 10:40	01/10/24 17:50	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		01/09/24 10:40	01/10/24 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*83*		*18 - 147*	*01/09/24 10:40*	*01/10/24 17:50*	*1*
2-Fluorobiphenyl	*77*		*15 - 128*	*01/09/24 10:40*	*01/10/24 17:50*	*1*

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

Job ID: 400-249331-1

Client Sample ID: MW1-ROX-010524
Date Collected: 01/05/24 11:00
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-4
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*80*		*10 - 144*	*01/09/24 10:40*	*01/10/24 17:50*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	8.5	ug/L		01/09/24 10:40	01/09/24 18:11	1
Benzenethiol	ND		9.8	9.7	ug/L		01/09/24 10:40	01/09/24 18:11	1
Benzoic acid	ND		29	23	ug/L		01/09/24 10:40	01/09/24 18:11	1
Benzyl alcohol	ND		9.8	7.1	ug/L		01/09/24 10:40	01/09/24 18:11	1
Bis(2-chloroethoxy)methane	ND		9.8	4.5	ug/L		01/09/24 10:40	01/09/24 18:11	1
Bis(2-chloroethyl)ether	ND		9.8	3.8	ug/L		01/09/24 10:40	01/09/24 18:11	1
bis (2-chloroisopropyl) ether	ND		9.8	1.8	ug/L		01/09/24 10:40	01/09/24 18:11	1
Bis(2-ethylhexyl) phthalate	ND		9.8	8.7	ug/L		01/09/24 10:40	01/09/24 18:11	1
4-Bromophenyl phenyl ether	ND		9.8	8.4	ug/L		01/09/24 10:40	01/09/24 18:11	1
Butyl benzyl phthalate	ND		9.8	5.7	ug/L		01/09/24 10:40	01/09/24 18:11	1
4-Chloroaniline	ND		9.8	4.6	ug/L		01/09/24 10:40	01/09/24 18:11	1
4-Chloro-3-methylphenol	ND		9.8	5.2	ug/L		01/09/24 10:40	01/09/24 18:11	1
2-Chloronaphthalene	ND		9.8	3.7	ug/L		01/09/24 10:40	01/09/24 18:11	1
2-Chlorophenol	ND		9.8	4.0	ug/L		01/09/24 10:40	01/09/24 18:11	1
4-Chlorophenyl phenyl ether	ND		9.8	3.6	ug/L		01/09/24 10:40	01/09/24 18:11	1
Dibenz[a,h]acridine	ND		9.8	2.7	ug/L		01/09/24 10:40	01/09/24 18:11	1
Dibenzofuran	ND		9.8	3.9	ug/L		01/09/24 10:40	01/09/24 18:11	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/09/24 10:40	01/09/24 18:11	1
2,4-Dichlorophenol	ND		9.8	4.2	ug/L		01/09/24 10:40	01/09/24 18:11	1
Diethyl phthalate	ND		9.8	4.3	ug/L		01/09/24 10:40	01/09/24 18:11	1
2,4-Dimethylphenol	ND		9.8	5.1	ug/L		01/09/24 10:40	01/09/24 18:11	1
Dimethyl phthalate	ND		9.8	4.1	ug/L		01/09/24 10:40	01/09/24 18:11	1
Di-n-butyl phthalate	ND		9.8	4.5	ug/L		01/09/24 10:40	01/09/24 18:11	1
4,6-Dinitro-ortho-cresol	ND		9.8	9.8	ug/L		01/09/24 10:40	01/09/24 18:11	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		01/09/24 10:40	01/09/24 18:11	1
2,4-Dinitrotoluene	ND		9.8	5.0	ug/L		01/09/24 10:40	01/09/24 18:11	1
2,6-Dinitrotoluene	ND		9.8	3.8	ug/L		01/09/24 10:40	01/09/24 18:11	1
Di-n-octyl phthalate	ND		9.8	5.9	ug/L		01/09/24 10:40	01/09/24 18:11	1
1,4-Dioxane	ND		9.8	4.2	ug/L		01/09/24 10:40	01/09/24 18:11	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	3.2	ug/L		01/09/24 10:40	01/09/24 18:11	1
Hexachlorobenzene	ND		9.8	9.5	ug/L		01/09/24 10:40	01/09/24 18:11	1
Hexachlorocyclopentadiene	ND		20	4.4	ug/L		01/09/24 10:40	01/09/24 18:11	1
Hexachloroethane	ND		9.8	5.1	ug/L		01/09/24 10:40	01/09/24 18:11	1
Indene	ND		9.8	3.5	ug/L		01/09/24 10:40	01/09/24 18:11	1
Isophorone	ND		9.8	5.1	ug/L		01/09/24 10:40	01/09/24 18:11	1
2-Methylphenol	ND		9.8	3.1	ug/L		01/09/24 10:40	01/09/24 18:11	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		01/09/24 10:40	01/09/24 18:11	1
2-Nitroaniline	ND		9.8	4.9	ug/L		01/09/24 10:40	01/09/24 18:11	1
3-Nitroaniline	ND		9.8	4.6	ug/L		01/09/24 10:40	01/09/24 18:11	1
4-Nitroaniline	ND		9.8	4.0	ug/L		01/09/24 10:40	01/09/24 18:11	1
Nitrobenzene	ND		9.8	4.6	ug/L		01/09/24 10:40	01/09/24 18:11	1
2-Nitrophenol	ND		9.8	4.5	ug/L		01/09/24 10:40	01/09/24 18:11	1
4-Nitrophenol	ND		9.8	3.2	ug/L		01/09/24 10:40	01/09/24 18:11	1
N-Nitrosodimethylamine	ND		9.8	2.2	ug/L		01/09/24 10:40	01/09/24 18:11	1

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

Job ID: 400-249331-1

Client Sample ID: MW1-ROX-010524
Date Collected: 01/05/24 11:00
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-4
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	2.4	ug/L		01/09/24 10:40	01/09/24 18:11	1
N-Nitrosodiphenylamine	ND		9.8	3.6	ug/L		01/09/24 10:40	01/09/24 18:11	1
Pentachlorophenol	ND		20	12	ug/L		01/09/24 10:40	01/09/24 18:11	1
Phenol	ND		9.8	4.1	ug/L		01/09/24 10:40	01/09/24 18:11	1
Pyridine	ND		9.8	9.8	ug/L		01/09/24 10:40	01/09/24 18:11	1
Quinoline	ND		9.8	2.3	ug/L		01/09/24 10:40	01/09/24 18:11	1
2,4,5-Trichlorophenol	ND		9.8	3.9	ug/L		01/09/24 10:40	01/09/24 18:11	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		01/09/24 10:40	01/09/24 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*21 - 114*	*01/09/24 10:40*	*01/09/24 18:11*	*1*
2-Fluorophenol	*52*		*10 - 105*	*01/09/24 10:40*	*01/09/24 18:11*	*1*
Nitrobenzene-d5	*66*		*16 - 127*	*01/09/24 10:40*	*01/09/24 18:11*	*1*
Phenol-d5	*31*		*10 - 129*	*01/09/24 10:40*	*01/09/24 18:11*	*1*
Terphenyl-d14	*92*		*13 - 150*	*01/09/24 10:40*	*01/09/24 18:11*	*1*
2,4,6-Tribromophenol	*60*		*10 - 150*	*01/09/24 10:40*	*01/09/24 18:11*	*1*

Method: EPA 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		01/10/24 14:08	01/11/24 12:38	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/10/24 14:08	01/11/24 12:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*01/10/24 14:08*	*01/11/24 12:38*	*1*

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

Job ID: 400-249331-1

Client Sample ID: MW26-ROX-010524
Date Collected: 01/05/24 12:30
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/11/24 10:09	1
Acrolein	ND		20	3.3	ug/L			01/11/24 10:09	1
Acrylonitrile	ND		10	2.8	ug/L			01/11/24 10:09	1
Benzene	ND		1.0	0.50	ug/L			01/11/24 10:09	1
Bromobenzene	ND		1.0	0.54	ug/L			01/11/24 10:09	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/11/24 10:09	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/11/24 10:09	1
Bromoform	ND		5.0	0.25	ug/L			01/11/24 10:09	1
Bromomethane	ND		1.0	0.98	ug/L			01/11/24 10:09	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/11/24 10:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/11/24 10:09	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/11/24 10:09	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/11/24 10:09	1
Chloroethane	ND		1.0	0.76	ug/L			01/11/24 10:09	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			01/11/24 10:09	1
Chloroform	ND		1.0	0.90	ug/L			01/11/24 10:09	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/11/24 10:09	1
Chloromethane	ND		1.0	0.90	ug/L			01/11/24 10:09	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/11/24 10:09	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/11/24 10:09	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/11/24 10:09	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/11/24 10:09	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/11/24 10:09	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/11/24 10:09	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/11/24 10:09	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/11/24 10:09	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/11/24 10:09	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/11/24 10:09	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 10:09	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 10:09	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 10:09	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/11/24 10:09	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/11/24 10:09	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/11/24 10:09	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/11/24 10:09	1
2-Hexanone	ND		25	1.4	ug/L			01/11/24 10:09	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/11/24 10:09	1
Methylene bromide	ND		5.0	0.22	ug/L			01/11/24 10:09	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/11/24 10:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/11/24 10:09	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/11/24 10:09	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/11/24 10:09	1
Naphthalene	ND		5.0	3.0	ug/L			01/11/24 10:09	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/11/24 10:09	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/11/24 10:09	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/11/24 10:09	1
o-Xylene	ND		5.0	0.60	ug/L			01/11/24 10:09	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/11/24 10:09	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/11/24 10:09	1

Client Sample ID: MW26-ROX-010524

Date Collected: 01/05/24 12:30
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/11/24 10:09	1
Styrene	ND		1.0	1.0	ug/L			01/11/24 10:09	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/11/24 10:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/11/24 10:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/11/24 10:09	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/11/24 10:09	1
Toluene	ND		1.0	0.90	ug/L			01/11/24 10:09	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/11/24 10:09	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/11/24 10:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/11/24 10:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/11/24 10:09	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/11/24 10:09	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/11/24 10:09	1
Trichloroethene	ND		1.0	0.15	ug/L			01/11/24 10:09	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/11/24 10:09	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/11/24 10:09	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/11/24 10:09	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/11/24 10:09	1
Vinyl acetate	ND		25	0.93	ug/L			01/11/24 10:09	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/11/24 10:09	1
Xylenes, Total	ND		10	1.6	ug/L			01/11/24 10:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*01/11/24 10:09*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/11/24 10:09*	*1*
Toluene-d8 (Surr)	*93*		*64 - 132*		*01/11/24 10:09*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.098	ug/L		01/09/24 10:40	01/10/24 18:10	1
Acenaphthylene	ND		0.20	0.043	ug/L		01/09/24 10:40	01/10/24 18:10	1
Anthracene	ND		0.20	0.046	ug/L		01/09/24 10:40	01/10/24 18:10	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		01/09/24 10:40	01/10/24 18:10	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		01/09/24 10:40	01/10/24 18:10	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		01/09/24 10:40	01/10/24 18:10	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/09/24 10:40	01/10/24 18:10	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		01/09/24 10:40	01/10/24 18:10	1
Chrysene	ND		0.20	0.033	ug/L		01/09/24 10:40	01/10/24 18:10	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		01/09/24 10:40	01/10/24 18:10	1
Fluoranthene	ND		0.20	0.034	ug/L		01/09/24 10:40	01/10/24 18:10	1
Fluorene	ND		0.20	0.088	ug/L		01/09/24 10:40	01/10/24 18:10	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		01/09/24 10:40	01/10/24 18:10	1
Phenanthrene	ND		0.20	0.089	ug/L		01/09/24 10:40	01/10/24 18:10	1
Pyrene	ND		0.20	0.039	ug/L		01/09/24 10:40	01/10/24 18:10	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		01/09/24 10:40	01/10/24 18:10	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		01/09/24 10:40	01/10/24 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*83*		*18 - 147*	*01/09/24 10:40*	*01/10/24 18:10*	*1*
2-Fluorobiphenyl	*77*		*15 - 128*	*01/09/24 10:40*	*01/10/24 18:10*	*1*

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

Job ID: 400-249331-1

Client Sample ID: MW26-ROX-010524
Date Collected: 01/05/24 12:30
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-5
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*79*		*10 - 144*	*01/09/24 10:40*	*01/10/24 18:10*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.9	8.6	ug/L		01/09/24 10:40	01/09/24 18:34	1
Benzenethiol	ND		9.9	9.8	ug/L		01/09/24 10:40	01/09/24 18:34	1
Benzoic acid	ND	F1	30	24	ug/L		01/09/24 10:40	01/09/24 18:34	1
Benzyl alcohol	ND		9.9	7.2	ug/L		01/09/24 10:40	01/09/24 18:34	1
Bis(2-chloroethoxy)methane	ND		9.9	4.5	ug/L		01/09/24 10:40	01/09/24 18:34	1
Bis(2-chloroethyl)ether	ND		9.9	3.9	ug/L		01/09/24 10:40	01/09/24 18:34	1
bis (2-chloroisopropyl) ether	ND		9.9	1.8	ug/L		01/09/24 10:40	01/09/24 18:34	1
Bis(2-ethylhexyl) phthalate	ND		9.9	8.8	ug/L		01/09/24 10:40	01/09/24 18:34	1
4-Bromophenyl phenyl ether	ND		9.9	8.5	ug/L		01/09/24 10:40	01/09/24 18:34	1
Butyl benzyl phthalate	ND		9.9	5.7	ug/L		01/09/24 10:40	01/09/24 18:34	1
4-Chloroaniline	ND		9.9	4.6	ug/L		01/09/24 10:40	01/09/24 18:34	1
4-Chloro-3-methylphenol	ND		9.9	5.2	ug/L		01/09/24 10:40	01/09/24 18:34	1
2-Chloronaphthalene	ND		9.9	3.8	ug/L		01/09/24 10:40	01/09/24 18:34	1
2-Chlorophenol	ND		9.9	4.1	ug/L		01/09/24 10:40	01/09/24 18:34	1
4-Chlorophenyl phenyl ether	ND		9.9	3.7	ug/L		01/09/24 10:40	01/09/24 18:34	1
Dibenz[a,h]acridine	ND		9.9	2.8	ug/L		01/09/24 10:40	01/09/24 18:34	1
Dibenzofuran	ND		9.9	4.0	ug/L		01/09/24 10:40	01/09/24 18:34	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/09/24 10:40	01/09/24 18:34	1
2,4-Dichlorophenol	ND		9.9	4.2	ug/L		01/09/24 10:40	01/09/24 18:34	1
Diethyl phthalate	ND		9.9	4.3	ug/L		01/09/24 10:40	01/09/24 18:34	1
2,4-Dimethylphenol	ND		9.9	5.1	ug/L		01/09/24 10:40	01/09/24 18:34	1
Dimethyl phthalate	ND		9.9	4.2	ug/L		01/09/24 10:40	01/09/24 18:34	1
Di-n-butyl phthalate	ND		9.9	4.5	ug/L		01/09/24 10:40	01/09/24 18:34	1
4,6-Dinitro-ortho-cresol	ND		9.9	9.9	ug/L		01/09/24 10:40	01/09/24 18:34	1
2,4-Dinitrophenol	ND		30	4.5	ug/L		01/09/24 10:40	01/09/24 18:34	1
2,4-Dinitrotoluene	ND		9.9	5.0	ug/L		01/09/24 10:40	01/09/24 18:34	1
2,6-Dinitrotoluene	ND		9.9	3.9	ug/L		01/09/24 10:40	01/09/24 18:34	1
Di-n-octyl phthalate	ND		9.9	5.9	ug/L		01/09/24 10:40	01/09/24 18:34	1
1,4-Dioxane	ND	F1	9.9	4.2	ug/L		01/09/24 10:40	01/09/24 18:34	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	3.3	ug/L		01/09/24 10:40	01/09/24 18:34	1
Hexachlorobenzene	ND		9.9	9.6	ug/L		01/09/24 10:40	01/09/24 18:34	1
Hexachlorocyclopentadiene	ND		20	4.4	ug/L		01/09/24 10:40	01/09/24 18:34	1
Hexachloroethane	ND		9.9	5.1	ug/L		01/09/24 10:40	01/09/24 18:34	1
Indene	ND		9.9	3.6	ug/L		01/09/24 10:40	01/09/24 18:34	1
Isophorone	ND		9.9	5.1	ug/L		01/09/24 10:40	01/09/24 18:34	1
2-Methylphenol	ND		9.9	3.2	ug/L		01/09/24 10:40	01/09/24 18:34	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		01/09/24 10:40	01/09/24 18:34	1
2-Nitroaniline	ND		9.9	4.9	ug/L		01/09/24 10:40	01/09/24 18:34	1
3-Nitroaniline	ND		9.9	4.6	ug/L		01/09/24 10:40	01/09/24 18:34	1
4-Nitroaniline	ND		9.9	4.1	ug/L		01/09/24 10:40	01/09/24 18:34	1
Nitrobenzene	ND		9.9	4.6	ug/L		01/09/24 10:40	01/09/24 18:34	1
2-Nitrophenol	ND		9.9	4.5	ug/L		01/09/24 10:40	01/09/24 18:34	1
4-Nitrophenol	ND		9.9	3.3	ug/L		01/09/24 10:40	01/09/24 18:34	1
N-Nitrosodimethylamine	ND		9.9	2.2	ug/L		01/09/24 10:40	01/09/24 18:34	1

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

Job ID: 400-249331-1

Client Sample ID: MW26-ROX-010524
Date Collected: 01/05/24 12:30
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-5
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.9	2.5	ug/L		01/09/24 10:40	01/09/24 18:34	1
N-Nitrosodiphenylamine	ND		9.9	3.7	ug/L		01/09/24 10:40	01/09/24 18:34	1
Pentachlorophenol	ND		20	12	ug/L		01/09/24 10:40	01/09/24 18:34	1
Phenol	ND	F1	9.9	4.2	ug/L		01/09/24 10:40	01/09/24 18:34	1
Pyridine	ND	F1	9.9	9.9	ug/L		01/09/24 10:40	01/09/24 18:34	1
Quinoline	ND		9.9	2.4	ug/L		01/09/24 10:40	01/09/24 18:34	1
2,4,5-Trichlorophenol	ND		9.9	4.0	ug/L		01/09/24 10:40	01/09/24 18:34	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		01/09/24 10:40	01/09/24 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*21 - 114*	*01/09/24 10:40*	*01/09/24 18:34*	*1*
2-Fluorophenol	*53*		*10 - 105*	*01/09/24 10:40*	*01/09/24 18:34*	*1*
Nitrobenzene-d5	*67*		*16 - 127*	*01/09/24 10:40*	*01/09/24 18:34*	*1*
Phenol-d5	*37*		*10 - 129*	*01/09/24 10:40*	*01/09/24 18:34*	*1*
Terphenyl-d14	*87*		*13 - 150*	*01/09/24 10:40*	*01/09/24 18:34*	*1*
2,4,6-Tribromophenol	*55*		*10 - 150*	*01/09/24 10:40*	*01/09/24 18:34*	*1*

Method: EPA 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		01/10/24 14:08	01/11/24 13:00	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/10/24 14:08	01/11/24 13:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*51 - 149*	*01/10/24 14:08*	*01/11/24 13:00*	*1*

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

Job ID: 400-249331-1

Client Sample ID: MW11-ROX-010524
Date Collected: 01/05/24 13:50
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/11/24 18:01	1
Acrolein	ND		20	3.3	ug/L			01/11/24 18:01	1
Acrylonitrile	ND		10	2.8	ug/L			01/11/24 18:01	1
Benzene	ND		1.0	0.50	ug/L			01/11/24 18:01	1
Bromobenzene	ND		1.0	0.54	ug/L			01/11/24 18:01	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/11/24 18:01	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/11/24 18:01	1
Bromoform	ND		5.0	0.25	ug/L			01/11/24 18:01	1
Bromomethane	ND		1.0	0.98	ug/L			01/11/24 18:01	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/11/24 18:01	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/11/24 18:01	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/11/24 18:01	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/11/24 18:01	1
Chloroethane	ND		1.0	0.76	ug/L			01/11/24 18:01	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/11/24 18:01	1
Chloroform	ND		1.0	0.90	ug/L			01/11/24 18:01	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/11/24 18:01	1
Chloromethane	ND		1.0	0.90	ug/L			01/11/24 18:01	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/11/24 18:01	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/11/24 18:01	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/11/24 18:01	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/11/24 18:01	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/11/24 18:01	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/11/24 18:01	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/11/24 18:01	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/11/24 18:01	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/11/24 18:01	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/11/24 18:01	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 18:01	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 18:01	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 18:01	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/11/24 18:01	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/11/24 18:01	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/11/24 18:01	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/11/24 18:01	1
2-Hexanone	ND		25	1.4	ug/L			01/11/24 18:01	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/11/24 18:01	1
Methylene bromide	ND		5.0	0.22	ug/L			01/11/24 18:01	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/11/24 18:01	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/11/24 18:01	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/11/24 18:01	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/11/24 18:01	1
Naphthalene	ND		5.0	3.0	ug/L			01/11/24 18:01	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/11/24 18:01	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/11/24 18:01	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/11/24 18:01	1
o-Xylene	ND		5.0	0.60	ug/L			01/11/24 18:01	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/11/24 18:01	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/11/24 18:01	1

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

Job ID: 400-249331-1

Client Sample ID: MW11-ROX-010524
Date Collected: 01/05/24 13:50
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/11/24 18:01	1
Styrene	ND		1.0	1.0	ug/L			01/11/24 18:01	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/11/24 18:01	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/11/24 18:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/11/24 18:01	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/11/24 18:01	1
Toluene	ND		1.0	0.90	ug/L			01/11/24 18:01	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/11/24 18:01	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/11/24 18:01	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/11/24 18:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/11/24 18:01	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/11/24 18:01	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/11/24 18:01	1
Trichloroethene	ND		1.0	0.15	ug/L			01/11/24 18:01	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/11/24 18:01	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/11/24 18:01	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/11/24 18:01	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/11/24 18:01	1
Vinyl acetate	ND		25	0.93	ug/L			01/11/24 18:01	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/11/24 18:01	1
Xylenes, Total	ND		10	1.6	ug/L			01/11/24 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*01/11/24 18:01*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*01/11/24 18:01*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*01/11/24 18:01*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.10	ug/L		01/09/24 10:40	01/10/24 19:12	1
Acenaphthylene	ND		0.21	0.045	ug/L		01/09/24 10:40	01/10/24 19:12	1
Anthracene	ND		0.21	0.049	ug/L		01/09/24 10:40	01/10/24 19:12	1
Benzo[a]anthracene	ND		0.21	0.035	ug/L		01/09/24 10:40	01/10/24 19:12	1
Benzo[a]pyrene	ND		0.21	0.066	ug/L		01/09/24 10:40	01/10/24 19:12	1
Benzo[b]fluoranthene	ND		0.21	0.038	ug/L		01/09/24 10:40	01/10/24 19:12	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		01/09/24 10:40	01/10/24 19:12	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		01/09/24 10:40	01/10/24 19:12	1
Chrysene	ND		0.21	0.034	ug/L		01/09/24 10:40	01/10/24 19:12	1
Dibenz(a,h)anthracene	ND		0.21	0.050	ug/L		01/09/24 10:40	01/10/24 19:12	1
Fluoranthene	ND		0.21	0.035	ug/L		01/09/24 10:40	01/10/24 19:12	1
Fluorene	ND		0.21	0.092	ug/L		01/09/24 10:40	01/10/24 19:12	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.035	ug/L		01/09/24 10:40	01/10/24 19:12	1
Phenanthrene	ND		0.21	0.093	ug/L		01/09/24 10:40	01/10/24 19:12	1
Pyrene	ND		0.21	0.040	ug/L		01/09/24 10:40	01/10/24 19:12	1
1-Methylnaphthalene	ND		0.21	0.083	ug/L		01/09/24 10:40	01/10/24 19:12	1
2-Methylnaphthalene	ND		0.21	0.068	ug/L		01/09/24 10:40	01/10/24 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*86*		*18 - 147*	*01/09/24 10:40*	*01/10/24 19:12*	*1*
2-Fluorobiphenyl	*80*		*15 - 128*	*01/09/24 10:40*	*01/10/24 19:12*	*1*

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

Job ID: 400-249331-1

Client Sample ID: MW11-ROX-010524
Date Collected: 01/05/24 13:50
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-6
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*85*		*10 - 144*	*01/09/24 10:40*	*01/10/24 19:12*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	9.0	ug/L		01/09/24 10:40	01/09/24 19:40	1
Benzenethiol	ND		10	10	ug/L		01/09/24 10:40	01/09/24 19:40	1
Benzoic acid	ND		31	25	ug/L		01/09/24 10:40	01/09/24 19:40	1
Benzyl alcohol	ND		10	7.5	ug/L		01/09/24 10:40	01/09/24 19:40	1
Bis(2-chloroethoxy)methane	ND		10	4.8	ug/L		01/09/24 10:40	01/09/24 19:40	1
Bis(2-chloroethyl)ether	ND		10	4.0	ug/L		01/09/24 10:40	01/09/24 19:40	1
bis (2-chloroisopropyl) ether	ND		10	1.9	ug/L		01/09/24 10:40	01/09/24 19:40	1
Bis(2-ethylhexyl) phthalate	ND		10	9.2	ug/L		01/09/24 10:40	01/09/24 19:40	1
4-Bromophenyl phenyl ether	ND		10	8.9	ug/L		01/09/24 10:40	01/09/24 19:40	1
Butyl benzyl phthalate	ND		10	6.0	ug/L		01/09/24 10:40	01/09/24 19:40	1
4-Chloroaniline	ND		10	4.9	ug/L		01/09/24 10:40	01/09/24 19:40	1
4-Chloro-3-methylphenol	ND		10	5.5	ug/L		01/09/24 10:40	01/09/24 19:40	1
2-Chloronaphthalene	ND		10	3.9	ug/L		01/09/24 10:40	01/09/24 19:40	1
2-Chlorophenol	ND		10	4.2	ug/L		01/09/24 10:40	01/09/24 19:40	1
4-Chlorophenyl phenyl ether	ND		10	3.8	ug/L		01/09/24 10:40	01/09/24 19:40	1
Dibenz[a,h]acridine	ND		10	2.9	ug/L		01/09/24 10:40	01/09/24 19:40	1
Dibenzofuran	ND		10	4.1	ug/L		01/09/24 10:40	01/09/24 19:40	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/09/24 10:40	01/09/24 19:40	1
2,4-Dichlorophenol	ND		10	4.4	ug/L		01/09/24 10:40	01/09/24 19:40	1
Diethyl phthalate	ND		10	4.5	ug/L		01/09/24 10:40	01/09/24 19:40	1
2,4-Dimethylphenol	ND		10	5.4	ug/L		01/09/24 10:40	01/09/24 19:40	1
Dimethyl phthalate	ND		10	4.3	ug/L		01/09/24 10:40	01/09/24 19:40	1
Di-n-butyl phthalate	ND		10	4.8	ug/L		01/09/24 10:40	01/09/24 19:40	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/09/24 10:40	01/09/24 19:40	1
2,4-Dinitrophenol	ND		31	4.8	ug/L		01/09/24 10:40	01/09/24 19:40	1
2,4-Dinitrotoluene	ND		10	5.3	ug/L		01/09/24 10:40	01/09/24 19:40	1
2,6-Dinitrotoluene	ND		10	4.0	ug/L		01/09/24 10:40	01/09/24 19:40	1
Di-n-octyl phthalate	ND		10	6.2	ug/L		01/09/24 10:40	01/09/24 19:40	1
1,4-Dioxane	ND		10	4.4	ug/L		01/09/24 10:40	01/09/24 19:40	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.4	ug/L		01/09/24 10:40	01/09/24 19:40	1
Hexachlorobenzene	ND		10	10	ug/L		01/09/24 10:40	01/09/24 19:40	1
Hexachlorocyclopentadiene	ND		21	4.6	ug/L		01/09/24 10:40	01/09/24 19:40	1
Hexachloroethane	ND		10	5.4	ug/L		01/09/24 10:40	01/09/24 19:40	1
Indene	ND		10	3.7	ug/L		01/09/24 10:40	01/09/24 19:40	1
Isophorone	ND		10	5.4	ug/L		01/09/24 10:40	01/09/24 19:40	1
2-Methylphenol	ND		10	3.3	ug/L		01/09/24 10:40	01/09/24 19:40	1
3 & 4 Methylphenol	ND		21	4.8	ug/L		01/09/24 10:40	01/09/24 19:40	1
2-Nitroaniline	ND		10	5.2	ug/L		01/09/24 10:40	01/09/24 19:40	1
3-Nitroaniline	ND		10	4.9	ug/L		01/09/24 10:40	01/09/24 19:40	1
4-Nitroaniline	ND		10	4.2	ug/L		01/09/24 10:40	01/09/24 19:40	1
Nitrobenzene	ND		10	4.9	ug/L		01/09/24 10:40	01/09/24 19:40	1
2-Nitrophenol	ND		10	4.8	ug/L		01/09/24 10:40	01/09/24 19:40	1
4-Nitrophenol	ND		10	3.4	ug/L		01/09/24 10:40	01/09/24 19:40	1
N-Nitrosodimethylamine	ND		10	2.3	ug/L		01/09/24 10:40	01/09/24 19:40	1

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

Job ID: 400-249331-1

Client Sample ID: MW11-ROX-010524
Date Collected: 01/05/24 13:50
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-6
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.6	ug/L		01/09/24 10:40	01/09/24 19:40	1
N-Nitrosodiphenylamine	ND		10	3.8	ug/L		01/09/24 10:40	01/09/24 19:40	1
Pentachlorophenol	ND		21	12	ug/L		01/09/24 10:40	01/09/24 19:40	1
Phenol	ND		10	4.3	ug/L		01/09/24 10:40	01/09/24 19:40	1
Pyridine	ND		10	10	ug/L		01/09/24 10:40	01/09/24 19:40	1
Quinoline	ND		10	2.5	ug/L		01/09/24 10:40	01/09/24 19:40	1
2,4,5-Trichlorophenol	ND		10	4.1	ug/L		01/09/24 10:40	01/09/24 19:40	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		01/09/24 10:40	01/09/24 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*21 - 114*	*01/09/24 10:40*	*01/09/24 19:40*	*1*
2-Fluorophenol	*56*		*10 - 105*	*01/09/24 10:40*	*01/09/24 19:40*	*1*
Nitrobenzene-d5	*70*		*16 - 127*	*01/09/24 10:40*	*01/09/24 19:40*	*1*
Phenol-d5	*41*		*10 - 129*	*01/09/24 10:40*	*01/09/24 19:40*	*1*
Terphenyl-d14	*90*		*13 - 150*	*01/09/24 10:40*	*01/09/24 19:40*	*1*
2,4,6-Tribromophenol	*61*		*10 - 150*	*01/09/24 10:40*	*01/09/24 19:40*	*1*

Method: EPA 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		01/10/24 14:08	01/11/24 14:04	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/10/24 14:08	01/11/24 14:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*51 - 149*	*01/10/24 14:08*	*01/11/24 14:04*	*1*

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

Job ID: 400-249331-1

Client Sample ID: TB-ROX-010524-8011-B
Date Collected: 01/05/24 00:00
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-7
Matrix: Water

Method: EPA 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		01/10/24 14:08	01/11/24 14:26	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/10/24 14:08	01/11/24 14:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*51 - 149*	*01/10/24 14:08*	*01/11/24 14:26*	*1*

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

Job ID: 400-249331-1

Client Sample ID: TB-ROX-010524-8260-B
Date Collected: 01/05/24 00:00
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-8
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/11/24 16:25	1
Acrolein	ND		20	3.3	ug/L			01/11/24 16:25	1
Acrylonitrile	ND		10	2.8	ug/L			01/11/24 16:25	1
Benzene	ND		1.0	0.50	ug/L			01/11/24 16:25	1
Bromobenzene	ND		1.0	0.54	ug/L			01/11/24 16:25	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/11/24 16:25	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/11/24 16:25	1
Bromoform	ND		5.0	0.25	ug/L			01/11/24 16:25	1
Bromomethane	ND		1.0	0.98	ug/L			01/11/24 16:25	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/11/24 16:25	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/11/24 16:25	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/11/24 16:25	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/11/24 16:25	1
Chloroethane	ND		1.0	0.76	ug/L			01/11/24 16:25	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/11/24 16:25	1
Chloroform	ND		1.0	0.90	ug/L			01/11/24 16:25	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/11/24 16:25	1
Chloromethane	ND		1.0	0.90	ug/L			01/11/24 16:25	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/11/24 16:25	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/11/24 16:25	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/11/24 16:25	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/11/24 16:25	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/11/24 16:25	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/11/24 16:25	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/11/24 16:25	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/11/24 16:25	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/11/24 16:25	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/11/24 16:25	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 16:25	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 16:25	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 16:25	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/11/24 16:25	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/11/24 16:25	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/11/24 16:25	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/11/24 16:25	1
2-Hexanone	ND		25	1.4	ug/L			01/11/24 16:25	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/11/24 16:25	1
Methylene bromide	ND		5.0	0.22	ug/L			01/11/24 16:25	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/11/24 16:25	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/11/24 16:25	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/11/24 16:25	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/11/24 16:25	1
Naphthalene	ND		5.0	3.0	ug/L			01/11/24 16:25	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/11/24 16:25	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/11/24 16:25	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/11/24 16:25	1
o-Xylene	ND		5.0	0.60	ug/L			01/11/24 16:25	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/11/24 16:25	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/11/24 16:25	1

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

Job ID: 400-249331-1

Client Sample ID: TB-ROX-010524-8260-B
Date Collected: 01/05/24 00:00
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-8
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/11/24 16:25	1
Styrene	ND		1.0	1.0	ug/L			01/11/24 16:25	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/11/24 16:25	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/11/24 16:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/11/24 16:25	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/11/24 16:25	1
Toluene	ND		1.0	0.90	ug/L			01/11/24 16:25	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/11/24 16:25	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/11/24 16:25	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/11/24 16:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/11/24 16:25	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/11/24 16:25	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/11/24 16:25	1
Trichloroethene	ND		1.0	0.15	ug/L			01/11/24 16:25	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/11/24 16:25	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/11/24 16:25	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/11/24 16:25	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/11/24 16:25	1
Vinyl acetate	ND		25	0.93	ug/L			01/11/24 16:25	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/11/24 16:25	1
Xylenes, Total	ND		10	1.6	ug/L			01/11/24 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*01/11/24 16:25*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*01/11/24 16:25*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*01/11/24 16:25*	*1*

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

Job ID: 400-249331-1

Client Sample ID: MW9-ROX-010524-EB
Date Collected: 01/05/24 09:45
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-9
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/11/24 09:44	1
Acrolein	ND		20	3.3	ug/L			01/11/24 09:44	1
Acrylonitrile	ND		10	2.8	ug/L			01/11/24 09:44	1
Benzene	ND		1.0	0.50	ug/L			01/11/24 09:44	1
Bromobenzene	ND		1.0	0.54	ug/L			01/11/24 09:44	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/11/24 09:44	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/11/24 09:44	1
Bromoform	ND		5.0	0.25	ug/L			01/11/24 09:44	1
Bromomethane	ND		1.0	0.98	ug/L			01/11/24 09:44	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/11/24 09:44	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/11/24 09:44	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/11/24 09:44	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/11/24 09:44	1
Chloroethane	ND		1.0	0.76	ug/L			01/11/24 09:44	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/11/24 09:44	1
Chloroform	ND		1.0	0.90	ug/L			01/11/24 09:44	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/11/24 09:44	1
Chloromethane	ND		1.0	0.90	ug/L			01/11/24 09:44	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/11/24 09:44	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/11/24 09:44	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/11/24 09:44	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/11/24 09:44	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/11/24 09:44	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/11/24 09:44	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/11/24 09:44	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/11/24 09:44	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/11/24 09:44	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/11/24 09:44	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 09:44	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 09:44	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 09:44	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/11/24 09:44	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/11/24 09:44	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/11/24 09:44	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/11/24 09:44	1
2-Hexanone	ND		25	1.4	ug/L			01/11/24 09:44	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/11/24 09:44	1
Methylene bromide	ND		5.0	0.22	ug/L			01/11/24 09:44	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/11/24 09:44	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/11/24 09:44	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/11/24 09:44	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/11/24 09:44	1
Naphthalene	ND		5.0	3.0	ug/L			01/11/24 09:44	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/11/24 09:44	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/11/24 09:44	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/11/24 09:44	1
o-Xylene	ND		5.0	0.60	ug/L			01/11/24 09:44	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/11/24 09:44	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/11/24 09:44	1

Client Sample ID: MW9-ROX-010524-EB

Lab Sample ID: 400-249331-9

Date Collected: 01/05/24 09:45

Matrix: Water

Date Received: 01/08/24 09:59

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/11/24 09:44	1
Styrene	ND		1.0	1.0	ug/L			01/11/24 09:44	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/11/24 09:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/11/24 09:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/11/24 09:44	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/11/24 09:44	1
Toluene	ND		1.0	0.90	ug/L			01/11/24 09:44	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/11/24 09:44	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/11/24 09:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/11/24 09:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/11/24 09:44	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/11/24 09:44	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/11/24 09:44	1
Trichloroethene	ND		1.0	0.15	ug/L			01/11/24 09:44	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/11/24 09:44	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/11/24 09:44	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/11/24 09:44	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/11/24 09:44	1
Vinyl acetate	ND		25	0.93	ug/L			01/11/24 09:44	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/11/24 09:44	1
Xylenes, Total	ND		10	1.6	ug/L			01/11/24 09:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 130*		*01/11/24 09:44*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/11/24 09:44*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*01/11/24 09:44*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		01/09/24 10:40	01/10/24 19:32	1
Acenaphthylene	ND		0.20	0.044	ug/L		01/09/24 10:40	01/10/24 19:32	1
Anthracene	ND		0.20	0.047	ug/L		01/09/24 10:40	01/10/24 19:32	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		01/09/24 10:40	01/10/24 19:32	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		01/09/24 10:40	01/10/24 19:32	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		01/09/24 10:40	01/10/24 19:32	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/09/24 10:40	01/10/24 19:32	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		01/09/24 10:40	01/10/24 19:32	1
Chrysene	ND		0.20	0.033	ug/L		01/09/24 10:40	01/10/24 19:32	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		01/09/24 10:40	01/10/24 19:32	1
Fluoranthene	ND		0.20	0.034	ug/L		01/09/24 10:40	01/10/24 19:32	1
Fluorene	ND		0.20	0.090	ug/L		01/09/24 10:40	01/10/24 19:32	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		01/09/24 10:40	01/10/24 19:32	1
Phenanthrene	ND		0.20	0.091	ug/L		01/09/24 10:40	01/10/24 19:32	1
Pyrene	ND		0.20	0.039	ug/L		01/09/24 10:40	01/10/24 19:32	1
1-Methylnaphthalene	ND		0.20	0.081	ug/L		01/09/24 10:40	01/10/24 19:32	1
2-Methylnaphthalene	ND		0.20	0.067	ug/L		01/09/24 10:40	01/10/24 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*78*		*18 - 147*	*01/09/24 10:40*	*01/10/24 19:32*	*1*
2-Fluorobiphenyl	*70*		*15 - 128*	*01/09/24 10:40*	*01/10/24 19:32*	*1*

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

Job ID: 400-249331-1

Client Sample ID: MW9-ROX-010524-EB

Date Collected: 01/05/24 09:45
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-9

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*71*		*10 - 144*	*01/09/24 10:40*	*01/10/24 19:32*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.8	ug/L		01/09/24 10:40	01/09/24 20:02	1
Benzenethiol	ND		10	10	ug/L		01/09/24 10:40	01/09/24 20:02	1
Benzoic acid	ND		30	24	ug/L		01/09/24 10:40	01/09/24 20:02	1
Benzyl alcohol	ND		10	7.4	ug/L		01/09/24 10:40	01/09/24 20:02	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		01/09/24 10:40	01/09/24 20:02	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		01/09/24 10:40	01/09/24 20:02	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		01/09/24 10:40	01/09/24 20:02	1
Bis(2-ethylhexyl) phthalate	ND		10	9.0	ug/L		01/09/24 10:40	01/09/24 20:02	1
4-Bromophenyl phenyl ether	ND		10	8.7	ug/L		01/09/24 10:40	01/09/24 20:02	1
Butyl benzyl phthalate	ND		10	5.9	ug/L		01/09/24 10:40	01/09/24 20:02	1
4-Chloroaniline	ND		10	4.7	ug/L		01/09/24 10:40	01/09/24 20:02	1
4-Chloro-3-methylphenol	ND		10	5.4	ug/L		01/09/24 10:40	01/09/24 20:02	1
2-Chloronaphthalene	ND		10	3.8	ug/L		01/09/24 10:40	01/09/24 20:02	1
2-Chlorophenol	ND		10	4.1	ug/L		01/09/24 10:40	01/09/24 20:02	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		01/09/24 10:40	01/09/24 20:02	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		01/09/24 10:40	01/09/24 20:02	1
Dibenzofuran	ND		10	4.0	ug/L		01/09/24 10:40	01/09/24 20:02	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/09/24 10:40	01/09/24 20:02	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		01/09/24 10:40	01/09/24 20:02	1
Diethyl phthalate	ND		10	4.4	ug/L		01/09/24 10:40	01/09/24 20:02	1
2,4-Dimethylphenol	ND		10	5.3	ug/L		01/09/24 10:40	01/09/24 20:02	1
Dimethyl phthalate	ND		10	4.2	ug/L		01/09/24 10:40	01/09/24 20:02	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		01/09/24 10:40	01/09/24 20:02	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/09/24 10:40	01/09/24 20:02	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		01/09/24 10:40	01/09/24 20:02	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		01/09/24 10:40	01/09/24 20:02	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		01/09/24 10:40	01/09/24 20:02	1
Di-n-octyl phthalate	ND		10	6.1	ug/L		01/09/24 10:40	01/09/24 20:02	1
1,4-Dioxane	ND		10	4.3	ug/L		01/09/24 10:40	01/09/24 20:02	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		01/09/24 10:40	01/09/24 20:02	1
Hexachlorobenzene	ND		10	9.8	ug/L		01/09/24 10:40	01/09/24 20:02	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		01/09/24 10:40	01/09/24 20:02	1
Hexachloroethane	ND		10	5.3	ug/L		01/09/24 10:40	01/09/24 20:02	1
Indene	ND		10	3.6	ug/L		01/09/24 10:40	01/09/24 20:02	1
Isophorone	ND		10	5.3	ug/L		01/09/24 10:40	01/09/24 20:02	1
2-Methylphenol	ND		10	3.2	ug/L		01/09/24 10:40	01/09/24 20:02	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		01/09/24 10:40	01/09/24 20:02	1
2-Nitroaniline	ND		10	5.0	ug/L		01/09/24 10:40	01/09/24 20:02	1
3-Nitroaniline	ND		10	4.7	ug/L		01/09/24 10:40	01/09/24 20:02	1
4-Nitroaniline	ND		10	4.1	ug/L		01/09/24 10:40	01/09/24 20:02	1
Nitrobenzene	ND		10	4.7	ug/L		01/09/24 10:40	01/09/24 20:02	1
2-Nitrophenol	ND		10	4.6	ug/L		01/09/24 10:40	01/09/24 20:02	1
4-Nitrophenol	ND		10	3.3	ug/L		01/09/24 10:40	01/09/24 20:02	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		01/09/24 10:40	01/09/24 20:02	1

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

Job ID: 400-249331-1

Client Sample ID: MW9-ROX-010524-EB

Date Collected: 01/05/24 09:45
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-9

Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		01/09/24 10:40	01/09/24 20:02	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		01/09/24 10:40	01/09/24 20:02	1
Pentachlorophenol	ND		20	12	ug/L		01/09/24 10:40	01/09/24 20:02	1
Phenol	ND		10	4.2	ug/L		01/09/24 10:40	01/09/24 20:02	1
Pyridine	ND		10	10	ug/L		01/09/24 10:40	01/09/24 20:02	1
Quinoline	ND		10	2.4	ug/L		01/09/24 10:40	01/09/24 20:02	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		01/09/24 10:40	01/09/24 20:02	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/09/24 10:40	01/09/24 20:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*21 - 114*	*01/09/24 10:40*	*01/09/24 20:02*	*1*
2-Fluorophenol	*49*		*10 - 105*	*01/09/24 10:40*	*01/09/24 20:02*	*1*
Nitrobenzene-d5	*61*		*16 - 127*	*01/09/24 10:40*	*01/09/24 20:02*	*1*
Phenol-d5	*35*		*10 - 129*	*01/09/24 10:40*	*01/09/24 20:02*	*1*
Terphenyl-d14	*81*		*13 - 150*	*01/09/24 10:40*	*01/09/24 20:02*	*1*
2,4,6-Tribromophenol	*47*		*10 - 150*	*01/09/24 10:40*	*01/09/24 20:02*	*1*

Method: EPA 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		01/10/24 14:08	01/11/24 14:47	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/10/24 14:08	01/11/24 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*		*51 - 149*	*01/10/24 14:08*	*01/11/24 14:47*	*1*

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

Job ID: 400-249331-1

Client Sample ID: MW9-ROX-010524
Date Collected: 01/05/24 10:55
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-10
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/11/24 18:26	1
Acrolein	ND		20	3.3	ug/L			01/11/24 18:26	1
Acrylonitrile	ND		10	2.8	ug/L			01/11/24 18:26	1
Benzene	ND		1.0	0.50	ug/L			01/11/24 18:26	1
Bromobenzene	ND		1.0	0.54	ug/L			01/11/24 18:26	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/11/24 18:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/11/24 18:26	1
Bromoform	ND		5.0	0.25	ug/L			01/11/24 18:26	1
Bromomethane	ND		1.0	0.98	ug/L			01/11/24 18:26	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/11/24 18:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/11/24 18:26	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/11/24 18:26	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/11/24 18:26	1
Chloroethane	ND		1.0	0.76	ug/L			01/11/24 18:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/11/24 18:26	1
Chloroform	ND		1.0	0.90	ug/L			01/11/24 18:26	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/11/24 18:26	1
Chloromethane	ND		1.0	0.90	ug/L			01/11/24 18:26	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/11/24 18:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/11/24 18:26	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/11/24 18:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/11/24 18:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/11/24 18:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/11/24 18:26	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/11/24 18:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/11/24 18:26	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/11/24 18:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/11/24 18:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 18:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 18:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 18:26	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/11/24 18:26	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/11/24 18:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/11/24 18:26	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/11/24 18:26	1
2-Hexanone	ND		25	1.4	ug/L			01/11/24 18:26	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/11/24 18:26	1
Methylene bromide	ND		5.0	0.22	ug/L			01/11/24 18:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/11/24 18:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/11/24 18:26	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/11/24 18:26	1
m-Xylene & p-Xylene	**0.75**	**J**	5.0	0.63	ug/L			01/11/24 18:26	1
Naphthalene	ND		5.0	3.0	ug/L			01/11/24 18:26	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/11/24 18:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/11/24 18:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/11/24 18:26	1
o-Xylene	ND		5.0	0.60	ug/L			01/11/24 18:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/11/24 18:26	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/11/24 18:26	1

Client Sample ID: MW9-ROX-010524
Date Collected: 01/05/24 10:55
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-10
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/11/24 18:26	1
Styrene	ND		1.0	1.0	ug/L			01/11/24 18:26	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/11/24 18:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/11/24 18:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/11/24 18:26	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/11/24 18:26	1
Toluene	**0.90**	**J**	1.0	0.90	ug/L			01/11/24 18:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/11/24 18:26	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/11/24 18:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/11/24 18:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/11/24 18:26	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/11/24 18:26	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/11/24 18:26	1
Trichloroethene	ND		1.0	0.15	ug/L			01/11/24 18:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/11/24 18:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/11/24 18:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/11/24 18:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/11/24 18:26	1
Vinyl acetate	ND		25	0.93	ug/L			01/11/24 18:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/11/24 18:26	1
Xylenes, Total	ND		10	1.6	ug/L			01/11/24 18:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*72 - 130*		*01/11/24 18:26*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/11/24 18:26*	*1*
Toluene-d8 (Surr)	*89*		*64 - 132*		*01/11/24 18:26*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.10	ug/L		01/09/24 10:40	01/10/24 19:53	1
Acenaphthylene	ND		0.21	0.047	ug/L		01/09/24 10:40	01/10/24 19:53	1
Anthracene	ND		0.21	0.050	ug/L		01/09/24 10:40	01/10/24 19:53	1
Benzo[a]anthracene	ND		0.21	0.036	ug/L		01/09/24 10:40	01/10/24 19:53	1
Benzo[a]pyrene	ND		0.21	0.068	ug/L		01/09/24 10:40	01/10/24 19:53	1
Benzo[b]fluoranthene	ND		0.21	0.039	ug/L		01/09/24 10:40	01/10/24 19:53	1
Benzo[g,h,i]perylene	ND		0.21	0.029	ug/L		01/09/24 10:40	01/10/24 19:53	1
Benzo[k]fluoranthene	ND		0.21	0.066	ug/L		01/09/24 10:40	01/10/24 19:53	1
Chrysene	ND		0.21	0.035	ug/L		01/09/24 10:40	01/10/24 19:53	1
Dibenz(a,h)anthracene	ND		0.21	0.051	ug/L		01/09/24 10:40	01/10/24 19:53	1
Fluoranthene	ND		0.21	0.036	ug/L		01/09/24 10:40	01/10/24 19:53	1
Fluorene	ND		0.21	0.094	ug/L		01/09/24 10:40	01/10/24 19:53	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.036	ug/L		01/09/24 10:40	01/10/24 19:53	1
Phenanthrene	ND		0.21	0.095	ug/L		01/09/24 10:40	01/10/24 19:53	1
Pyrene	ND		0.21	0.041	ug/L		01/09/24 10:40	01/10/24 19:53	1
1-Methylnaphthalene	ND		0.21	0.085	ug/L		01/09/24 10:40	01/10/24 19:53	1
2-Methylnaphthalene	**0.093**	**J**	0.21	0.070	ug/L		01/09/24 10:40	01/10/24 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*87*		*18 - 147*	*01/09/24 10:40*	*01/10/24 19:53*	*1*
2-Fluorobiphenyl	*81*		*15 - 128*	*01/09/24 10:40*	*01/10/24 19:53*	*1*

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

Job ID: 400-249331-1

Client Sample ID: MW9-ROX-010524

Date Collected: 01/05/24 10:55
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-10

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*81*		*10 - 144*	*01/09/24 10:40*	*01/10/24 19:53*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	9.2	ug/L		01/09/24 10:40	01/09/24 20:24	1
Benzenethiol	ND		11	10	ug/L		01/09/24 10:40	01/09/24 20:24	1
Benzoic acid	ND		32	25	ug/L		01/09/24 10:40	01/09/24 20:24	1
Benzyl alcohol	ND		11	7.7	ug/L		01/09/24 10:40	01/09/24 20:24	1
Bis(2-chloroethoxy)methane	ND		11	4.9	ug/L		01/09/24 10:40	01/09/24 20:24	1
Bis(2-chloroethyl)ether	ND		11	4.1	ug/L		01/09/24 10:40	01/09/24 20:24	1
bis (2-chloroisopropyl) ether	ND		11	1.9	ug/L		01/09/24 10:40	01/09/24 20:24	1
Bis(2-ethylhexyl) phthalate	ND		11	9.4	ug/L		01/09/24 10:40	01/09/24 20:24	1
4-Bromophenyl phenyl ether	ND		11	9.1	ug/L		01/09/24 10:40	01/09/24 20:24	1
Butyl benzyl phthalate	ND		11	6.1	ug/L		01/09/24 10:40	01/09/24 20:24	1
4-Chloroaniline	ND		11	5.0	ug/L		01/09/24 10:40	01/09/24 20:24	1
4-Chloro-3-methylphenol	ND		11	5.6	ug/L		01/09/24 10:40	01/09/24 20:24	1
2-Chloronaphthalene	ND		11	4.0	ug/L		01/09/24 10:40	01/09/24 20:24	1
2-Chlorophenol	ND		11	4.3	ug/L		01/09/24 10:40	01/09/24 20:24	1
4-Chlorophenyl phenyl ether	ND		11	3.9	ug/L		01/09/24 10:40	01/09/24 20:24	1
Dibenz[a,h]acridine	ND		11	3.0	ug/L		01/09/24 10:40	01/09/24 20:24	1
Dibenzofuran	ND		11	4.2	ug/L		01/09/24 10:40	01/09/24 20:24	1
3,3'-Dichlorobenzidine	ND		12	12	ug/L		01/09/24 10:40	01/09/24 20:24	1
2,4-Dichlorophenol	ND		11	4.6	ug/L		01/09/24 10:40	01/09/24 20:24	1
Diethyl phthalate	ND		11	4.7	ug/L		01/09/24 10:40	01/09/24 20:24	1
2,4-Dimethylphenol	ND		11	5.5	ug/L		01/09/24 10:40	01/09/24 20:24	1
Dimethyl phthalate	ND		11	4.4	ug/L		01/09/24 10:40	01/09/24 20:24	1
Di-n-butyl phthalate	ND		11	4.9	ug/L		01/09/24 10:40	01/09/24 20:24	1
4,6-Dinitro-ortho-cresol	ND		11	11	ug/L		01/09/24 10:40	01/09/24 20:24	1
2,4-Dinitrophenol	ND		32	4.9	ug/L		01/09/24 10:40	01/09/24 20:24	1
2,4-Dinitrotoluene	ND		11	5.4	ug/L		01/09/24 10:40	01/09/24 20:24	1
2,6-Dinitrotoluene	ND		11	4.1	ug/L		01/09/24 10:40	01/09/24 20:24	1
Di-n-octyl phthalate	ND		11	6.4	ug/L		01/09/24 10:40	01/09/24 20:24	1
1,4-Dioxane	ND		11	4.6	ug/L		01/09/24 10:40	01/09/24 20:24	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	3.5	ug/L		01/09/24 10:40	01/09/24 20:24	1
Hexachlorobenzene	ND		11	10	ug/L		01/09/24 10:40	01/09/24 20:24	1
Hexachlorocyclopentadiene	ND		21	4.8	ug/L		01/09/24 10:40	01/09/24 20:24	1
Hexachloroethane	ND		11	5.5	ug/L		01/09/24 10:40	01/09/24 20:24	1
Indene	ND		11	3.8	ug/L		01/09/24 10:40	01/09/24 20:24	1
Isophorone	ND		11	5.5	ug/L		01/09/24 10:40	01/09/24 20:24	1
2-Methylphenol	ND		11	3.4	ug/L		01/09/24 10:40	01/09/24 20:24	1
3 & 4 Methylphenol	ND		21	4.9	ug/L		01/09/24 10:40	01/09/24 20:24	1
2-Nitroaniline	ND		11	5.3	ug/L		01/09/24 10:40	01/09/24 20:24	1
3-Nitroaniline	ND		11	5.0	ug/L		01/09/24 10:40	01/09/24 20:24	1
4-Nitroaniline	ND		11	4.3	ug/L		01/09/24 10:40	01/09/24 20:24	1
Nitrobenzene	ND		11	5.0	ug/L		01/09/24 10:40	01/09/24 20:24	1
2-Nitrophenol	ND		11	4.9	ug/L		01/09/24 10:40	01/09/24 20:24	1
4-Nitrophenol	ND		11	3.5	ug/L		01/09/24 10:40	01/09/24 20:24	1
N-Nitrosodimethylamine	ND		11	2.3	ug/L		01/09/24 10:40	01/09/24 20:24	1

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

Job ID: 400-249331-1

Client Sample ID: MW9-ROX-010524
Date Collected: 01/05/24 10:55
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-10
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		11	2.6	ug/L		01/09/24 10:40	01/09/24 20:24	1
N-Nitrosodiphenylamine	ND		11	3.9	ug/L		01/09/24 10:40	01/09/24 20:24	1
Pentachlorophenol	ND		21	13	ug/L		01/09/24 10:40	01/09/24 20:24	1
Phenol	ND		11	4.4	ug/L		01/09/24 10:40	01/09/24 20:24	1
Pyridine	ND		11	11	ug/L		01/09/24 10:40	01/09/24 20:24	1
Quinoline	ND		11	2.5	ug/L		01/09/24 10:40	01/09/24 20:24	1
2,4,5-Trichlorophenol	ND		11	4.2	ug/L		01/09/24 10:40	01/09/24 20:24	1
2,4,6-Trichlorophenol	ND		11	3.7	ug/L		01/09/24 10:40	01/09/24 20:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*21 - 114*	*01/09/24 10:40*	*01/09/24 20:24*	*1*
2-Fluorophenol	*55*		*10 - 105*	*01/09/24 10:40*	*01/09/24 20:24*	*1*
Nitrobenzene-d5	*64*		*16 - 127*	*01/09/24 10:40*	*01/09/24 20:24*	*1*
Phenol-d5	*39*		*10 - 129*	*01/09/24 10:40*	*01/09/24 20:24*	*1*
Terphenyl-d14	*89*		*13 - 150*	*01/09/24 10:40*	*01/09/24 20:24*	*1*
2,4,6-Tribromophenol	*56*		*10 - 150*	*01/09/24 10:40*	*01/09/24 20:24*	*1*

Method: EPA 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		01/10/24 14:08	01/11/24 15:30	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/10/24 14:08	01/11/24 15:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*51 - 149*	*01/10/24 14:08*	*01/11/24 15:30*	*1*

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

Job ID: 400-249331-1

Client Sample ID: MW10-ROX-010524
Date Collected: 01/05/24 11:55
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-11
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/11/24 18:51	1
Acrolein	ND		20	3.3	ug/L			01/11/24 18:51	1
Acrylonitrile	ND		10	2.8	ug/L			01/11/24 18:51	1
Benzene	ND		1.0	0.50	ug/L			01/11/24 18:51	1
Bromobenzene	ND		1.0	0.54	ug/L			01/11/24 18:51	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/11/24 18:51	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/11/24 18:51	1
Bromoform	ND		5.0	0.25	ug/L			01/11/24 18:51	1
Bromomethane	ND		1.0	0.98	ug/L			01/11/24 18:51	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/11/24 18:51	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/11/24 18:51	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/11/24 18:51	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/11/24 18:51	1
Chloroethane	ND		1.0	0.76	ug/L			01/11/24 18:51	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/11/24 18:51	1
Chloroform	ND		1.0	0.90	ug/L			01/11/24 18:51	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/11/24 18:51	1
Chloromethane	ND		1.0	0.90	ug/L			01/11/24 18:51	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/11/24 18:51	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/11/24 18:51	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/11/24 18:51	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/11/24 18:51	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/11/24 18:51	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/11/24 18:51	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/11/24 18:51	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/11/24 18:51	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/11/24 18:51	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/11/24 18:51	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 18:51	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 18:51	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 18:51	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/11/24 18:51	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/11/24 18:51	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/11/24 18:51	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/11/24 18:51	1
2-Hexanone	ND		25	1.4	ug/L			01/11/24 18:51	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/11/24 18:51	1
Methylene bromide	ND		5.0	0.22	ug/L			01/11/24 18:51	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/11/24 18:51	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/11/24 18:51	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/11/24 18:51	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/11/24 18:51	1
Naphthalene	ND		5.0	3.0	ug/L			01/11/24 18:51	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/11/24 18:51	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/11/24 18:51	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/11/24 18:51	1
o-Xylene	ND		5.0	0.60	ug/L			01/11/24 18:51	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/11/24 18:51	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/11/24 18:51	1

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

Job ID: 400-249331-1

Client Sample ID: MW10-ROX-010524

Date Collected: 01/05/24 11:55
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-11

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/11/24 18:51	1
Styrene	ND		1.0	1.0	ug/L			01/11/24 18:51	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/11/24 18:51	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/11/24 18:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/11/24 18:51	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/11/24 18:51	1
Toluene	ND		1.0	0.90	ug/L			01/11/24 18:51	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/11/24 18:51	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/11/24 18:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/11/24 18:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/11/24 18:51	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/11/24 18:51	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/11/24 18:51	1
Trichloroethene	ND		1.0	0.15	ug/L			01/11/24 18:51	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/11/24 18:51	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/11/24 18:51	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/11/24 18:51	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/11/24 18:51	1
Vinyl acetate	ND		25	0.93	ug/L			01/11/24 18:51	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/11/24 18:51	1
Xylenes, Total	ND		10	1.6	ug/L			01/11/24 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*72 - 130*		*01/11/24 18:51*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*01/11/24 18:51*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*01/11/24 18:51*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.11	ug/L		01/09/24 10:40	01/10/24 20:13	1
Acenaphthylene	ND		0.21	0.047	ug/L		01/09/24 10:40	01/10/24 20:13	1
Anthracene	ND		0.21	0.050	ug/L		01/09/24 10:40	01/10/24 20:13	1
Benzo[a]anthracene	ND		0.21	0.036	ug/L		01/09/24 10:40	01/10/24 20:13	1
Benzo[a]pyrene	ND		0.21	0.068	ug/L		01/09/24 10:40	01/10/24 20:13	1
Benzo[b]fluoranthene	ND		0.21	0.040	ug/L		01/09/24 10:40	01/10/24 20:13	1
Benzo[g,h,i]perylene	ND		0.21	0.029	ug/L		01/09/24 10:40	01/10/24 20:13	1
Benzo[k]fluoranthene	ND		0.21	0.066	ug/L		01/09/24 10:40	01/10/24 20:13	1
Chrysene	ND		0.21	0.035	ug/L		01/09/24 10:40	01/10/24 20:13	1
Dibenz(a,h)anthracene	ND		0.21	0.051	ug/L		01/09/24 10:40	01/10/24 20:13	1
Fluoranthene	ND		0.21	0.036	ug/L		01/09/24 10:40	01/10/24 20:13	1
Fluorene	ND		0.21	0.095	ug/L		01/09/24 10:40	01/10/24 20:13	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.036	ug/L		01/09/24 10:40	01/10/24 20:13	1
Phenanthrene	ND		0.21	0.096	ug/L		01/09/24 10:40	01/10/24 20:13	1
Pyrene	ND		0.21	0.042	ug/L		01/09/24 10:40	01/10/24 20:13	1
1-Methylnaphthalene	ND		0.21	0.085	ug/L		01/09/24 10:40	01/10/24 20:13	1
2-Methylnaphthalene	ND		0.21	0.071	ug/L		01/09/24 10:40	01/10/24 20:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*18 - 147*	*01/09/24 10:40*	*01/10/24 20:13*	*1*
2-Fluorobiphenyl	*80*		*15 - 128*	*01/09/24 10:40*	*01/10/24 20:13*	*1*

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

Job ID: 400-249331-1

Client Sample ID: MW10-ROX-010524
Date Collected: 01/05/24 11:55
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-11
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*81*		*10 - 144*	*01/09/24 10:40*	*01/10/24 20:13*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	9.3	ug/L		01/09/24 10:40	01/09/24 20:47	1
Benzenethiol	ND		11	11	ug/L		01/09/24 10:40	01/09/24 20:47	1
Benzoic acid	ND		32	26	ug/L		01/09/24 10:40	01/09/24 20:47	1
Benzyl alcohol	ND		11	7.8	ug/L		01/09/24 10:40	01/09/24 20:47	1
Bis(2-chloroethoxy)methane	ND		11	4.9	ug/L		01/09/24 10:40	01/09/24 20:47	1
Bis(2-chloroethyl)ether	ND		11	4.2	ug/L		01/09/24 10:40	01/09/24 20:47	1
bis (2-chloroisopropyl) ether	ND		11	1.9	ug/L		01/09/24 10:40	01/09/24 20:47	1
Bis(2-ethylhexyl) phthalate	ND		11	9.5	ug/L		01/09/24 10:40	01/09/24 20:47	1
4-Bromophenyl phenyl ether	ND		11	9.2	ug/L		01/09/24 10:40	01/09/24 20:47	1
Butyl benzyl phthalate	ND		11	6.2	ug/L		01/09/24 10:40	01/09/24 20:47	1
4-Chloroaniline	ND		11	5.0	ug/L		01/09/24 10:40	01/09/24 20:47	1
4-Chloro-3-methylphenol	ND		11	5.7	ug/L		01/09/24 10:40	01/09/24 20:47	1
2-Chloronaphthalene	ND		11	4.1	ug/L		01/09/24 10:40	01/09/24 20:47	1
2-Chlorophenol	ND		11	4.4	ug/L		01/09/24 10:40	01/09/24 20:47	1
4-Chlorophenyl phenyl ether	ND		11	4.0	ug/L		01/09/24 10:40	01/09/24 20:47	1
Dibenz[a,h]acridine	ND		11	3.0	ug/L		01/09/24 10:40	01/09/24 20:47	1
Dibenzofuran	ND		11	4.3	ug/L		01/09/24 10:40	01/09/24 20:47	1
3,3'-Dichlorobenzidine	ND		12	12	ug/L		01/09/24 10:40	01/09/24 20:47	1
2,4-Dichlorophenol	ND		11	4.6	ug/L		01/09/24 10:40	01/09/24 20:47	1
Diethyl phthalate	ND		11	4.7	ug/L		01/09/24 10:40	01/09/24 20:47	1
2,4-Dimethylphenol	ND		11	5.6	ug/L		01/09/24 10:40	01/09/24 20:47	1
Dimethyl phthalate	ND		11	4.5	ug/L		01/09/24 10:40	01/09/24 20:47	1
Di-n-butyl phthalate	ND		11	4.9	ug/L		01/09/24 10:40	01/09/24 20:47	1
4,6-Dinitro-ortho-cresol	ND		11	11	ug/L		01/09/24 10:40	01/09/24 20:47	1
2,4-Dinitrophenol	ND		32	4.9	ug/L		01/09/24 10:40	01/09/24 20:47	1
2,4-Dinitrotoluene	ND		11	5.4	ug/L		01/09/24 10:40	01/09/24 20:47	1
2,6-Dinitrotoluene	ND		11	4.2	ug/L		01/09/24 10:40	01/09/24 20:47	1
Di-n-octyl phthalate	ND		11	6.4	ug/L		01/09/24 10:40	01/09/24 20:47	1
1,4-Dioxane	ND		11	4.6	ug/L		01/09/24 10:40	01/09/24 20:47	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	3.5	ug/L		01/09/24 10:40	01/09/24 20:47	1
Hexachlorobenzene	ND		11	10	ug/L		01/09/24 10:40	01/09/24 20:47	1
Hexachlorocyclopentadiene	ND		21	4.8	ug/L		01/09/24 10:40	01/09/24 20:47	1
Hexachloroethane	ND		11	5.6	ug/L		01/09/24 10:40	01/09/24 20:47	1
Indene	ND		11	3.8	ug/L		01/09/24 10:40	01/09/24 20:47	1
Isophorone	ND		11	5.6	ug/L		01/09/24 10:40	01/09/24 20:47	1
2-Methylphenol	ND		11	3.4	ug/L		01/09/24 10:40	01/09/24 20:47	1
3 & 4 Methylphenol	ND		21	4.9	ug/L		01/09/24 10:40	01/09/24 20:47	1
2-Nitroaniline	ND		11	5.3	ug/L		01/09/24 10:40	01/09/24 20:47	1
3-Nitroaniline	ND		11	5.0	ug/L		01/09/24 10:40	01/09/24 20:47	1
4-Nitroaniline	ND		11	4.4	ug/L		01/09/24 10:40	01/09/24 20:47	1
Nitrobenzene	ND		11	5.0	ug/L		01/09/24 10:40	01/09/24 20:47	1
2-Nitrophenol	ND		11	4.9	ug/L		01/09/24 10:40	01/09/24 20:47	1
4-Nitrophenol	ND		11	3.5	ug/L		01/09/24 10:40	01/09/24 20:47	1
N-Nitrosodimethylamine	ND		11	2.4	ug/L		01/09/24 10:40	01/09/24 20:47	1

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

Job ID: 400-249331-1

Client Sample ID: MW10-ROX-010524
Date Collected: 01/05/24 11:55
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-11
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		11	2.7	ug/L		01/09/24 10:40	01/09/24 20:47	1
N-Nitrosodiphenylamine	ND		11	4.0	ug/L		01/09/24 10:40	01/09/24 20:47	1
Pentachlorophenol	ND		21	13	ug/L		01/09/24 10:40	01/09/24 20:47	1
Phenol	ND		11	4.5	ug/L		01/09/24 10:40	01/09/24 20:47	1
Pyridine	ND		11	11	ug/L		01/09/24 10:40	01/09/24 20:47	1
Quinoline	ND		11	2.6	ug/L		01/09/24 10:40	01/09/24 20:47	1
2,4,5-Trichlorophenol	ND		11	4.3	ug/L		01/09/24 10:40	01/09/24 20:47	1
2,4,6-Trichlorophenol	ND		11	3.7	ug/L		01/09/24 10:40	01/09/24 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*21 - 114*	*01/09/24 10:40*	*01/09/24 20:47*	*1*
2-Fluorophenol	*53*		*10 - 105*	*01/09/24 10:40*	*01/09/24 20:47*	*1*
Nitrobenzene-d5	*64*		*16 - 127*	*01/09/24 10:40*	*01/09/24 20:47*	*1*
Phenol-d5	*38*		*10 - 129*	*01/09/24 10:40*	*01/09/24 20:47*	*1*
Terphenyl-d14	*88*		*13 - 150*	*01/09/24 10:40*	*01/09/24 20:47*	*1*
2,4,6-Tribromophenol	*53*		*10 - 150*	*01/09/24 10:40*	*01/09/24 20:47*	*1*

Method: EPA 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		01/10/24 14:08	01/11/24 15:52	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/10/24 14:08	01/11/24 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*51 - 149*	*01/10/24 14:08*	*01/11/24 15:52*	*1*

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

Job ID: 400-249331-1

Client Sample ID: MW28-ROX-010524

Date Collected: 01/05/24 13:50
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-12

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/12/24 09:49	1
Acrolein	ND	F2	20	3.3	ug/L			01/12/24 09:49	1
Acrylonitrile	ND		10	2.8	ug/L			01/12/24 09:49	1
Benzene	ND	F2	1.0	0.50	ug/L			01/12/24 09:49	1
Bromobenzene	ND		1.0	0.54	ug/L			01/12/24 09:49	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/12/24 09:49	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/12/24 09:49	1
Bromoform	ND		5.0	0.25	ug/L			01/12/24 09:49	1
Bromomethane	ND		1.0	0.98	ug/L			01/12/24 09:49	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/12/24 09:49	1
Carbon disulfide	ND	F2	1.0	0.50	ug/L			01/12/24 09:49	1
Carbon tetrachloride	ND	F2	1.0	0.19	ug/L			01/12/24 09:49	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/12/24 09:49	1
Chloroethane	ND	F2	1.0	0.76	ug/L			01/12/24 09:49	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			01/12/24 09:49	1
Chloroform	ND	F2	1.0	0.90	ug/L			01/12/24 09:49	1
1-Chlorohexane	ND	F2 F1	1.0	0.32	ug/L			01/12/24 09:49	1
Chloromethane	ND	F2	1.0	0.90	ug/L			01/12/24 09:49	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/12/24 09:49	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/12/24 09:49	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/12/24 09:49	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/12/24 09:49	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/12/24 09:49	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/12/24 09:49	1
Dichlorodifluoromethane	ND	F2	1.0	0.85	ug/L			01/12/24 09:49	1
1,1-Dichloroethane	ND	F2	1.0	0.50	ug/L			01/12/24 09:49	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/12/24 09:49	1
1,1-Dichloroethene	ND	F2	1.0	0.50	ug/L			01/12/24 09:49	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 09:49	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 09:49	1
2,2-Dichloropropane	ND	F2	1.0	0.50	ug/L			01/12/24 09:49	1
1,1-Dichloropropene	ND	F2	1.0	0.50	ug/L			01/12/24 09:49	1
Ethylbenzene	ND	F2	1.0	0.50	ug/L			01/12/24 09:49	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/12/24 09:49	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/12/24 09:49	1
2-Hexanone	ND		25	1.4	ug/L			01/12/24 09:49	1
Isopropylbenzene	ND	F2	1.0	0.53	ug/L			01/12/24 09:49	1
Methylene bromide	ND		5.0	0.22	ug/L			01/12/24 09:49	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/12/24 09:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/12/24 09:49	1
Methyl tert-butyl ether	**1.7**		1.0	0.22	ug/L			01/12/24 09:49	1
m-Xylene & p-Xylene	ND	F2	5.0	0.63	ug/L			01/12/24 09:49	1
Naphthalene	ND		5.0	3.0	ug/L			01/12/24 09:49	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/12/24 09:49	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/12/24 09:49	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/12/24 09:49	1
o-Xylene	ND		5.0	0.60	ug/L			01/12/24 09:49	1
p-Chlorotoluene	ND	F2	1.0	0.56	ug/L			01/12/24 09:49	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/12/24 09:49	1

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

Job ID: 400-249331-1

Client Sample ID: MW28-ROX-010524

Date Collected: 01/05/24 13:50
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-12

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/12/24 09:49	1
Styrene	ND		1.0	1.0	ug/L			01/12/24 09:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/12/24 09:49	1
1,1,1,2-Tetrachloroethane	ND	F2	1.0	0.16	ug/L			01/12/24 09:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/12/24 09:49	1
Tetrachloroethene	ND	F2	1.0	0.90	ug/L			01/12/24 09:49	1
Toluene	ND	F2 F1	1.0	0.90	ug/L			01/12/24 09:49	1
trans-1,2-Dichloroethene	ND	F2	1.0	0.50	ug/L			01/12/24 09:49	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/12/24 09:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/12/24 09:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/12/24 09:49	1
1,1,1-Trichloroethane	ND	F2	1.0	0.18	ug/L			01/12/24 09:49	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/12/24 09:49	1
Trichloroethene	ND	F2	1.0	0.15	ug/L			01/12/24 09:49	1
Trichlorofluoromethane	ND	F2	1.0	0.52	ug/L			01/12/24 09:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/12/24 09:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/12/24 09:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/12/24 09:49	1
Vinyl acetate	ND	F2	25	0.93	ug/L			01/12/24 09:49	1
Vinyl chloride	ND	F2	1.0	0.50	ug/L			01/12/24 09:49	1
Xylenes, Total	ND		10	1.6	ug/L			01/12/24 09:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 130*		*01/12/24 09:49*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/12/24 09:49*	*1*
Toluene-d8 (Surr)	*88*		*64 - 132*		*01/12/24 09:49*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.22	0.11	ug/L		01/09/24 10:40	01/10/24 20:34	1
Acenaphthylene	ND		0.22	0.048	ug/L		01/09/24 10:40	01/10/24 20:34	1
Anthracene	ND		0.22	0.051	ug/L		01/09/24 10:40	01/10/24 20:34	1
Benzo[a]anthracene	ND		0.22	0.037	ug/L		01/09/24 10:40	01/10/24 20:34	1
Benzo[a]pyrene	ND		0.22	0.070	ug/L		01/09/24 10:40	01/10/24 20:34	1
Benzo[b]fluoranthene	ND		0.22	0.040	ug/L		01/09/24 10:40	01/10/24 20:34	1
Benzo[g,h,i]perylene	ND		0.22	0.029	ug/L		01/09/24 10:40	01/10/24 20:34	1
Benzo[k]fluoranthene	ND		0.22	0.068	ug/L		01/09/24 10:40	01/10/24 20:34	1
Chrysene	ND		0.22	0.036	ug/L		01/09/24 10:40	01/10/24 20:34	1
Dibenz(a,h)anthracene	ND		0.22	0.052	ug/L		01/09/24 10:40	01/10/24 20:34	1
Fluoranthene	ND		0.22	0.037	ug/L		01/09/24 10:40	01/10/24 20:34	1
Fluorene	ND		0.22	0.097	ug/L		01/09/24 10:40	01/10/24 20:34	1
Indeno[1,2,3-cd]pyrene	ND		0.22	0.037	ug/L		01/09/24 10:40	01/10/24 20:34	1
Phenanthrene	ND		0.22	0.098	ug/L		01/09/24 10:40	01/10/24 20:34	1
Pyrene	ND		0.22	0.043	ug/L		01/09/24 10:40	01/10/24 20:34	1
1-Methylnaphthalene	ND		0.22	0.087	ug/L		01/09/24 10:40	01/10/24 20:34	1
2-Methylnaphthalene	ND		0.22	0.072	ug/L		01/09/24 10:40	01/10/24 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*80*		*18 - 147*	*01/09/24 10:40*	*01/10/24 20:34*	*1*
2-Fluorobiphenyl	*71*		*15 - 128*	*01/09/24 10:40*	*01/10/24 20:34*	*1*

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

Job ID: 400-249331-1

Client Sample ID: MW28-ROX-010524

Date Collected: 01/05/24 13:50
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-12

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*73*		*10 - 144*	*01/09/24 10:40*	*01/10/24 20:34*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	9.5	ug/L		01/09/24 10:40	01/09/24 21:09	1
Benzenethiol	ND		11	11	ug/L		01/09/24 10:40	01/09/24 21:09	1
Benzoic acid	ND		33	26	ug/L		01/09/24 10:40	01/09/24 21:09	1
Benzyl alcohol	ND		11	8.0	ug/L		01/09/24 10:40	01/09/24 21:09	1
Bis(2-chloroethoxy)methane	ND		11	5.0	ug/L		01/09/24 10:40	01/09/24 21:09	1
Bis(2-chloroethyl)ether	ND		11	4.3	ug/L		01/09/24 10:40	01/09/24 21:09	1
bis (2-chloroisopropyl) ether	ND		11	2.0	ug/L		01/09/24 10:40	01/09/24 21:09	1
Bis(2-ethylhexyl) phthalate	ND		11	9.7	ug/L		01/09/24 10:40	01/09/24 21:09	1
4-Bromophenyl phenyl ether	ND		11	9.4	ug/L		01/09/24 10:40	01/09/24 21:09	1
Butyl benzyl phthalate	ND		11	6.3	ug/L		01/09/24 10:40	01/09/24 21:09	1
4-Chloroaniline	ND		11	5.1	ug/L		01/09/24 10:40	01/09/24 21:09	1
4-Chloro-3-methylphenol	ND		11	5.8	ug/L		01/09/24 10:40	01/09/24 21:09	1
2-Chloronaphthalene	ND		11	4.1	ug/L		01/09/24 10:40	01/09/24 21:09	1
2-Chlorophenol	ND		11	4.5	ug/L		01/09/24 10:40	01/09/24 21:09	1
4-Chlorophenyl phenyl ether	ND		11	4.0	ug/L		01/09/24 10:40	01/09/24 21:09	1
Dibenz[a,h]acridine	ND		11	3.1	ug/L		01/09/24 10:40	01/09/24 21:09	1
Dibenzofuran	ND		11	4.4	ug/L		01/09/24 10:40	01/09/24 21:09	1
3,3'-Dichlorobenzidine	ND		12	12	ug/L		01/09/24 10:40	01/09/24 21:09	1
2,4-Dichlorophenol	ND		11	4.7	ug/L		01/09/24 10:40	01/09/24 21:09	1
Diethyl phthalate	ND		11	4.8	ug/L		01/09/24 10:40	01/09/24 21:09	1
2,4-Dimethylphenol	ND		11	5.7	ug/L		01/09/24 10:40	01/09/24 21:09	1
Dimethyl phthalate	ND		11	4.6	ug/L		01/09/24 10:40	01/09/24 21:09	1
Di-n-butyl phthalate	ND		11	5.0	ug/L		01/09/24 10:40	01/09/24 21:09	1
4,6-Dinitro-ortho-cresol	ND		11	11	ug/L		01/09/24 10:40	01/09/24 21:09	1
2,4-Dinitrophenol	ND		33	5.0	ug/L		01/09/24 10:40	01/09/24 21:09	1
2,4-Dinitrotoluene	ND		11	5.6	ug/L		01/09/24 10:40	01/09/24 21:09	1
2,6-Dinitrotoluene	ND		11	4.3	ug/L		01/09/24 10:40	01/09/24 21:09	1
Di-n-octyl phthalate	ND		11	6.5	ug/L		01/09/24 10:40	01/09/24 21:09	1
1,4-Dioxane	ND	F1	11	4.7	ug/L		01/09/24 10:40	01/09/24 21:09	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	3.6	ug/L		01/09/24 10:40	01/09/24 21:09	1
Hexachlorobenzene	ND		11	11	ug/L		01/09/24 10:40	01/09/24 21:09	1
Hexachlorocyclopentadiene	ND		22	4.9	ug/L		01/09/24 10:40	01/09/24 21:09	1
Hexachloroethane	ND		11	5.7	ug/L		01/09/24 10:40	01/09/24 21:09	1
Indene	ND		11	3.9	ug/L		01/09/24 10:40	01/09/24 21:09	1
Isophorone	ND		11	5.7	ug/L		01/09/24 10:40	01/09/24 21:09	1
2-Methylphenol	ND		11	3.5	ug/L		01/09/24 10:40	01/09/24 21:09	1
3 & 4 Methylphenol	ND		22	5.0	ug/L		01/09/24 10:40	01/09/24 21:09	1
2-Nitroaniline	ND		11	5.5	ug/L		01/09/24 10:40	01/09/24 21:09	1
3-Nitroaniline	ND		11	5.1	ug/L		01/09/24 10:40	01/09/24 21:09	1
4-Nitroaniline	ND		11	4.5	ug/L		01/09/24 10:40	01/09/24 21:09	1
Nitrobenzene	ND		11	5.1	ug/L		01/09/24 10:40	01/09/24 21:09	1
2-Nitrophenol	ND		11	5.0	ug/L		01/09/24 10:40	01/09/24 21:09	1
4-Nitrophenol	ND		11	3.6	ug/L		01/09/24 10:40	01/09/24 21:09	1
N-Nitrosodimethylamine	ND		11	2.4	ug/L		01/09/24 10:40	01/09/24 21:09	1

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

Job ID: 400-249331-1

Client Sample ID: MW28-ROX-010524

Lab Sample ID: 400-249331-12

Date Collected: 01/05/24 13:50

Matrix: Water

Date Received: 01/08/24 09:59

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		11	2.7	ug/L		01/09/24 10:40	01/09/24 21:09	1
N-Nitrosodiphenylamine	ND		11	4.0	ug/L		01/09/24 10:40	01/09/24 21:09	1
Pentachlorophenol	ND		22	13	ug/L		01/09/24 10:40	01/09/24 21:09	1
Phenol	ND		11	4.6	ug/L		01/09/24 10:40	01/09/24 21:09	1
Pyridine	ND	F1	11	11	ug/L		01/09/24 10:40	01/09/24 21:09	1
Quinoline	ND		11	2.6	ug/L		01/09/24 10:40	01/09/24 21:09	1
2,4,5-Trichlorophenol	ND		11	4.4	ug/L		01/09/24 10:40	01/09/24 21:09	1
2,4,6-Trichlorophenol	ND		11	3.8	ug/L		01/09/24 10:40	01/09/24 21:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*21 - 114*	*01/09/24 10:40*	*01/09/24 21:09*	*1*
2-Fluorophenol	*54*		*10 - 105*	*01/09/24 10:40*	*01/09/24 21:09*	*1*
Nitrobenzene-d5	*62*		*16 - 127*	*01/09/24 10:40*	*01/09/24 21:09*	*1*
Phenol-d5	*41*		*10 - 129*	*01/09/24 10:40*	*01/09/24 21:09*	*1*
Terphenyl-d14	*88*		*13 - 150*	*01/09/24 10:40*	*01/09/24 21:09*	*1*
2,4,6-Tribromophenol	*65*		*10 - 150*	*01/09/24 10:40*	*01/09/24 21:09*	*1*

Method: EPA 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		01/10/24 14:08	01/11/24 16:14	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/10/24 14:08	01/11/24 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*51 - 149*	*01/10/24 14:08*	*01/11/24 16:14*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Job ID: 400-249331-1
Project/Site: ROXANA QUARTERLY GW

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.

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: 400-249331-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-130)	(75-126)	(64-132)
400-249331-1	TB-ROX-010524-8260-A	91	109	91
400-249331-3	MW1-ROX-010524-EB	91	104	91
400-249331-4	MW1-ROX-010524	90	106	93
400-249331-5	MW26-ROX-010524	90	105	93
400-249331-5 MS	MW26-ROX-010524	96	102	96
400-249331-5 MSD	MW26-ROX-010524	97	101	95
400-249331-6	MW11-ROX-010524	90	107	91
400-249331-8	TB-ROX-010524-8260-B	90	103	92
400-249331-9	MW9-ROX-010524-EB	91	104	90
400-249331-10	MW9-ROX-010524	89	105	89
400-249331-11	MW10-ROX-010524	89	108	91
400-249331-12	MW28-ROX-010524	91	104	88
400-249331-12 MS	MW28-ROX-010524	95	101	96
400-249331-12 MSD	MW28-ROX-010524	98	103	93
LCS 400-657335/1002	Lab Control Sample	96	100	98
LCS 400-657479/1002	Lab Control Sample	94	99	98
MB 400-657335/5	Method Blank	90	104	91
MB 400-657479/5	Method Blank	92	106	91

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - 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	(21-114)	(10-105)	(16-127)	(10-129)	(13-150)	(10-150)
400-249331-3	MW1-ROX-010524-EB	72	52	62	37	84	55
400-249331-4	MW1-ROX-010524	73	52	66	31	92	60
400-249331-5	MW26-ROX-010524	74	53	67	37	87	55
400-249331-5 MS	MW26-ROX-010524	78	56	68	49	89	78
400-249331-5 MSD	MW26-ROX-010524	79	64	74	55	89	82
400-249331-6	MW11-ROX-010524	74	56	70	41	90	61
400-249331-9	MW9-ROX-010524-EB	65	49	61	35	81	47
400-249331-10	MW9-ROX-010524	75	55	64	39	89	56
400-249331-11	MW10-ROX-010524	74	53	64	38	88	53
400-249331-12	MW28-ROX-010524	70	54	62	41	88	65
400-249331-12 MS	MW28-ROX-010524	77	62	72	54	84	78
400-249331-12 MSD	MW28-ROX-010524	81	65	74	56	88	79
LCS 400-657077/20-A	Lab Control Sample	72	59	65	48	91	60
LCS 400-657077/2-A	Lab Control Sample	76	62	72	55	86	83
LCSD 400-657077/21-A	Lab Control Sample Dup	73	58	63	46	92	63
MB 400-657077/1-A	Method Blank	68	48	61	34	83	63

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5

Surrogate Summary

Client: AECOM Technical Services Inc. Job ID: 400-249331-1
Project/Site: ROXANA QUARTERLY GW

PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-249331-3	MW1-ROX-010524-EB	88	80	80
400-249331-4	MW1-ROX-010524	83	77	80
400-249331-5	MW26-ROX-010524	83	77	79
400-249331-5 MS	MW26-ROX-010524	82	87	68
400-249331-5 MSD	MW26-ROX-010524	85	89	69
400-249331-6	MW11-ROX-010524	86	80	85
400-249331-9	MW9-ROX-010524-EB	78	70	71
400-249331-10	MW9-ROX-010524	87	81	81
400-249331-11	MW10-ROX-010524	81	80	81
400-249331-12	MW28-ROX-010524	80	71	73
400-249331-12 MS	MW28-ROX-010524	81	90	70
400-249331-12 MSD	MW28-ROX-010524	80	88	68
LCS 400-657077/2-A	Lab Control Sample	82	91	69
MB 400-657077/1-A	Method Blank	88	74	73

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-249331-2	TB-ROX-010524-8011-A	101
400-249331-3	MW1-ROX-010524-EB	103
400-249331-4	MW1-ROX-010524	99
400-249331-5	MW26-ROX-010524	102
400-249331-5 MS	MW26-ROX-010524	82
400-249331-5 MSD	MW26-ROX-010524	99
400-249331-6	MW11-ROX-010524	95
400-249331-7	TB-ROX-010524-8011-B	86
400-249331-9	MW9-ROX-010524-EB	84
400-249331-10	MW9-ROX-010524	107
400-249331-11	MW10-ROX-010524	109
400-249331-12	MW28-ROX-010524	98
400-249331-12 MS	MW28-ROX-010524	80
400-249331-12 MSD	MW28-ROX-010524	90
LCS 400-657281/2-A	Lab Control Sample	89 p
LCSD 400-657281/3-A	Lab Control Sample Dup	71 p
MB 400-657281/1-A	Method Blank	74 p

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-249331-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins 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: 400-249331-1

Client Sample ID: TB-ROX-010524-8260-A
Lab Sample ID: 400-249331-1
Date Collected: 01/05/24 00:00
Matrix: Water
Date Received: 01/08/24 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657335	01/11/24 15:16	WPD	EET PEN

Client Sample ID: TB-ROX-010524-8011-A
Lab Sample ID: 400-249331-2
Date Collected: 01/05/24 00:00
Matrix: Water
Date Received: 01/08/24 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.4 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657341	01/11/24 11:55	PG	EET PEN

Client Sample ID: MW1-ROX-010524-EB
Lab Sample ID: 400-249331-3
Date Collected: 01/05/24 09:40
Matrix: Water
Date Received: 01/08/24 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657335	01/11/24 09:18	WPD	EET PEN
Total/NA	Prep	3510C			255.6 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657097	01/09/24 17:49	S1B	EET PEN
Total/NA	Prep	3510C			255.6 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657220	01/10/24 17:29	TH	EET PEN
Total/NA	Prep	8011			34 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657341	01/11/24 12:16	PG	EET PEN

Client Sample ID: MW1-ROX-010524
Lab Sample ID: 400-249331-4
Date Collected: 01/05/24 11:00
Matrix: Water
Date Received: 01/08/24 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657335	01/11/24 17:36	WPD	EET PEN
Total/NA	Prep	3510C			255.6 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657097	01/09/24 18:11	S1B	EET PEN
Total/NA	Prep	3510C			255.6 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657220	01/10/24 17:50	TH	EET PEN
Total/NA	Prep	8011			34.8 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657341	01/11/24 12:38	PG	EET PEN

Client Sample ID: MW26-ROX-010524
Lab Sample ID: 400-249331-5
Date Collected: 01/05/24 12:30
Matrix: Water
Date Received: 01/08/24 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657335	01/11/24 10:09	WPD	EET PEN
Total/NA	Prep	3510C			253 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657097	01/09/24 18:34	S1B	EET PEN

Client Sample ID: MW26-ROX-010524

Lab Sample ID: 400-249331-5

Date Collected: 01/05/24 12:30

Matrix: Water

Date Received: 01/08/24 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			253 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657220	01/10/24 18:10	TH	EET PEN
Total/NA	Prep	8011			35.8 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657341	01/11/24 13:00	PG	EET PEN

Client Sample ID: MW11-ROX-010524

Lab Sample ID: 400-249331-6

Date Collected: 01/05/24 13:50

Matrix: Water

Date Received: 01/08/24 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657335	01/11/24 18:01	WPD	EET PEN
Total/NA	Prep	3510C			242 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657097	01/09/24 19:40	S1B	EET PEN
Total/NA	Prep	3510C			242 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657220	01/10/24 19:12	TH	EET PEN
Total/NA	Prep	8011			35.1 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657341	01/11/24 14:04	PG	EET PEN

Client Sample ID: TB-ROX-010524-8011-B

Lab Sample ID: 400-249331-7

Date Collected: 01/05/24 00:00

Matrix: Water

Date Received: 01/08/24 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.6 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657341	01/11/24 14:26	PG	EET PEN

Client Sample ID: TB-ROX-010524-8260-B

Lab Sample ID: 400-249331-8

Date Collected: 01/05/24 00:00

Matrix: Water

Date Received: 01/08/24 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657335	01/11/24 16:25	WPD	EET PEN

Client Sample ID: MW9-ROX-010524-EB

Lab Sample ID: 400-249331-9

Date Collected: 01/05/24 09:45

Matrix: Water

Date Received: 01/08/24 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657335	01/11/24 09:44	WPD	EET PEN
Total/NA	Prep	3510C			247.6 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657097	01/09/24 20:02	S1B	EET PEN
Total/NA	Prep	3510C			247.6 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657220	01/10/24 19:32	TH	EET PEN
Total/NA	Prep	8011			34.5 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657341	01/11/24 14:47	PG	EET PEN

Client Sample ID: MW9-ROX-010524

Lab Sample ID: 400-249331-10

Date Collected: 01/05/24 10:55

Matrix: Water

Date Received: 01/08/24 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657335	01/11/24 18:26	WPD	EET PEN
Total/NA	Prep	3510C			236.2 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657097	01/09/24 20:24	S1B	EET PEN
Total/NA	Prep	3510C			236.2 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657220	01/10/24 19:53	TH	EET PEN
Total/NA	Prep	8011			35.3 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657341	01/11/24 15:30	PG	EET PEN

Client Sample ID: MW10-ROX-010524

Lab Sample ID: 400-249331-11

Date Collected: 01/05/24 11:55

Matrix: Water

Date Received: 01/08/24 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657335	01/11/24 18:51	WPD	EET PEN
Total/NA	Prep	3510C			234 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657097	01/09/24 20:47	S1B	EET PEN
Total/NA	Prep	3510C			234 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657220	01/10/24 20:13	TH	EET PEN
Total/NA	Prep	8011			35 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657341	01/11/24 15:52	PG	EET PEN

Client Sample ID: MW28-ROX-010524

Lab Sample ID: 400-249331-12

Date Collected: 01/05/24 13:50

Matrix: Water

Date Received: 01/08/24 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657479	01/12/24 09:49	WPD	EET PEN
Total/NA	Prep	3510C			229.2 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657097	01/09/24 21:09	S1B	EET PEN
Total/NA	Prep	3510C			229.2 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657220	01/10/24 20:34	TH	EET PEN
Total/NA	Prep	8011			34.4 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657341	01/11/24 16:14	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-657077/1-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	3510C			250 mL	1 mL	657077	01/09/24 10:39	AS	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657097	01/09/24 15:58	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	657077	01/09/24 10:39	AS	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657220	01/10/24 16:28	TH	EET PEN

Lab Chronicle

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

Job ID: 400-249331-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-657281/1-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	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657319	01/10/24 17:10	DS	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-657335/5
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	8260D		1	5 mL	5 mL	657335	01/11/24 08:52	WPD	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-657479/5
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	8260D		1	5 mL	5 mL	657479	01/12/24 08:36	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657077/20-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	3510C			250 mL	1 mL	657077	01/09/24 10:44	AS	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657097	01/09/24 17:05	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657077/2-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	3510C			250 mL	1 mL	657077	01/09/24 10:39	AS	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657097	01/09/24 16:42	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	657077	01/09/24 10:39	AS	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	657220	01/10/24 17:09	TH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657281/2-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	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657319	01/10/24 17:32	DS	EET PEN

Lab Chronicle

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

Job ID: 400-249331-1

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-657335/1002
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	8260D		1	5 mL	5 mL	657335	01/11/24 07:40	WPD	EET PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-657479/1002
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	8260D		1	5 mL	5 mL	657479	01/12/24 07:22	WPD	EET PEN

Client Sample ID: Lab Control Sample Dup
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-657077/21-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	3510C			250 mL	1 mL	657077	01/09/24 10:44	AS	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657097	01/09/24 17:27	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-657281/3-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	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657319	01/10/24 17:53	DS	EET PEN

Client Sample ID: MW26-ROX-010524
Date Collected: 01/05/24 12:30
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-5 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	8260D		1	5 mL	5 mL	657335	01/11/24 13:59	WPD	EET PEN
Total/NA	Prep	3510C			256.6 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657097	01/09/24 18:56	S1B	EET PEN
Total/NA	Prep	3510C			256.6 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	657220	01/10/24 18:31	TH	EET PEN
Total/NA	Prep	8011			35.4 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657341	01/11/24 13:21	PG	EET PEN

Client Sample ID: MW26-ROX-010524
Date Collected: 01/05/24 12:30
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-5 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	8260D		1	5 mL	5 mL	657335	01/11/24 14:24	WPD	EET PEN
Total/NA	Prep	3510C			249.8 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657097	01/09/24 19:18	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-249331-1

Client Sample ID: MW26-ROX-010524
Date Collected: 01/05/24 12:30
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-5 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	Prep	3510C			249.8 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	657220	01/10/24 18:51	TH	EET PEN
Total/NA	Prep	8011			35.5 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657341	01/11/24 13:43	PG	EET PEN

Client Sample ID: MW28-ROX-010524
Date Collected: 01/05/24 13:50
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-12 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	8260D		1	5 mL	5 mL	657479	01/12/24 12:14	WPD	EET PEN
Total/NA	Prep	3510C			237.8 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657097	01/09/24 21:31	S1B	EET PEN
Total/NA	Prep	3510C			237.8 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	657220	01/10/24 20:55	TH	EET PEN
Total/NA	Prep	8011			35.5 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657341	01/11/24 16:36	PG	EET PEN

Client Sample ID: MW28-ROX-010524
Date Collected: 01/05/24 13:50
Date Received: 01/08/24 09:59

Lab Sample ID: 400-249331-12 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	8260D		1	5 mL	5 mL	657479	01/12/24 12:38	WPD	EET PEN
Total/NA	Prep	3510C			246.2 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657097	01/09/24 21:54	S1B	EET PEN
Total/NA	Prep	3510C			246.2 mL	1 mL	657077	01/09/24 10:40	AS	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	657220	01/10/24 21:15	TH	EET PEN
Total/NA	Prep	8011			34.8 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657341	01/11/24 16:57	PG	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 657335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249331-1	TB-ROX-010524-8260-A	Total/NA	Water	8260D	
400-249331-3	MW1-ROX-010524-EB	Total/NA	Water	8260D	
400-249331-4	MW1-ROX-010524	Total/NA	Water	8260D	
400-249331-5	MW26-ROX-010524	Total/NA	Water	8260D	
400-249331-6	MW11-ROX-010524	Total/NA	Water	8260D	
400-249331-8	TB-ROX-010524-8260-B	Total/NA	Water	8260D	
400-249331-9	MW9-ROX-010524-EB	Total/NA	Water	8260D	
400-249331-10	MW9-ROX-010524	Total/NA	Water	8260D	
400-249331-11	MW10-ROX-010524	Total/NA	Water	8260D	
MB 400-657335/5	Method Blank	Total/NA	Water	8260D	
LCS 400-657335/1002	Lab Control Sample	Total/NA	Water	8260D	
400-249331-5 MS	MW26-ROX-010524	Total/NA	Water	8260D	
400-249331-5 MSD	MW26-ROX-010524	Total/NA	Water	8260D	

Analysis Batch: 657479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249331-12	MW28-ROX-010524	Total/NA	Water	8260D	
MB 400-657479/5	Method Blank	Total/NA	Water	8260D	
LCS 400-657479/1002	Lab Control Sample	Total/NA	Water	8260D	
400-249331-12 MS	MW28-ROX-010524	Total/NA	Water	8260D	
400-249331-12 MSD	MW28-ROX-010524	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 657077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249331-3	MW1-ROX-010524-EB	Total/NA	Water	3510C	
400-249331-4	MW1-ROX-010524	Total/NA	Water	3510C	
400-249331-5	MW26-ROX-010524	Total/NA	Water	3510C	
400-249331-6	MW11-ROX-010524	Total/NA	Water	3510C	
400-249331-9	MW9-ROX-010524-EB	Total/NA	Water	3510C	
400-249331-10	MW9-ROX-010524	Total/NA	Water	3510C	
400-249331-11	MW10-ROX-010524	Total/NA	Water	3510C	
400-249331-12	MW28-ROX-010524	Total/NA	Water	3510C	
MB 400-657077/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-657077/20-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-657077/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-657077/21-A	Lab Control Sample Dup	Total/NA	Water	3510C	
400-249331-5 MS	MW26-ROX-010524	Total/NA	Water	3510C	
400-249331-5 MSD	MW26-ROX-010524	Total/NA	Water	3510C	
400-249331-12 MS	MW28-ROX-010524	Total/NA	Water	3510C	
400-249331-12 MSD	MW28-ROX-010524	Total/NA	Water	3510C	

Analysis Batch: 657097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249331-3	MW1-ROX-010524-EB	Total/NA	Water	8270E	657077
400-249331-4	MW1-ROX-010524	Total/NA	Water	8270E	657077
400-249331-5	MW26-ROX-010524	Total/NA	Water	8270E	657077
400-249331-6	MW11-ROX-010524	Total/NA	Water	8270E	657077
400-249331-9	MW9-ROX-010524-EB	Total/NA	Water	8270E	657077
400-249331-10	MW9-ROX-010524	Total/NA	Water	8270E	657077

GC/MS Semi VOA (Continued)

Analysis Batch: 657097 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249331-11	MW10-ROX-010524	Total/NA	Water	8270E	657077
400-249331-12	MW28-ROX-010524	Total/NA	Water	8270E	657077
MB 400-657077/1-A	Method Blank	Total/NA	Water	8270E	657077
LCS 400-657077/20-A	Lab Control Sample	Total/NA	Water	8270E	657077
LCS 400-657077/2-A	Lab Control Sample	Total/NA	Water	8270E	657077
LCSD 400-657077/21-A	Lab Control Sample Dup	Total/NA	Water	8270E	657077
400-249331-5 MS	MW26-ROX-010524	Total/NA	Water	8270E	657077
400-249331-5 MSD	MW26-ROX-010524	Total/NA	Water	8270E	657077
400-249331-12 MS	MW28-ROX-010524	Total/NA	Water	8270E	657077
400-249331-12 MSD	MW28-ROX-010524	Total/NA	Water	8270E	657077

Analysis Batch: 657220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249331-3	MW1-ROX-010524-EB	Total/NA	Water	8270E SIM	657077
400-249331-4	MW1-ROX-010524	Total/NA	Water	8270E SIM	657077
400-249331-5	MW26-ROX-010524	Total/NA	Water	8270E SIM	657077
400-249331-6	MW11-ROX-010524	Total/NA	Water	8270E SIM	657077
400-249331-9	MW9-ROX-010524-EB	Total/NA	Water	8270E SIM	657077
400-249331-10	MW9-ROX-010524	Total/NA	Water	8270E SIM	657077
400-249331-11	MW10-ROX-010524	Total/NA	Water	8270E SIM	657077
400-249331-12	MW28-ROX-010524	Total/NA	Water	8270E SIM	657077
MB 400-657077/1-A	Method Blank	Total/NA	Water	8270E SIM	657077
LCS 400-657077/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	657077
400-249331-5 MS	MW26-ROX-010524	Total/NA	Water	8270E SIM	657077
400-249331-5 MSD	MW26-ROX-010524	Total/NA	Water	8270E SIM	657077
400-249331-12 MS	MW28-ROX-010524	Total/NA	Water	8270E SIM	657077
400-249331-12 MSD	MW28-ROX-010524	Total/NA	Water	8270E SIM	657077

GC Semi VOA

Prep Batch: 657281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249331-2	TB-ROX-010524-8011-A	Total/NA	Water	8011	
400-249331-3	MW1-ROX-010524-EB	Total/NA	Water	8011	
400-249331-4	MW1-ROX-010524	Total/NA	Water	8011	
400-249331-5	MW26-ROX-010524	Total/NA	Water	8011	
400-249331-6	MW11-ROX-010524	Total/NA	Water	8011	
400-249331-7	TB-ROX-010524-8011-B	Total/NA	Water	8011	
400-249331-9	MW9-ROX-010524-EB	Total/NA	Water	8011	
400-249331-10	MW9-ROX-010524	Total/NA	Water	8011	
400-249331-11	MW10-ROX-010524	Total/NA	Water	8011	
400-249331-12	MW28-ROX-010524	Total/NA	Water	8011	
MB 400-657281/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-657281/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-657281/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-249331-5 MS	MW26-ROX-010524	Total/NA	Water	8011	
400-249331-5 MSD	MW26-ROX-010524	Total/NA	Water	8011	
400-249331-12 MS	MW28-ROX-010524	Total/NA	Water	8011	
400-249331-12 MSD	MW28-ROX-010524	Total/NA	Water	8011	

GC Semi VOA

Analysis Batch: 657319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-657281/1-A	Method Blank	Total/NA	Water	8011	657281
LCS 400-657281/2-A	Lab Control Sample	Total/NA	Water	8011	657281
LCSD 400-657281/3-A	Lab Control Sample Dup	Total/NA	Water	8011	657281

Analysis Batch: 657341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249331-2	TB-ROX-010524-8011-A	Total/NA	Water	8011	657281
400-249331-3	MW1-ROX-010524-EB	Total/NA	Water	8011	657281
400-249331-4	MW1-ROX-010524	Total/NA	Water	8011	657281
400-249331-5	MW26-ROX-010524	Total/NA	Water	8011	657281
400-249331-6	MW11-ROX-010524	Total/NA	Water	8011	657281
400-249331-7	TB-ROX-010524-8011-B	Total/NA	Water	8011	657281
400-249331-9	MW9-ROX-010524-EB	Total/NA	Water	8011	657281
400-249331-10	MW9-ROX-010524	Total/NA	Water	8011	657281
400-249331-11	MW10-ROX-010524	Total/NA	Water	8011	657281
400-249331-12	MW28-ROX-010524	Total/NA	Water	8011	657281
400-249331-5 MS	MW26-ROX-010524	Total/NA	Water	8011	657281
400-249331-5 MSD	MW26-ROX-010524	Total/NA	Water	8011	657281
400-249331-12 MS	MW28-ROX-010524	Total/NA	Water	8011	657281
400-249331-12 MSD	MW28-ROX-010524	Total/NA	Water	8011	657281

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-657335/5
Matrix: Water
Analysis Batch: 657335

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			01/11/24 08:52	1
Acrolein	ND		20	3.3	ug/L			01/11/24 08:52	1
Acrylonitrile	ND		10	2.8	ug/L			01/11/24 08:52	1
Benzene	ND		1.0	0.50	ug/L			01/11/24 08:52	1
Bromobenzene	ND		1.0	0.54	ug/L			01/11/24 08:52	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/11/24 08:52	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/11/24 08:52	1
Bromoform	ND		5.0	0.25	ug/L			01/11/24 08:52	1
Bromomethane	ND		1.0	0.98	ug/L			01/11/24 08:52	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/11/24 08:52	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/11/24 08:52	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/11/24 08:52	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/11/24 08:52	1
Chloroethane	ND		1.0	0.76	ug/L			01/11/24 08:52	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/11/24 08:52	1
Chloroform	ND		1.0	0.90	ug/L			01/11/24 08:52	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/11/24 08:52	1
Chloromethane	ND		1.0	0.90	ug/L			01/11/24 08:52	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/11/24 08:52	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/11/24 08:52	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/11/24 08:52	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/11/24 08:52	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/11/24 08:52	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/11/24 08:52	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/11/24 08:52	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/11/24 08:52	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/11/24 08:52	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/11/24 08:52	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 08:52	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 08:52	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/11/24 08:52	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/11/24 08:52	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/11/24 08:52	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/11/24 08:52	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/11/24 08:52	1
2-Hexanone	ND		25	1.4	ug/L			01/11/24 08:52	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/11/24 08:52	1
Methylene bromide	ND		5.0	0.22	ug/L			01/11/24 08:52	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/11/24 08:52	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/11/24 08:52	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/11/24 08:52	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/11/24 08:52	1
Naphthalene	ND		5.0	3.0	ug/L			01/11/24 08:52	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/11/24 08:52	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/11/24 08:52	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/11/24 08:52	1
o-Xylene	ND		5.0	0.60	ug/L			01/11/24 08:52	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/11/24 08:52	1

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

Lab Sample ID: MB 400-657335/5
Matrix: Water
Analysis Batch: 657335

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			01/11/24 08:52	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/11/24 08:52	1
Styrene	ND		1.0	1.0	ug/L			01/11/24 08:52	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/11/24 08:52	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/11/24 08:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/11/24 08:52	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/11/24 08:52	1
Toluene	ND		1.0	0.90	ug/L			01/11/24 08:52	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/11/24 08:52	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/11/24 08:52	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/11/24 08:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/11/24 08:52	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/11/24 08:52	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/11/24 08:52	1
Trichloroethene	ND		1.0	0.15	ug/L			01/11/24 08:52	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/11/24 08:52	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/11/24 08:52	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/11/24 08:52	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/11/24 08:52	1
Vinyl acetate	ND		25	0.93	ug/L			01/11/24 08:52	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/11/24 08:52	1
Xylenes, Total	ND		10	1.6	ug/L			01/11/24 08:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*01/11/24 08:52*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/11/24 08:52*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*01/11/24 08:52*	*1*

Lab Sample ID: LCS 400-657335/1002
Matrix: Water
Analysis Batch: 657335

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	187		ug/L		93	43 - 160
Acrolein	500	542		ug/L		108	38 - 160
Acrylonitrile	500	441		ug/L		88	64 - 142
Benzene	50.0	47.4		ug/L		95	70 - 130
Bromobenzene	50.0	47.4		ug/L		95	70 - 132
Bromochloromethane	50.0	49.9		ug/L		100	70 - 130
Bromodichloromethane	50.0	51.7		ug/L		103	67 - 133
Bromoform	50.0	54.9		ug/L		110	57 - 140
Bromomethane	50.0	58.3		ug/L		117	10 - 160
2-Butanone (MEK)	200	190		ug/L		95	61 - 145
Carbon disulfide	50.0	37.2		ug/L		74	61 - 137
Carbon tetrachloride	50.0	50.8		ug/L		102	61 - 137
Chlorobenzene	50.0	49.3		ug/L		99	70 - 130
Chloroethane	50.0	51.3		ug/L		103	55 - 141
2-Chloroethyl vinyl ether	50.0	46.8		ug/L		94	10 - 160

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

Lab Sample ID: LCS 400-657335/1002
Matrix: Water
Analysis Batch: 657335

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	46.7		ug/L		93	69 - 130
1-Chlorohexane	50.0	43.8		ug/L		88	69 - 130
Chloromethane	50.0	45.7		ug/L		91	58 - 137
cis-1,2-Dichloroethene	50.0	48.4		ug/L		97	68 - 130
cis-1,3-Dichloropropene	50.0	50.6		ug/L		101	69 - 132
Dibromochloromethane	50.0	53.2		ug/L		106	67 - 135
1,2-Dichlorobenzene	50.0	49.5		ug/L		99	67 - 130
1,3-Dichlorobenzene	50.0	48.4		ug/L		97	70 - 130
1,4-Dichlorobenzene	50.0	50.7		ug/L		101	70 - 130
Dichlorodifluoromethane	50.0	46.3		ug/L		93	41 - 146
1,1-Dichloroethane	50.0	46.2		ug/L		92	70 - 130
1,2-Dichloroethane	50.0	47.3		ug/L		95	69 - 130
1,1-Dichloroethene	50.0	43.6		ug/L		87	63 - 134
1,2-Dichloropropane	50.0	46.5		ug/L		93	70 - 130
1,3-Dichloropropane	50.0	46.4		ug/L		93	70 - 130
2,2-Dichloropropane	50.0	47.0		ug/L		94	52 - 135
1,1-Dichloropropene	50.0	45.3		ug/L		91	70 - 130
Ethylbenzene	50.0	47.9		ug/L		96	70 - 130
Ethyl methacrylate	50.0	49.3		ug/L		99	68 - 130
Hexachlorobutadiene	50.0	50.2		ug/L		100	53 - 140
2-Hexanone	200	178		ug/L		89	65 - 137
Isopropylbenzene	50.0	50.4		ug/L		101	70 - 130
Methylene bromide	50.0	48.2		ug/L		96	70 - 130
Methylene Chloride	50.0	47.1		ug/L		94	66 - 135
4-Methyl-2-pentanone (MIBK)	200	189		ug/L		94	69 - 138
Methyl tert-butyl ether	50.0	48.9		ug/L		98	66 - 130
m-Xylene & p-Xylene	50.0	48.6		ug/L		97	70 - 130
Naphthalene	50.0	46.9		ug/L		94	47 - 149
n-Butylbenzene	50.0	46.7		ug/L		93	67 - 130
N-Propylbenzene	50.0	49.0		ug/L		98	70 - 130
o-Chlorotoluene	50.0	45.8		ug/L		92	70 - 130
o-Xylene	50.0	48.8		ug/L		98	70 - 130
p-Chlorotoluene	50.0	46.4		ug/L		93	70 - 130
p-Isopropyltoluene	50.0	48.4		ug/L		97	65 - 130
sec-Butylbenzene	50.0	48.7		ug/L		97	66 - 130
Styrene	50.0	49.3		ug/L		99	70 - 130
tert-Butylbenzene	50.0	46.5		ug/L		93	64 - 139
1,1,1,2-Tetrachloroethane	50.0	51.6		ug/L		103	67 - 131
1,1,2,2-Tetrachloroethane	50.0	45.2		ug/L		90	70 - 131
Tetrachloroethene	50.0	47.9		ug/L		96	65 - 130
Toluene	50.0	47.8		ug/L		96	70 - 130
trans-1,2-Dichloroethene	50.0	44.4		ug/L		89	70 - 130
trans-1,3-Dichloropropene	50.0	49.0		ug/L		98	63 - 130
1,2,3-Trichlorobenzene	50.0	48.4		ug/L		97	60 - 138
1,2,4-Trichlorobenzene	50.0	48.5		ug/L		97	60 - 140
1,1,1-Trichloroethane	50.0	48.1		ug/L		96	68 - 130
1,1,2-Trichloroethane	50.0	48.9		ug/L		98	70 - 130
Trichloroethene	50.0	50.9		ug/L		102	70 - 130
Trichlorofluoromethane	50.0	48.9		ug/L		98	65 - 138

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

Lab Sample ID: LCS 400-657335/1002
Matrix: Water
Analysis Batch: 657335

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	47.8		ug/L		96	70 - 130
1,2,4-Trimethylbenzene	50.0	46.4		ug/L		93	70 - 130
1,3,5-Trimethylbenzene	50.0	47.0		ug/L		94	69 - 130
Vinyl acetate	100	112		ug/L		112	26 - 160
Vinyl chloride	50.0	47.9		ug/L		96	59 - 136
Xylenes, Total	100	97.4		ug/L		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*72 - 130*
Dibromofluoromethane	*100*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Lab Sample ID: 400-249331-5 MS
Matrix: Water
Analysis Batch: 657335

Client Sample ID: MW26-ROX-010524
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND		200	190		ug/L		95	43 - 150
Acrolein	ND		500	531		ug/L		106	38 - 150
Acrylonitrile	ND		500	510		ug/L		102	62 - 149
Benzene	ND		50.0	47.5		ug/L		95	56 - 142
Bromobenzene	ND		50.0	41.9		ug/L		84	59 - 136
Bromochloromethane	ND		50.0	51.3		ug/L		103	64 - 140
Bromodichloromethane	ND		50.0	53.1		ug/L		106	59 - 143
Bromoform	ND		50.0	55.6		ug/L		111	50 - 140
Bromomethane	ND		50.0	52.4		ug/L		105	10 - 150
2-Butanone (MEK)	ND		200	213		ug/L		106	55 - 150
Carbon disulfide	ND		50.0	37.4		ug/L		75	48 - 150
Carbon tetrachloride	ND		50.0	51.9		ug/L		104	55 - 145
Chlorobenzene	ND		50.0	44.2		ug/L		88	64 - 130
Chloroethane	ND		50.0	46.0		ug/L		92	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	47.8		ug/L		96	60 - 141
1-Chlorohexane	ND		50.0	37.2		ug/L		74	56 - 136
Chloromethane	ND		50.0	39.9		ug/L		80	49 - 148
cis-1,2-Dichloroethene	ND		50.0	50.1		ug/L		100	59 - 143
cis-1,3-Dichloropropene	ND		50.0	51.4		ug/L		103	57 - 140
Dibromochloromethane	ND		50.0	53.3		ug/L		107	56 - 143
1,2-Dichlorobenzene	ND		50.0	42.8		ug/L		86	52 - 137
1,3-Dichlorobenzene	ND		50.0	39.5		ug/L		79	54 - 135
1,4-Dichlorobenzene	ND		50.0	40.1		ug/L		80	53 - 135
Dichlorodifluoromethane	ND		50.0	40.4		ug/L		81	16 - 150
1,1-Dichloroethane	ND		50.0	47.3		ug/L		95	61 - 144
1,2-Dichloroethane	ND		50.0	50.6		ug/L		101	60 - 141
1,1-Dichloroethene	ND		50.0	45.6		ug/L		91	54 - 147
1,2-Dichloropropane	ND		50.0	48.7		ug/L		97	66 - 137
1,3-Dichloropropane	ND		50.0	47.5		ug/L		95	66 - 133
2,2-Dichloropropane	ND		50.0	48.0		ug/L		96	42 - 144

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

Lab Sample ID: 400-249331-5 MS
Matrix: Water
Analysis Batch: 657335

Client Sample ID: MW26-ROX-010524
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	42.0		ug/L		84	58 - 131
Ethyl methacrylate	ND		50.0	50.2		ug/L		100	64 - 130
Hexachlorobutadiene	ND		50.0	33.7		ug/L		67	31 - 149
2-Hexanone	ND		200	191		ug/L		95	65 - 140
Isopropylbenzene	ND		50.0	41.1		ug/L		82	56 - 133
Methylene bromide	ND		50.0	52.3		ug/L		105	63 - 138
Methylene Chloride	ND		50.0	51.1		ug/L		102	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	210		ug/L		105	63 - 146
Methyl tert-butyl ether	ND		50.0	54.3		ug/L		109	59 - 137
m-Xylene & p-Xylene	ND		50.0	41.9		ug/L		84	57 - 130
Naphthalene	ND		50.0	43.6		ug/L		87	25 - 150
n-Butylbenzene	ND		50.0	33.5		ug/L		67	41 - 142
N-Propylbenzene	ND		50.0	38.0		ug/L		76	51 - 138
o-Chlorotoluene	ND		50.0	37.7		ug/L		75	53 - 134
o-Xylene	ND		50.0	42.9		ug/L		86	61 - 130
p-Chlorotoluene	ND		50.0	37.4		ug/L		75	54 - 133
p-Isopropyltoluene	ND		50.0	36.7		ug/L		73	48 - 139
sec-Butylbenzene	ND		50.0	38.3		ug/L		77	50 - 138
Styrene	ND		50.0	42.7		ug/L		85	58 - 131
tert-Butylbenzene	ND		50.0	41.5		ug/L		83	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	50.9		ug/L		102	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	46.3		ug/L		93	66 - 135
Tetrachloroethene	ND		50.0	42.8		ug/L		86	52 - 133
Toluene	ND		50.0	45.0		ug/L		90	65 - 130
trans-1,2-Dichloroethene	ND		50.0	44.4		ug/L		89	61 - 143
trans-1,3-Dichloropropene	ND		50.0	47.5		ug/L		95	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	38.5		ug/L		77	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	38.0		ug/L		76	39 - 148
1,1,1-Trichloroethane	ND		50.0	49.4		ug/L		99	57 - 142
1,1,2-Trichloroethane	ND		50.0	50.3		ug/L		101	66 - 131
Trichloroethene	ND		50.0	50.0		ug/L		100	64 - 136
Trichlorofluoromethane	ND		50.0	44.5		ug/L		89	54 - 150
1,2,3-Trichloropropane	ND		50.0	49.5		ug/L		99	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	37.6		ug/L		75	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	38.9		ug/L		78	52 - 135
Vinyl acetate	ND		100	110		ug/L		110	26 - 150
Vinyl chloride	ND		50.0	42.7		ug/L		85	46 - 150
Xylenes, Total	ND		100	84.8		ug/L		85	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*72 - 130*
Dibromofluoromethane	*102*		*75 - 126*
Toluene-d8 (Surr)	*96*		*64 - 132*

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

Lab Sample ID: 400-249331-5 MSD
Matrix: Water
Analysis Batch: 657335

Client Sample ID: MW26-ROX-010524
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	197		ug/L		99	43 - 150	4	30
Acrolein	ND		500	540		ug/L		108	38 - 150	2	31
Acrylonitrile	ND		500	507		ug/L		101	62 - 149	0	30
Benzene	ND		50.0	45.6		ug/L		91	56 - 142	4	30
Bromobenzene	ND		50.0	37.9		ug/L		76	59 - 136	10	30
Bromochloromethane	ND		50.0	48.9		ug/L		98	64 - 140	5	30
Bromodichloromethane	ND		50.0	50.8		ug/L		102	59 - 143	4	30
Bromoform	ND		50.0	52.7		ug/L		105	50 - 140	5	30
Bromomethane	ND		50.0	51.9		ug/L		104	10 - 150	1	50
2-Butanone (MEK)	ND		200	213		ug/L		106	55 - 150	0	30
Carbon disulfide	ND		50.0	36.3		ug/L		73	48 - 150	3	30
Carbon tetrachloride	ND		50.0	49.3		ug/L		99	55 - 145	5	30
Chlorobenzene	ND		50.0	41.2		ug/L		82	64 - 130	7	30
Chloroethane	ND		50.0	45.4		ug/L		91	50 - 150	1	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	45.5		ug/L		91	60 - 141	5	30
1-Chlorohexane	ND		50.0	34.5		ug/L		69	56 - 136	8	30
Chloromethane	ND		50.0	39.6		ug/L		79	49 - 148	1	31
cis-1,2-Dichloroethene	ND		50.0	48.5		ug/L		97	59 - 143	3	30
cis-1,3-Dichloropropene	ND		50.0	48.7		ug/L		97	57 - 140	5	30
Dibromochloromethane	ND		50.0	49.9		ug/L		100	56 - 143	7	30
1,2-Dichlorobenzene	ND		50.0	35.8		ug/L		72	52 - 137	18	30
1,3-Dichlorobenzene	ND		50.0	34.3		ug/L		69	54 - 135	14	30
1,4-Dichlorobenzene	ND		50.0	34.0		ug/L		68	53 - 135	16	30
Dichlorodifluoromethane	ND		50.0	39.1		ug/L		78	16 - 150	3	31
1,1-Dichloroethane	ND		50.0	45.9		ug/L		92	61 - 144	3	30
1,2-Dichloroethane	ND		50.0	48.9		ug/L		98	60 - 141	3	30
1,1-Dichloroethene	ND		50.0	42.5		ug/L		85	54 - 147	7	30
1,2-Dichloropropane	ND		50.0	46.5		ug/L		93	66 - 137	5	30
1,3-Dichloropropane	ND		50.0	45.4		ug/L		91	66 - 133	4	30
2,2-Dichloropropane	ND		50.0	46.0		ug/L		92	42 - 144	4	31
1,1-Dichloropropene	ND		50.0	43.2		ug/L		86	65 - 136	5	30
Ethylbenzene	ND		50.0	38.6		ug/L		77	58 - 131	9	30
Ethyl methacrylate	ND		50.0	48.4		ug/L		97	64 - 130	4	30
Hexachlorobutadiene	ND		50.0	28.8		ug/L		58	31 - 149	16	36
2-Hexanone	ND		200	186		ug/L		93	65 - 140	2	30
Isopropylbenzene	ND		50.0	37.4		ug/L		75	56 - 133	9	30
Methylene bromide	ND		50.0	50.0		ug/L		100	63 - 138	5	30
Methylene Chloride	ND		50.0	48.0		ug/L		96	60 - 146	6	32
4-Methyl-2-pentanone (MIBK)	ND		200	207		ug/L		103	63 - 146	1	30
Methyl tert-butyl ether	ND		50.0	53.7		ug/L		107	59 - 137	1	30
m-Xylene & p-Xylene	ND		50.0	38.0		ug/L		76	57 - 130	10	30
Naphthalene	ND		50.0	35.0		ug/L		70	25 - 150	22	30
n-Butylbenzene	ND		50.0	30.4		ug/L		61	41 - 142	10	31
N-Propylbenzene	ND		50.0	35.5		ug/L		71	51 - 138	7	30
o-Chlorotoluene	ND		50.0	35.5		ug/L		71	53 - 134	6	30
o-Xylene	ND		50.0	38.8		ug/L		78	61 - 130	10	30
p-Chlorotoluene	ND		50.0	32.7		ug/L		65	54 - 133	13	30

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

Lab Sample ID: 400-249331-5 MSD
Matrix: Water
Analysis Batch: 657335

Client Sample ID: MW26-ROX-010524
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	33.3		ug/L		67	48 - 139	9	30
sec-Butylbenzene	ND		50.0	35.0		ug/L		70	50 - 138	9	30
Styrene	ND		50.0	38.1		ug/L		76	58 - 131	11	30
tert-Butylbenzene	ND		50.0	38.0		ug/L		76	54 - 146	9	30
1,1,1,2-Tetrachloroethane	ND		50.0	47.2		ug/L		94	59 - 137	8	30
1,1,2,2-Tetrachloroethane	ND		50.0	44.3		ug/L		89	66 - 135	4	30
Tetrachloroethene	ND		50.0	40.4		ug/L		81	52 - 133	6	30
Toluene	ND		50.0	42.1		ug/L		84	65 - 130	7	30
trans-1,2-Dichloroethene	ND		50.0	43.1		ug/L		86	61 - 143	3	30
trans-1,3-Dichloropropene	ND		50.0	45.4		ug/L		91	53 - 133	4	30
1,2,3-Trichlorobenzene	ND		50.0	29.4		ug/L		59	43 - 145	27	30
1,2,4-Trichlorobenzene	ND		50.0	29.1		ug/L		58	39 - 148	27	30
1,1,1-Trichloroethane	ND		50.0	48.4		ug/L		97	57 - 142	2	30
1,1,2-Trichloroethane	ND		50.0	47.6		ug/L		95	66 - 131	6	30
Trichloroethene	ND		50.0	48.2		ug/L		96	64 - 136	4	30
Trichlorofluoromethane	ND		50.0	44.6		ug/L		89	54 - 150	0	30
1,2,3-Trichloropropane	ND		50.0	48.9		ug/L		98	65 - 133	1	30
1,2,4-Trimethylbenzene	ND		50.0	32.9		ug/L		66	50 - 139	13	30
1,3,5-Trimethylbenzene	ND		50.0	34.8		ug/L		70	52 - 135	11	30
Vinyl acetate	ND		100	109		ug/L		109	26 - 150	1	33
Vinyl chloride	ND		50.0	41.4		ug/L		83	46 - 150	3	30
Xylenes, Total	ND		100	76.7		ug/L		77	59 - 130	10	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*72 - 130*
Dibromofluoromethane	*101*		*75 - 126*
Toluene-d8 (Surr)	*95*		*64 - 132*

Lab Sample ID: MB 400-657479/5
Matrix: Water
Analysis Batch: 657479

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			01/12/24 08:36	1
Acrolein	ND		20	3.3	ug/L			01/12/24 08:36	1
Acrylonitrile	ND		10	2.8	ug/L			01/12/24 08:36	1
Benzene	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Bromobenzene	ND		1.0	0.54	ug/L			01/12/24 08:36	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/12/24 08:36	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Bromoform	ND		5.0	0.25	ug/L			01/12/24 08:36	1
Bromomethane	ND		1.0	0.98	ug/L			01/12/24 08:36	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/12/24 08:36	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/12/24 08:36	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/12/24 08:36	1
Chloroethane	ND		1.0	0.76	ug/L			01/12/24 08:36	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/12/24 08:36	1

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

Lab Sample ID: MB 400-657479/5
Matrix: Water
Analysis Batch: 657479

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.0	0.90	ug/L			01/12/24 08:36	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/12/24 08:36	1
Chloromethane	ND		1.0	0.90	ug/L			01/12/24 08:36	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/12/24 08:36	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/12/24 08:36	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/12/24 08:36	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/12/24 08:36	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/12/24 08:36	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/12/24 08:36	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/12/24 08:36	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/12/24 08:36	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/12/24 08:36	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 08:36	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 08:36	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 08:36	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 08:36	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/12/24 08:36	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/12/24 08:36	1
2-Hexanone	ND		25	1.4	ug/L			01/12/24 08:36	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/12/24 08:36	1
Methylene bromide	ND		5.0	0.22	ug/L			01/12/24 08:36	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/12/24 08:36	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/12/24 08:36	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/12/24 08:36	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/12/24 08:36	1
Naphthalene	ND		5.0	3.0	ug/L			01/12/24 08:36	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/12/24 08:36	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/12/24 08:36	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/12/24 08:36	1
o-Xylene	ND		5.0	0.60	ug/L			01/12/24 08:36	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/12/24 08:36	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/12/24 08:36	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/12/24 08:36	1
Styrene	ND		1.0	1.0	ug/L			01/12/24 08:36	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/12/24 08:36	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/12/24 08:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/12/24 08:36	1
Toluene	ND		1.0	0.90	ug/L			01/12/24 08:36	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 08:36	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/12/24 08:36	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/12/24 08:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/12/24 08:36	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/12/24 08:36	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/12/24 08:36	1
Trichloroethene	ND		1.0	0.15	ug/L			01/12/24 08:36	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/12/24 08:36	1

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

Lab Sample ID: MB 400-657479/5
Matrix: Water
Analysis Batch: 657479

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			01/12/24 08:36	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/12/24 08:36	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/12/24 08:36	1
Vinyl acetate	ND		25	0.93	ug/L			01/12/24 08:36	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Xylenes, Total	ND		10	1.6	ug/L			01/12/24 08:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 130*		*01/12/24 08:36*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*01/12/24 08:36*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*01/12/24 08:36*	*1*

Lab Sample ID: LCS 400-657479/1002
Matrix: Water
Analysis Batch: 657479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	183		ug/L		92	43 - 160
Acrolein	500	491		ug/L		98	38 - 160
Acrylonitrile	500	433		ug/L		87	64 - 142
Benzene	50.0	46.0		ug/L		92	70 - 130
Bromobenzene	50.0	45.8		ug/L		92	70 - 132
Bromochloromethane	50.0	47.8		ug/L		96	70 - 130
Bromodichloromethane	50.0	50.1		ug/L		100	67 - 133
Bromoform	50.0	52.3		ug/L		105	57 - 140
Bromomethane	50.0	49.7		ug/L		99	10 - 160
2-Butanone (MEK)	200	190		ug/L		95	61 - 145
Carbon disulfide	50.0	35.4		ug/L		71	61 - 137
Carbon tetrachloride	50.0	49.7		ug/L		99	61 - 137
Chlorobenzene	50.0	47.7		ug/L		95	70 - 130
Chloroethane	50.0	45.7		ug/L		91	55 - 141
2-Chloroethyl vinyl ether	50.0	42.4		ug/L		85	10 - 160
Chloroform	50.0	45.4		ug/L		91	69 - 130
1-Chlorohexane	50.0	42.7		ug/L		85	69 - 130
Chloromethane	50.0	41.4		ug/L		83	58 - 137
cis-1,2-Dichloroethene	50.0	47.5		ug/L		95	68 - 130
cis-1,3-Dichloropropene	50.0	49.5		ug/L		99	69 - 132
Dibromochloromethane	50.0	51.1		ug/L		102	67 - 135
1,2-Dichlorobenzene	50.0	47.3		ug/L		95	67 - 130
1,3-Dichlorobenzene	50.0	47.6		ug/L		95	70 - 130
1,4-Dichlorobenzene	50.0	48.4		ug/L		97	70 - 130
Dichlorodifluoromethane	50.0	40.9		ug/L		82	41 - 146
1,1-Dichloroethane	50.0	45.9		ug/L		92	70 - 130
1,2-Dichloroethane	50.0	47.2		ug/L		94	69 - 130
1,1-Dichloroethene	50.0	42.7		ug/L		85	63 - 134
1,2-Dichloropropane	50.0	46.2		ug/L		92	70 - 130
1,3-Dichloropropane	50.0	44.4		ug/L		89	70 - 130
2,2-Dichloropropane	50.0	45.9		ug/L		92	52 - 135

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

Lab Sample ID: LCS 400-657479/1002
Matrix: Water
Analysis Batch: 657479

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	45.0		ug/L		90	70 - 130
Ethylbenzene	50.0	46.4		ug/L		93	70 - 130
Ethyl methacrylate	50.0	45.7		ug/L		91	68 - 130
Hexachlorobutadiene	50.0	50.2		ug/L		100	53 - 140
2-Hexanone	200	169		ug/L		84	65 - 137
Isopropylbenzene	50.0	49.0		ug/L		98	70 - 130
Methylene bromide	50.0	47.7		ug/L		95	70 - 130
Methylene Chloride	50.0	45.1		ug/L		90	66 - 135
4-Methyl-2-pentanone (MIBK)	200	179		ug/L		89	69 - 138
Methyl tert-butyl ether	50.0	47.2		ug/L		94	66 - 130
m-Xylene & p-Xylene	50.0	47.7		ug/L		95	70 - 130
Naphthalene	50.0	43.4		ug/L		87	47 - 149
n-Butylbenzene	50.0	46.0		ug/L		92	67 - 130
N-Propylbenzene	50.0	46.4		ug/L		93	70 - 130
o-Chlorotoluene	50.0	44.9		ug/L		90	70 - 130
o-Xylene	50.0	47.9		ug/L		96	70 - 130
p-Chlorotoluene	50.0	44.4		ug/L		89	70 - 130
p-Isopropyltoluene	50.0	47.5		ug/L		95	65 - 130
sec-Butylbenzene	50.0	47.1		ug/L		94	66 - 130
Styrene	50.0	47.5		ug/L		95	70 - 130
tert-Butylbenzene	50.0	44.9		ug/L		90	64 - 139
1,1,1,2-Tetrachloroethane	50.0	50.4		ug/L		101	67 - 131
1,1,2,2-Tetrachloroethane	50.0	42.2		ug/L		84	70 - 131
Tetrachloroethene	50.0	46.8		ug/L		94	65 - 130
Toluene	50.0	46.6		ug/L		93	70 - 130
trans-1,2-Dichloroethene	50.0	44.3		ug/L		89	70 - 130
trans-1,3-Dichloropropene	50.0	47.2		ug/L		94	63 - 130
1,2,3-Trichlorobenzene	50.0	45.0		ug/L		90	60 - 138
1,2,4-Trichlorobenzene	50.0	46.4		ug/L		93	60 - 140
1,1,1-Trichloroethane	50.0	47.6		ug/L		95	68 - 130
1,1,2-Trichloroethane	50.0	47.4		ug/L		95	70 - 130
Trichloroethene	50.0	49.4		ug/L		99	70 - 130
Trichlorofluoromethane	50.0	44.7		ug/L		89	65 - 138
1,2,3-Trichloropropane	50.0	45.0		ug/L		90	70 - 130
1,2,4-Trimethylbenzene	50.0	45.4		ug/L		91	70 - 130
1,3,5-Trimethylbenzene	50.0	46.2		ug/L		92	69 - 130
Vinyl acetate	100	103		ug/L		103	26 - 160
Vinyl chloride	50.0	43.6		ug/L		87	59 - 136
Xylenes, Total	100	95.6		ug/L		96	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*72 - 130*
Dibromofluoromethane	*99*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

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

Lab Sample ID: 400-249331-12 MS
Matrix: Water
Analysis Batch: 657479

Client Sample ID: MW28-ROX-010524
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND		200	177		ug/L		88	43 - 150
Acrolein	ND	F2	500	521		ug/L		104	38 - 150
Acrylonitrile	ND		500	473		ug/L		95	62 - 149
Benzene	ND	F2	50.0	48.3		ug/L		97	56 - 142
Bromobenzene	ND		50.0	41.8		ug/L		84	59 - 136
Bromochloromethane	ND		50.0	50.5		ug/L		101	64 - 140
Bromodichloromethane	ND		50.0	52.8		ug/L		106	59 - 143
Bromoform	ND		50.0	52.4		ug/L		105	50 - 140
Bromomethane	ND		50.0	60.6		ug/L		121	10 - 150
2-Butanone (MEK)	ND		200	207		ug/L		104	55 - 150
Carbon disulfide	ND	F2	50.0	44.6		ug/L		89	48 - 150
Carbon tetrachloride	ND	F2	50.0	52.8		ug/L		106	55 - 145
Chlorobenzene	ND		50.0	45.0		ug/L		90	64 - 130
Chloroethane	ND	F2	50.0	48.5		ug/L		97	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	4.28	J F1	ug/L		9	10 - 150
Chloroform	ND	F2	50.0	47.6		ug/L		95	60 - 141
1-Chlorohexane	ND	F2 F1	50.0	38.5		ug/L		77	56 - 136
Chloromethane	ND	F2	50.0	41.9		ug/L		84	49 - 148
cis-1,2-Dichloroethene	ND		50.0	50.2		ug/L		100	59 - 143
cis-1,3-Dichloropropene	ND		50.0	50.7		ug/L		101	57 - 140
Dibromochloromethane	ND		50.0	50.4		ug/L		101	56 - 143
1,2-Dichlorobenzene	ND		50.0	42.0		ug/L		84	52 - 137
1,3-Dichlorobenzene	ND		50.0	41.5		ug/L		83	54 - 135
1,4-Dichlorobenzene	ND		50.0	40.5		ug/L		81	53 - 135
Dichlorodifluoromethane	ND	F2	50.0	42.4		ug/L		85	16 - 150
1,1-Dichloroethane	ND	F2	50.0	48.0		ug/L		96	61 - 144
1,2-Dichloroethane	ND		50.0	49.9		ug/L		100	60 - 141
1,1-Dichloroethene	ND	F2	50.0	46.9		ug/L		94	54 - 147
1,2-Dichloropropane	ND		50.0	48.0		ug/L		96	66 - 137
1,3-Dichloropropane	ND		50.0	45.2		ug/L		90	66 - 133
2,2-Dichloropropane	ND	F2	50.0	48.4		ug/L		97	42 - 144
1,1-Dichloropropene	ND	F2	50.0	46.7		ug/L		93	65 - 136
Ethylbenzene	ND	F2	50.0	42.4		ug/L		85	58 - 131
Ethyl methacrylate	ND		50.0	47.1		ug/L		94	64 - 130
Hexachlorobutadiene	ND		50.0	36.2		ug/L		72	31 - 149
2-Hexanone	ND		200	179		ug/L		89	65 - 140
Isopropylbenzene	ND	F2	50.0	42.6		ug/L		85	56 - 133
Methylene bromide	ND		50.0	52.0		ug/L		104	63 - 138
Methylene Chloride	ND		50.0	49.0		ug/L		98	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	196		ug/L		98	63 - 146
Methyl tert-butyl ether	1.7		50.0	53.5		ug/L		104	59 - 137
m-Xylene & p-Xylene	ND	F2	50.0	43.2		ug/L		86	57 - 130
Naphthalene	ND		50.0	42.6		ug/L		85	25 - 150
n-Butylbenzene	ND		50.0	36.3		ug/L		73	41 - 142
N-Propylbenzene	ND		50.0	40.1		ug/L		80	51 - 138
o-Chlorotoluene	ND		50.0	39.4		ug/L		79	53 - 134
o-Xylene	ND		50.0	43.2		ug/L		86	61 - 130
p-Chlorotoluene	ND	F2	50.0	40.5		ug/L		81	54 - 133

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

Lab Sample ID: 400-249331-12 MS
Matrix: Water
Analysis Batch: 657479

Client Sample ID: MW28-ROX-010524
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
p-Isopropyltoluene	ND		50.0	38.9		ug/L		78	48 - 139
sec-Butylbenzene	ND		50.0	40.7		ug/L		81	50 - 138
Styrene	ND		50.0	43.7		ug/L		87	58 - 131
tert-Butylbenzene	ND		50.0	39.5		ug/L		79	54 - 146
1,1,1,2-Tetrachloroethane	ND	F2	50.0	48.5		ug/L		97	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	44.2		ug/L		88	66 - 135
Tetrachloroethene	ND	F2	50.0	44.8		ug/L		90	52 - 133
Toluene	ND	F2 F1	50.0	45.8		ug/L		92	65 - 130
trans-1,2-Dichloroethene	ND	F2	50.0	47.4		ug/L		95	61 - 143
trans-1,3-Dichloropropene	ND		50.0	47.1		ug/L		94	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	38.4		ug/L		77	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	38.2		ug/L		76	39 - 148
1,1,1-Trichloroethane	ND	F2	50.0	50.9		ug/L		102	57 - 142
1,1,2-Trichloroethane	ND		50.0	47.8		ug/L		96	66 - 131
Trichloroethene	ND	F2	50.0	52.9		ug/L		106	64 - 136
Trichlorofluoromethane	ND	F2	50.0	46.0		ug/L		92	54 - 150
1,2,3-Trichloropropane	ND		50.0	46.9		ug/L		94	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	38.8		ug/L		78	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	39.7		ug/L		79	52 - 135
Vinyl acetate	ND	F2	100	112		ug/L		112	26 - 150
Vinyl chloride	ND	F2	50.0	45.6		ug/L		91	46 - 150
Xylenes, Total	ND		100	86.4		ug/L		86	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*72 - 130*
Dibromofluoromethane	*101*		*75 - 126*
Toluene-d8 (Surr)	*96*		*64 - 132*

Lab Sample ID: 400-249331-12 MSD
Matrix: Water
Analysis Batch: 657479

Client Sample ID: MW28-ROX-010524
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	171		ug/L		85	43 - 150	3	30
Acrolein	ND	F2	500	347	F2	ug/L		69	38 - 150	40	31
Acrylonitrile	ND		500	441		ug/L		88	62 - 149	7	30
Benzene	ND	F2	50.0	35.1	F2	ug/L		70	56 - 142	32	30
Bromobenzene	ND		50.0	33.5		ug/L		67	59 - 136	22	30
Bromochloromethane	ND		50.0	39.3		ug/L		79	64 - 140	25	30
Bromodichloromethane	ND		50.0	39.5		ug/L		79	59 - 143	29	30
Bromoform	ND		50.0	42.3		ug/L		85	50 - 140	21	30
Bromomethane	ND		50.0	38.1		ug/L		76	10 - 150	46	50
2-Butanone (MEK)	ND		200	191		ug/L		95	55 - 150	8	30
Carbon disulfide	ND	F2	50.0	30.6	F2	ug/L		61	48 - 150	37	30
Carbon tetrachloride	ND	F2	50.0	36.0	F2	ug/L		72	55 - 145	38	30
Chlorobenzene	ND		50.0	33.3		ug/L		67	64 - 130	30	30
Chloroethane	ND	F2	50.0	31.1	F2	ug/L		62	50 - 150	44	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50

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

Lab Sample ID: 400-249331-12 MSD
Matrix: Water
Analysis Batch: 657479

Client Sample ID: MW28-ROX-010524
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloroform	ND	F2	50.0	34.6	F2	ug/L		69	60 - 141	31	30
1-Chlorohexane	ND	F2 F1	50.0	26.9	F2 F1	ug/L		54	56 - 136	35	30
Chloromethane	ND	F2	50.0	27.0	F2	ug/L		54	49 - 148	43	31
cis-1,2-Dichloroethene	ND		50.0	37.8		ug/L		76	59 - 143	28	30
cis-1,3-Dichloropropene	ND		50.0	39.1		ug/L		78	57 - 140	26	30
Dibromochloromethane	ND		50.0	40.0		ug/L		80	56 - 143	23	30
1,2-Dichlorobenzene	ND		50.0	32.6		ug/L		65	52 - 137	25	30
1,3-Dichlorobenzene	ND		50.0	31.6		ug/L		63	54 - 135	27	30
1,4-Dichlorobenzene	ND		50.0	31.8		ug/L		64	53 - 135	24	30
Dichlorodifluoromethane	ND	F2	50.0	25.7	F2	ug/L		51	16 - 150	49	31
1,1-Dichloroethane	ND	F2	50.0	33.9	F2	ug/L		68	61 - 144	34	30
1,2-Dichloroethane	ND		50.0	40.6		ug/L		81	60 - 141	21	30
1,1-Dichloroethene	ND	F2	50.0	32.8	F2	ug/L		66	54 - 147	35	30
1,2-Dichloropropane	ND		50.0	36.5		ug/L		73	66 - 137	27	30
1,3-Dichloropropane	ND		50.0	37.0		ug/L		74	66 - 133	20	30
2,2-Dichloropropane	ND	F2	50.0	33.8	F2	ug/L		68	42 - 144	36	31
1,1-Dichloropropene	ND	F2	50.0	33.6	F2	ug/L		67	65 - 136	33	30
Ethylbenzene	ND	F2	50.0	30.7	F2	ug/L		61	58 - 131	32	30
Ethyl methacrylate	ND		50.0	39.5		ug/L		79	64 - 130	18	30
Hexachlorobutadiene	ND		50.0	29.9		ug/L		60	31 - 149	19	36
2-Hexanone	ND		200	157		ug/L		78	65 - 140	13	30
Isopropylbenzene	ND	F2	50.0	30.8	F2	ug/L		62	56 - 133	32	30
Methylene bromide	ND		50.0	41.7		ug/L		83	63 - 138	22	30
Methylene Chloride	ND		50.0	35.6		ug/L		71	60 - 146	32	32
4-Methyl-2-pentanone (MIBK)	ND		200	180		ug/L		90	63 - 146	9	30
Methyl tert-butyl ether	1.7		50.0	45.3		ug/L		87	59 - 137	17	30
m-Xylene & p-Xylene	ND	F2	50.0	31.4	F2	ug/L		63	57 - 130	32	30
Naphthalene	ND		50.0	36.7		ug/L		73	25 - 150	15	30
n-Butylbenzene	ND		50.0	26.5		ug/L		53	41 - 142	31	31
N-Propylbenzene	ND		50.0	29.8		ug/L		60	51 - 138	29	30
o-Chlorotoluene	ND		50.0	29.5		ug/L		59	53 - 134	29	30
o-Xylene	ND		50.0	32.4		ug/L		65	61 - 130	29	30
p-Chlorotoluene	ND	F2	50.0	29.5	F2	ug/L		59	54 - 133	32	30
p-Isopropyltoluene	ND		50.0	29.8		ug/L		60	48 - 139	27	30
sec-Butylbenzene	ND		50.0	30.3		ug/L		61	50 - 138	29	30
Styrene	ND		50.0	32.5		ug/L		65	58 - 131	29	30
tert-Butylbenzene	ND		50.0	32.6		ug/L		65	54 - 146	19	30
1,1,1,2-Tetrachloroethane	ND	F2	50.0	35.0	F2	ug/L		70	59 - 137	32	30
1,1,2,2-Tetrachloroethane	ND		50.0	39.1		ug/L		78	66 - 135	12	30
Tetrachloroethene	ND	F2	50.0	30.7	F2	ug/L		61	52 - 133	37	30
Toluene	ND	F2 F1	50.0	31.8	F2 F1	ug/L		64	65 - 130	36	30
trans-1,2-Dichloroethene	ND	F2	50.0	33.7	F2	ug/L		67	61 - 143	34	30
trans-1,3-Dichloropropene	ND		50.0	36.1		ug/L		72	53 - 133	27	30
1,2,3-Trichlorobenzene	ND		50.0	31.1		ug/L		62	43 - 145	21	30
1,2,4-Trichlorobenzene	ND		50.0	30.1		ug/L		60	39 - 148	24	30
1,1,1-Trichloroethane	ND	F2	50.0	34.4	F2	ug/L		69	57 - 142	39	30
1,1,2-Trichloroethane	ND		50.0	38.4		ug/L		77	66 - 131	22	30
Trichloroethene	ND	F2	50.0	36.9	F2	ug/L		74	64 - 136	36	30
Trichlorofluoromethane	ND	F2	50.0	29.3	F2	ug/L		59	54 - 150	44	30

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

Lab Sample ID: 400-249331-12 MSD
Matrix: Water
Analysis Batch: 657479

Client Sample ID: MW28-ROX-010524
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,3-Trichloropropane	ND		50.0	41.2		ug/L		82	65 - 133	13	30
1,2,4-Trimethylbenzene	ND		50.0	29.8		ug/L		60	50 - 139	26	30
1,3,5-Trimethylbenzene	ND		50.0	30.2		ug/L		60	52 - 135	27	30
Vinyl acetate	ND	F2	100	72.0	F2	ug/L		72	26 - 150	43	33
Vinyl chloride	ND	F2	50.0	28.5	F2	ug/L		57	46 - 150	46	30
Xylenes, Total	ND		100	63.8		ug/L		64	59 - 130	30	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 130*
Dibromofluoromethane	*103*		*75 - 126*
Toluene-d8 (Surr)	*93*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-657077/1-A
Matrix: Water
Analysis Batch: 657097

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657077

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		01/09/24 10:39	01/09/24 15:58	1
Benzenethiol	ND		10	9.9	ug/L		01/09/24 10:39	01/09/24 15:58	1
Benzoic acid	ND		30	24	ug/L		01/09/24 10:39	01/09/24 15:58	1
Benzyl alcohol	ND		10	7.3	ug/L		01/09/24 10:39	01/09/24 15:58	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		01/09/24 10:39	01/09/24 15:58	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		01/09/24 10:39	01/09/24 15:58	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		01/09/24 10:39	01/09/24 15:58	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		01/09/24 10:39	01/09/24 15:58	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		01/09/24 10:39	01/09/24 15:58	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		01/09/24 10:39	01/09/24 15:58	1
4-Chloroaniline	ND		10	4.7	ug/L		01/09/24 10:39	01/09/24 15:58	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		01/09/24 10:39	01/09/24 15:58	1
2-Chloronaphthalene	ND		10	3.8	ug/L		01/09/24 10:39	01/09/24 15:58	1
2-Chlorophenol	ND		10	4.1	ug/L		01/09/24 10:39	01/09/24 15:58	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		01/09/24 10:39	01/09/24 15:58	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		01/09/24 10:39	01/09/24 15:58	1
Dibenzofuran	ND		10	4.0	ug/L		01/09/24 10:39	01/09/24 15:58	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/09/24 10:39	01/09/24 15:58	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		01/09/24 10:39	01/09/24 15:58	1
Diethyl phthalate	ND		10	4.4	ug/L		01/09/24 10:39	01/09/24 15:58	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		01/09/24 10:39	01/09/24 15:58	1
Dimethyl phthalate	ND		10	4.2	ug/L		01/09/24 10:39	01/09/24 15:58	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		01/09/24 10:39	01/09/24 15:58	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/09/24 10:39	01/09/24 15:58	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		01/09/24 10:39	01/09/24 15:58	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		01/09/24 10:39	01/09/24 15:58	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		01/09/24 10:39	01/09/24 15:58	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		01/09/24 10:39	01/09/24 15:58	1
1,4-Dioxane	ND		10	4.3	ug/L		01/09/24 10:39	01/09/24 15:58	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-657077/1-A
Matrix: Water
Analysis Batch: 657097

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657077

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		01/09/24 10:39	01/09/24 15:58	1
Hexachlorobenzene	ND		10	9.7	ug/L		01/09/24 10:39	01/09/24 15:58	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		01/09/24 10:39	01/09/24 15:58	1
Hexachloroethane	ND		10	5.2	ug/L		01/09/24 10:39	01/09/24 15:58	1
Indene	ND		10	3.6	ug/L		01/09/24 10:39	01/09/24 15:58	1
Isophorone	ND		10	5.2	ug/L		01/09/24 10:39	01/09/24 15:58	1
2-Methylphenol	ND		10	3.2	ug/L		01/09/24 10:39	01/09/24 15:58	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		01/09/24 10:39	01/09/24 15:58	1
2-Nitroaniline	ND		10	5.0	ug/L		01/09/24 10:39	01/09/24 15:58	1
3-Nitroaniline	ND		10	4.7	ug/L		01/09/24 10:39	01/09/24 15:58	1
4-Nitroaniline	ND		10	4.1	ug/L		01/09/24 10:39	01/09/24 15:58	1
Nitrobenzene	ND		10	4.7	ug/L		01/09/24 10:39	01/09/24 15:58	1
2-Nitrophenol	ND		10	4.6	ug/L		01/09/24 10:39	01/09/24 15:58	1
4-Nitrophenol	ND		10	3.3	ug/L		01/09/24 10:39	01/09/24 15:58	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		01/09/24 10:39	01/09/24 15:58	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		01/09/24 10:39	01/09/24 15:58	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		01/09/24 10:39	01/09/24 15:58	1
Pentachlorophenol	ND		20	12	ug/L		01/09/24 10:39	01/09/24 15:58	1
Phenol	ND		10	4.2	ug/L		01/09/24 10:39	01/09/24 15:58	1
Pyridine	ND		10	10	ug/L		01/09/24 10:39	01/09/24 15:58	1
Quinoline	ND		10	2.4	ug/L		01/09/24 10:39	01/09/24 15:58	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		01/09/24 10:39	01/09/24 15:58	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/09/24 10:39	01/09/24 15:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*21 - 114*	*01/09/24 10:39*	*01/09/24 15:58*	*1*
2-Fluorophenol	*48*		*10 - 105*	*01/09/24 10:39*	*01/09/24 15:58*	*1*
Nitrobenzene-d5	*61*		*16 - 127*	*01/09/24 10:39*	*01/09/24 15:58*	*1*
Phenol-d5	*34*		*10 - 129*	*01/09/24 10:39*	*01/09/24 15:58*	*1*
Terphenyl-d14	*83*		*13 - 150*	*01/09/24 10:39*	*01/09/24 15:58*	*1*
2,4,6-Tribromophenol	*63*		*10 - 150*	*01/09/24 10:39*	*01/09/24 15:58*	*1*

Lab Sample ID: LCS 400-657077/20-A
Matrix: Water
Analysis Batch: 657097

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657077

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	105		ug/L		87	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*72*		*21 - 114*
2-Fluorophenol	*59*		*10 - 105*
Nitrobenzene-d5	*65*		*16 - 127*
Phenol-d5	*48*		*10 - 129*
Terphenyl-d14	*91*		*13 - 150*
2,4,6-Tribromophenol	*60*		*10 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-657077/2-A
Matrix: Water
Analysis Batch: 657097

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657077

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	67.7		ug/L		56	10 - 127
Benzoic acid	120	145		ug/L		121	19 - 126
Benzyl alcohol	120	84.2		ug/L		70	17 - 109
Bis(2-chloroethoxy)methane	120	75.8		ug/L		63	24 - 125
Bis(2-chloroethyl)ether	120	83.5		ug/L		70	10 - 121
bis (2-chloroisopropyl) ether	120	88.0		ug/L		73	14 - 123
Bis(2-ethylhexyl) phthalate	120	88.1		ug/L		73	16 - 150
4-Bromophenyl phenyl ether	120	96.3		ug/L		80	17 - 150
Butyl benzyl phthalate	120	89.4		ug/L		74	21 - 150
4-Chloroaniline	120	74.6		ug/L		62	10 - 124
4-Chloro-3-methylphenol	120	89.0		ug/L		74	37 - 131
2-Chloronaphthalene	120	89.9		ug/L		75	24 - 132
2-Chlorophenol	120	91.9		ug/L		77	27 - 124
4-Chlorophenyl phenyl ether	120	98.7		ug/L		82	27 - 147
Dibenz[a,h]acridine	114	109		ug/L		96	40 - 140
Dibenzofuran	120	96.2		ug/L		80	30 - 135
3,3'-Dichlorobenzidine	160	141		ug/L		88	10 - 150
2,4-Dichlorophenol	120	89.7		ug/L		75	33 - 132
Diethyl phthalate	120	98.3		ug/L		82	37 - 145
2,4-Dimethylphenol	120	108		ug/L		90	38 - 132
Dimethyl phthalate	120	91.5		ug/L		76	32 - 137
Di-n-butyl phthalate	120	101		ug/L		84	27 - 150
4,6-Dinitro-ortho-cresol	240	175		ug/L		73	14 - 150
2,4-Dinitrophenol	240	163		ug/L		68	15 - 150
2,4-Dinitrotoluene	120	102		ug/L		85	35 - 136
2,6-Dinitrotoluene	120	94.4		ug/L		79	29 - 140
Di-n-octyl phthalate	120	93.6		ug/L		78	26 - 150
1,4-Dioxane	120	43.4		ug/L		36	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	83.2		ug/L		69	23 - 138
Hexachlorobenzene	120	115		ug/L		95	10 - 150
Hexachlorocyclopentadiene	120	102		ug/L		85	10 - 124
Hexachloroethane	120	81.3		ug/L		68	10 - 127
Indene	120	104		ug/L		86	18 - 150
Isophorone	120	79.1		ug/L		66	28 - 127
2-Methylphenol	120	94.0		ug/L		78	34 - 124
3 & 4 Methylphenol	120	89.5		ug/L		75	32 - 122
2-Nitroaniline	120	90.7		ug/L		76	24 - 139
3-Nitroaniline	120	88.5		ug/L		74	10 - 128
4-Nitroaniline	120	99.8		ug/L		83	28 - 118
Nitrobenzene	120	77.4		ug/L		65	29 - 120
2-Nitrophenol	120	92.3		ug/L		77	25 - 148
4-Nitrophenol	240	158		ug/L		66	12 - 129
N-Nitrosodimethylamine	120	69.1		ug/L		58	10 - 115
N-Nitrosodi-n-propylamine	120	92.5		ug/L		77	24 - 142
N-Nitrosodiphenylamine	119	94.2		ug/L		79	29 - 138
Pentachlorophenol	240	171		ug/L		71	19 - 150
Phenol	120	64.0		ug/L		53	11 - 95
Pyridine	240	58.9		ug/L		25	10 - 82

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-657077/2-A
Matrix: Water
Analysis Batch: 657097

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657077

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Quinoline			114	91.2		ug/L		80	40 - 140		
2,4,5-Trichlorophenol			120	103		ug/L		86	30 - 144		
2,4,6-Trichlorophenol			120	96.3		ug/L		80	27 - 147		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*21 - 114*
2-Fluorophenol	*62*		*10 - 105*
Nitrobenzene-d5	*72*		*16 - 127*
Phenol-d5	*55*		*10 - 129*
Terphenyl-d14	*86*		*13 - 150*
2,4,6-Tribromophenol	*83*		*10 - 150*

Lab Sample ID: LCSD 400-657077/21-A
Matrix: Water
Analysis Batch: 657097

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657077

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	109		ug/L		91	40 - 140	4	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*21 - 114*
2-Fluorophenol	*58*		*10 - 105*
Nitrobenzene-d5	*63*		*16 - 127*
Phenol-d5	*46*		*10 - 129*
Terphenyl-d14	*92*		*13 - 150*
2,4,6-Tribromophenol	*63*		*10 - 150*

Lab Sample ID: 400-249331-5 MS
Matrix: Water
Analysis Batch: 657097

Client Sample ID: MW26-ROX-010524
Prep Type: Total/NA
Prep Batch: 657077

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Aniline	ND		117	68.2		ug/L		58	50 - 150		
Benzoic acid	ND	F1	117	168		ug/L		143	50 - 150		
Benzyl alcohol	ND		117	73.9		ug/L		63	50 - 150		
Bis(2-chloroethoxy)methane	ND		117	70.8		ug/L		61	50 - 150		
Bis(2-chloroethyl)ether	ND		117	74.3		ug/L		64	50 - 150		
bis (2-chloroisopropyl) ether	ND		117	78.4		ug/L		67	50 - 150		
Bis(2-ethylhexyl) phthalate	ND		117	85.0		ug/L		73	50 - 150		
4-Bromophenyl phenyl ether	ND		117	88.0		ug/L		75	50 - 150		
Butyl benzyl phthalate	ND		117	86.0		ug/L		74	50 - 150		
4-Chloroaniline	ND		117	72.2		ug/L		62	50 - 150		
4-Chloro-3-methylphenol	ND		117	84.1		ug/L		72	50 - 150		
2-Chloronaphthalene	ND		117	83.9		ug/L		72	50 - 150		
2-Chlorophenol	ND		117	80.2		ug/L		69	50 - 150		
4-Chlorophenyl phenyl ether	ND		117	93.5		ug/L		80	50 - 150		
Dibenz[a,h]acridine	ND		111	94.7		ug/L		85	50 - 150		
Dibenzofuran	ND		117	91.3		ug/L		78	50 - 150		

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-249331-5 MS
Matrix: Water
Analysis Batch: 657097

Client Sample ID: MW26-ROX-010524
Prep Type: Total/NA
Prep Batch: 657077

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
3,3'-Dichlorobenzidine	ND		156	126		ug/L		81	50 - 150
2,4-Dichlorophenol	ND		117	82.7		ug/L		71	50 - 150
Diethyl phthalate	ND		117	95.0		ug/L		81	50 - 150
2,4-Dimethylphenol	ND		117	98.2		ug/L		84	50 - 150
Dimethyl phthalate	ND		117	86.3		ug/L		74	50 - 150
Di-n-butyl phthalate	ND		117	96.9		ug/L		83	50 - 150
4,6-Dinitro-ortho-cresol	ND		234	167		ug/L		72	50 - 150
2,4-Dinitrophenol	ND		234	152		ug/L		65	50 - 150
2,4-Dinitrotoluene	ND		117	94.2		ug/L		81	50 - 150
2,6-Dinitrotoluene	ND		117	88.0		ug/L		75	50 - 150
Di-n-octyl phthalate	ND		117	91.3		ug/L		78	50 - 150
1,4-Dioxane	ND	F1	117	40.7	F1	ug/L		35	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		117	82.3		ug/L		70	50 - 150
Hexachlorobenzene	ND		117	104		ug/L		89	50 - 150
Hexachlorocyclopentadiene	ND		117	93.7		ug/L		80	50 - 150
Hexachloroethane	ND		117	72.3		ug/L		62	50 - 150
Indene	ND		117	88.2		ug/L		75	50 - 150
Isophorone	ND		117	72.5		ug/L		62	50 - 150
2-Methylphenol	ND		117	83.3		ug/L		71	50 - 150
3 & 4 Methylphenol	ND		117	77.4		ug/L		66	50 - 150
2-Nitroaniline	ND		117	88.0		ug/L		75	50 - 150
3-Nitroaniline	ND		117	86.5		ug/L		74	50 - 150
4-Nitroaniline	ND		117	115		ug/L		98	50 - 150
Nitrobenzene	ND		117	67.8		ug/L		58	50 - 150
2-Nitrophenol	ND		117	81.1		ug/L		69	50 - 150
4-Nitrophenol	ND		234	140		ug/L		60	50 - 150
N-Nitrosodimethylamine	ND		117	60.1		ug/L		51	50 - 150
N-Nitrosodi-n-propylamine	ND		117	83.4		ug/L		71	50 - 150
N-Nitrosodiphenylamine	ND		116	87.0		ug/L		75	50 - 150
Pentachlorophenol	ND		234	151		ug/L		65	50 - 150
Phenol	ND	F1	117	54.2	F1	ug/L		46	50 - 150
Pyridine	ND	F1	234	65.6	F1	ug/L		28	50 - 150
Quinoline	ND		111	91.4		ug/L		82	50 - 150
2,4,5-Trichlorophenol	ND		117	94.8		ug/L		81	50 - 150
2,4,6-Trichlorophenol	ND		117	88.2		ug/L		75	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*21 - 114*
2-Fluorophenol	*56*		*10 - 105*
Nitrobenzene-d5	*68*		*16 - 127*
Phenol-d5	*49*		*10 - 129*
Terphenyl-d14	*89*		*13 - 150*
2,4,6-Tribromophenol	*78*		*10 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-249331-5 MSD
Matrix: Water
Analysis Batch: 657097

Client Sample ID: MW26-ROX-010524
Prep Type: Total/NA
Prep Batch: 657077

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	ND		120	70.8		ug/L		59	50 - 150	4	40
Benzoic acid	ND	F1	120	186	F1	ug/L		155	50 - 150	10	40
Benzyl alcohol	ND		120	85.0		ug/L		71	50 - 150	14	40
Bis(2-chloroethoxy)methane	ND		120	79.6		ug/L		66	50 - 150	12	40
Bis(2-chloroethyl)ether	ND		120	88.9		ug/L		74	50 - 150	18	40
bis (2-chloroisopropyl) ether	ND		120	90.7		ug/L		76	50 - 150	15	40
Bis(2-ethylhexyl) phthalate	ND		120	94.3		ug/L		79	50 - 150	10	40
4-Bromophenyl phenyl ether	ND		120	100		ug/L		83	50 - 150	13	40
Butyl benzyl phthalate	ND		120	96.0		ug/L		80	50 - 150	11	40
4-Chloroaniline	ND		120	77.9		ug/L		65	50 - 150	8	40
4-Chloro-3-methylphenol	ND		120	94.4		ug/L		79	50 - 150	11	40
2-Chloronaphthalene	ND		120	94.4		ug/L		79	50 - 150	12	40
2-Chlorophenol	ND		120	95.1		ug/L		79	50 - 150	17	40
4-Chlorophenyl phenyl ether	ND		120	103		ug/L		85	50 - 150	9	40
Dibenz[a,h]acridine	ND		114	110		ug/L		96	50 - 150	15	40
Dibenzofuran	ND		120	99.5		ug/L		83	50 - 150	9	40
3,3'-Dichlorobenzidine	ND		160	143		ug/L		89	50 - 150	12	40
2,4-Dichlorophenol	ND		120	94.4		ug/L		79	50 - 150	13	40
Diethyl phthalate	ND		120	104		ug/L		87	50 - 150	9	40
2,4-Dimethylphenol	ND		120	111		ug/L		93	50 - 150	12	40
Dimethyl phthalate	ND		120	95.2		ug/L		79	50 - 150	10	40
Di-n-butyl phthalate	ND		120	107		ug/L		89	50 - 150	9	40
4,6-Dinitro-ortho-cresol	ND		240	184		ug/L		77	50 - 150	9	40
2,4-Dinitrophenol	ND		240	173		ug/L		72	50 - 150	13	40
2,4-Dinitrotoluene	ND		120	104		ug/L		87	50 - 150	10	40
2,6-Dinitrotoluene	ND		120	98.1		ug/L		82	50 - 150	11	40
Di-n-octyl phthalate	ND		120	102		ug/L		85	50 - 150	11	40
1,4-Dioxane	ND	F1	120	47.0	F1	ug/L		39	50 - 150	14	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		120	92.9		ug/L		77	50 - 150	12	40
Hexachlorobenzene	ND		120	119		ug/L		99	50 - 150	13	40
Hexachlorocyclopentadiene	ND		120	107		ug/L		89	50 - 150	13	40
Hexachloroethane	ND		120	87.9		ug/L		73	50 - 150	19	40
Indene	ND		120	106		ug/L		88	50 - 150	18	40
Isophorone	ND		120	82.7		ug/L		69	50 - 150	13	40
2-Methylphenol	ND		120	99.1		ug/L		83	50 - 150	17	40
3 & 4 Methylphenol	ND		120	93.0		ug/L		77	50 - 150	18	40
2-Nitroaniline	ND		120	101		ug/L		84	50 - 150	14	40
3-Nitroaniline	ND		120	96.9		ug/L		81	50 - 150	11	40
4-Nitroaniline	ND		120	102		ug/L		85	50 - 150	12	40
Nitrobenzene	ND		120	79.4		ug/L		66	50 - 150	16	40
2-Nitrophenol	ND		120	93.2		ug/L		78	50 - 150	14	40
4-Nitrophenol	ND		240	170		ug/L		71	50 - 150	20	40
N-Nitrosodimethylamine	ND		120	70.0		ug/L		58	50 - 150	15	40
N-Nitrosodi-n-propylamine	ND		120	95.5		ug/L		79	50 - 150	14	40
N-Nitrosodiphenylamine	ND		119	97.2		ug/L		82	50 - 150	11	40
Pentachlorophenol	ND		240	182		ug/L		76	50 - 150	19	40
Phenol	ND	F1	120	75.4		ug/L		63	50 - 150	33	40
Pyridine	ND	F1	240	74.4	F1	ug/L		31	50 - 150	13	40

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-249331-5 MSD
Matrix: Water
Analysis Batch: 657097

Client Sample ID: MW26-ROX-010524
Prep Type: Total/NA
Prep Batch: 657077

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Quinoline	ND		114	98.7		ug/L		86	50 - 150	8	40
2,4,5-Trichlorophenol	ND		120	108		ug/L		90	50 - 150	13	40
2,4,6-Trichlorophenol	ND		120	101		ug/L		84	50 - 150	13	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*79*		*21 - 114*
2-Fluorophenol	*64*		*10 - 105*
Nitrobenzene-d5	*74*		*16 - 127*
Phenol-d5	*55*		*10 - 129*
Terphenyl-d14	*89*		*13 - 150*
2,4,6-Tribromophenol	*82*		*10 - 150*

Lab Sample ID: 400-249331-12 MS
Matrix: Water
Analysis Batch: 657097

Client Sample ID: MW28-ROX-010524
Prep Type: Total/NA
Prep Batch: 657077

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	ND		126	81.3		ug/L		64	50 - 150
Benzoic acid	ND		126	179		ug/L		142	50 - 150
Benzyl alcohol	ND		126	88.2		ug/L		70	50 - 150
Bis(2-chloroethoxy)methane	ND		126	81.1		ug/L		64	50 - 150
Bis(2-chloroethyl)ether	ND		126	91.9		ug/L		73	50 - 150
bis (2-chloroisopropyl) ether	ND		126	94.5		ug/L		75	50 - 150
Bis(2-ethylhexyl) phthalate	ND		126	94.4		ug/L		75	50 - 150
4-Bromophenyl phenyl ether	ND		126	100		ug/L		80	50 - 150
Butyl benzyl phthalate	ND		126	94.4		ug/L		75	50 - 150
4-Chloroaniline	ND		126	75.9		ug/L		60	50 - 150
4-Chloro-3-methylphenol	ND		126	95.2		ug/L		75	50 - 150
2-Chloronaphthalene	ND		126	95.0		ug/L		75	50 - 150
2-Chlorophenol	ND		126	97.6		ug/L		77	50 - 150
4-Chlorophenyl phenyl ether	ND		126	104		ug/L		82	50 - 150
Dibenz[a,h]acridine	ND		120	108		ug/L		90	50 - 150
Dibenzofuran	ND		126	102		ug/L		81	50 - 150
3,3'-Dichlorobenzidine	ND		168	135		ug/L		80	50 - 150
2,4-Dichlorophenol	ND		126	95.0		ug/L		75	50 - 150
Diethyl phthalate	ND		126	106		ug/L		84	50 - 150
2,4-Dimethylphenol	ND		126	116		ug/L		92	50 - 150
Dimethyl phthalate	ND		126	96.8		ug/L		77	50 - 150
Di-n-butyl phthalate	ND		126	107		ug/L		85	50 - 150
4,6-Dinitro-ortho-cresol	ND		252	182		ug/L		72	50 - 150
2,4-Dinitrophenol	ND		252	172		ug/L		68	50 - 150
2,4-Dinitrotoluene	ND		126	107		ug/L		85	50 - 150
2,6-Dinitrotoluene	ND		126	99.2		ug/L		79	50 - 150
Di-n-octyl phthalate	ND		126	97.5		ug/L		77	50 - 150
1,4-Dioxane	ND	F1	126	50.5	F1	ug/L		40	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		126	93.1		ug/L		74	50 - 150
Hexachlorobenzene	ND		126	118		ug/L		94	50 - 150
Hexachlorocyclopentadiene	ND		126	106		ug/L		84	50 - 150

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-249331-12 MS
Matrix: Water
Analysis Batch: 657097

Client Sample ID: MW28-ROX-010524
Prep Type: Total/NA
Prep Batch: 657077

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachloroethane	ND		126	89.8		ug/L		71	50 - 150
Indene	ND		126	111		ug/L		88	50 - 150
Isophorone	ND		126	83.9		ug/L		66	50 - 150
2-Methylphenol	ND		126	99.7		ug/L		79	50 - 150
3 & 4 Methylphenol	ND		126	93.6		ug/L		74	50 - 150
2-Nitroaniline	ND		126	91.4		ug/L		72	50 - 150
3-Nitroaniline	ND		126	93.4		ug/L		74	50 - 150
4-Nitroaniline	ND		126	116		ug/L		92	50 - 150
Nitrobenzene	ND		126	85.0		ug/L		67	50 - 150
2-Nitrophenol	ND		126	94.7		ug/L		75	50 - 150
4-Nitrophenol	ND		252	172		ug/L		68	50 - 150
N-Nitrosodimethylamine	ND		126	72.3		ug/L		57	50 - 150
N-Nitrosodi-n-propylamine	ND		126	97.9		ug/L		78	50 - 150
N-Nitrosodiphenylamine	ND		125	101		ug/L		81	50 - 150
Pentachlorophenol	ND		252	178		ug/L		71	50 - 150
Phenol	ND		126	67.1		ug/L		53	50 - 150
Pyridine	ND	F1	252	84.9	F1	ug/L		34	50 - 150
Quinoline	ND		120	102		ug/L		85	50 - 150
2,4,5-Trichlorophenol	ND		126	108		ug/L		86	50 - 150
2,4,6-Trichlorophenol	ND		126	100		ug/L		79	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*77*		*21 - 114*
2-Fluorophenol	*62*		*10 - 105*
Nitrobenzene-d5	*72*		*16 - 127*
Phenol-d5	*54*		*10 - 129*
Terphenyl-d14	*84*		*13 - 150*
2,4,6-Tribromophenol	*78*		*10 - 150*

Lab Sample ID: 400-249331-12 MSD
Matrix: Water
Analysis Batch: 657097

Client Sample ID: MW28-ROX-010524
Prep Type: Total/NA
Prep Batch: 657077

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	ND		122	78.3		ug/L		64	50 - 150	4	40
Benzoic acid	ND		122	160		ug/L		131	50 - 150	11	40
Benzyl alcohol	ND		122	86.6		ug/L		71	50 - 150	2	40
Bis(2-chloroethoxy)methane	ND		122	80.1		ug/L		66	50 - 150	1	40
Bis(2-chloroethyl)ether	ND		122	91.2		ug/L		75	50 - 150	1	40
bis (2-chloroisopropyl) ether	ND		122	95.0		ug/L		78	50 - 150	1	40
Bis(2-ethylhexyl) phthalate	ND		122	95.2		ug/L		78	50 - 150	1	40
4-Bromophenyl phenyl ether	ND		122	99.6		ug/L		82	50 - 150	1	40
Butyl benzyl phthalate	ND		122	97.4		ug/L		80	50 - 150	3	40
4-Chloroaniline	ND		122	77.1		ug/L		63	50 - 150	2	40
4-Chloro-3-methylphenol	ND		122	94.4		ug/L		77	50 - 150	1	40
2-Chloronaphthalene	ND		122	97.6		ug/L		80	50 - 150	3	40
2-Chlorophenol	ND		122	97.3		ug/L		80	50 - 150	0	40
4-Chlorophenyl phenyl ether	ND		122	103		ug/L		85	50 - 150	0	40

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-249331-12 MSD
Matrix: Water
Analysis Batch: 657097

Client Sample ID: MW28-ROX-010524
Prep Type: Total/NA
Prep Batch: 657077

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dibenz[a,h]acridine	ND		116	106		ug/L		92	50 - 150	1	40
Dibenzofuran	ND		122	101		ug/L		83	50 - 150	1	40
3,3'-Dichlorobenzidine	ND		162	135		ug/L		83	50 - 150	0	40
2,4-Dichlorophenol	ND		122	94.4		ug/L		77	50 - 150	1	40
Diethyl phthalate	ND		122	105		ug/L		86	50 - 150	1	40
2,4-Dimethylphenol	ND		122	113		ug/L		93	50 - 150	2	40
Dimethyl phthalate	ND		122	96.6		ug/L		79	50 - 150	0	40
Di-n-butyl phthalate	ND		122	108		ug/L		89	50 - 150	1	40
4,6-Dinitro-ortho-cresol	ND		244	181		ug/L		74	50 - 150	1	40
2,4-Dinitrophenol	ND		244	172		ug/L		71	50 - 150	0	40
2,4-Dinitrotoluene	ND		122	105		ug/L		86	50 - 150	2	40
2,6-Dinitrotoluene	ND		122	99.0		ug/L		81	50 - 150	0	40
Di-n-octyl phthalate	ND		122	102		ug/L		84	50 - 150	4	40
1,4-Dioxane	ND	F1	122	49.0	F1	ug/L		40	50 - 150	3	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		122	93.3		ug/L		77	50 - 150	0	40
Hexachlorobenzene	ND		122	117		ug/L		96	50 - 150	1	40
Hexachlorocyclopentadiene	ND		122	105		ug/L		86	50 - 150	1	40
Hexachloroethane	ND		122	91.1		ug/L		75	50 - 150	1	40
Indene	ND		122	111		ug/L		91	50 - 150	0	40
Isophorone	ND		122	82.6		ug/L		68	50 - 150	1	40
2-Methylphenol	ND		122	100		ug/L		82	50 - 150	1	40
3 & 4 Methylphenol	ND		122	93.5		ug/L		77	50 - 150	0	40
2-Nitroaniline	ND		122	95.2		ug/L		78	50 - 150	4	40
3-Nitroaniline	ND		122	93.2		ug/L		76	50 - 150	0	40
4-Nitroaniline	ND		122	94.6		ug/L		78	50 - 150	20	40
Nitrobenzene	ND		122	82.7		ug/L		68	50 - 150	3	40
2-Nitrophenol	ND		122	93.7		ug/L		77	50 - 150	1	40
4-Nitrophenol	ND		244	168		ug/L		69	50 - 150	2	40
N-Nitrosodimethylamine	ND		122	71.8		ug/L		59	50 - 150	1	40
N-Nitrosodi-n-propylamine	ND		122	96.6		ug/L		79	50 - 150	1	40
N-Nitrosodiphenylamine	ND		121	98.1		ug/L		81	50 - 150	3	40
Pentachlorophenol	ND		244	172		ug/L		70	50 - 150	4	40
Phenol	ND		122	78.0		ug/L		64	50 - 150	15	40
Pyridine	ND	F1	244	82.7	F1	ug/L		34	50 - 150	3	40
Quinoline	ND		116	98.3		ug/L		85	50 - 150	4	40
2,4,5-Trichlorophenol	ND		122	111		ug/L		91	50 - 150	2	40
2,4,6-Trichlorophenol	ND		122	101		ug/L		83	50 - 150	1	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*81*		*21 - 114*
2-Fluorophenol	*65*		*10 - 105*
Nitrobenzene-d5	*74*		*16 - 127*
Phenol-d5	*56*		*10 - 129*
Terphenyl-d14	*88*		*13 - 150*
2,4,6-Tribromophenol	*79*		*10 - 150*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-657077/1-A
Matrix: Water
Analysis Batch: 657220

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657077

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		01/09/24 10:39	01/10/24 16:28	1
Acenaphthylene	ND		0.20	0.044	ug/L		01/09/24 10:39	01/10/24 16:28	1
Anthracene	ND		0.20	0.047	ug/L		01/09/24 10:39	01/10/24 16:28	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		01/09/24 10:39	01/10/24 16:28	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		01/09/24 10:39	01/10/24 16:28	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		01/09/24 10:39	01/10/24 16:28	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/09/24 10:39	01/10/24 16:28	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		01/09/24 10:39	01/10/24 16:28	1
Chrysene	ND		0.20	0.033	ug/L		01/09/24 10:39	01/10/24 16:28	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		01/09/24 10:39	01/10/24 16:28	1
Fluoranthene	ND		0.20	0.034	ug/L		01/09/24 10:39	01/10/24 16:28	1
Fluorene	ND		0.20	0.089	ug/L		01/09/24 10:39	01/10/24 16:28	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		01/09/24 10:39	01/10/24 16:28	1
Phenanthrene	ND		0.20	0.090	ug/L		01/09/24 10:39	01/10/24 16:28	1
Pyrene	ND		0.20	0.039	ug/L		01/09/24 10:39	01/10/24 16:28	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		01/09/24 10:39	01/10/24 16:28	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		01/09/24 10:39	01/10/24 16:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*88*		*18 - 147*	*01/09/24 10:39*	*01/10/24 16:28*	*1*
2-Fluorobiphenyl	*74*		*15 - 128*	*01/09/24 10:39*	*01/10/24 16:28*	*1*
Nitrobenzene-d5	*73*		*10 - 144*	*01/09/24 10:39*	*01/10/24 16:28*	*1*

Lab Sample ID: LCS 400-657077/2-A
Matrix: Water
Analysis Batch: 657220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657077

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	113		ug/L		94	40 - 140
Acenaphthylene	120	116		ug/L		97	40 - 140
Anthracene	120	114		ug/L		95	40 - 140
Benzo[a]anthracene	120	118		ug/L		98	40 - 140
Benzo[a]pyrene	120	120		ug/L		100	40 - 140
Benzo[b]fluoranthene	120	126		ug/L		105	40 - 140
Benzo[g,h,i]perylene	120	116		ug/L		97	40 - 140
Benzo[k]fluoranthene	120	124		ug/L		103	40 - 140
Chrysene	120	111		ug/L		93	40 - 140
Dibenz(a,h)anthracene	120	127		ug/L		106	40 - 140
Fluoranthene	120	116		ug/L		96	40 - 140
Fluorene	120	116		ug/L		97	40 - 140
Indeno[1,2,3-cd]pyrene	120	128		ug/L		107	40 - 140
Phenanthrene	120	115		ug/L		96	40 - 140
Pyrene	120	111		ug/L		92	40 - 140
1-Methylnaphthalene	120	76.0		ug/L		63	40 - 140
2-Methylnaphthalene	120	77.9		ug/L		65	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*82*		*18 - 147*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 400-657077/2-A
Matrix: Water
Analysis Batch: 657220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657077

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	91		15 - 128
Nitrobenzene-d5	69		10 - 144

Lab Sample ID: 400-249331-5 MS
Matrix: Water
Analysis Batch: 657220

Client Sample ID: MW26-ROX-010524
Prep Type: Total/NA
Prep Batch: 657077

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		117	106		ug/L		91	50 - 150
Acenaphthylene	ND		117	109		ug/L		93	50 - 150
Anthracene	ND		117	108		ug/L		92	50 - 150
Benzo[a]anthracene	ND		117	112		ug/L		96	50 - 150
Benzo[a]pyrene	ND		117	113		ug/L		96	50 - 150
Benzo[b]fluoranthene	ND		117	120		ug/L		103	50 - 150
Benzo[g,h,i]perylene	ND		117	109		ug/L		93	50 - 150
Benzo[k]fluoranthene	ND		117	117		ug/L		100	50 - 150
Chrysene	ND		117	106		ug/L		91	50 - 150
Dibenz(a,h)anthracene	ND		117	118		ug/L		101	50 - 150
Fluoranthene	ND		117	108		ug/L		92	50 - 150
Fluorene	ND		117	109		ug/L		93	50 - 150
Indeno[1,2,3-cd]pyrene	ND		117	119		ug/L		102	50 - 150
Phenanthrene	ND		117	109		ug/L		93	50 - 150
Pyrene	ND		117	107		ug/L		92	50 - 150
1-Methylnaphthalene	ND		117	75.5		ug/L		65	50 - 150
2-Methylnaphthalene	ND		117	78.2		ug/L		67	50 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
Terphenyl-d14	82		18 - 147
2-Fluorobiphenyl	87		15 - 128
Nitrobenzene-d5	68		10 - 144

Lab Sample ID: 400-249331-5 MSD
Matrix: Water
Analysis Batch: 657220

Client Sample ID: MW26-ROX-010524
Prep Type: Total/NA
Prep Batch: 657077

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		120	110		ug/L		92	50 - 150	4	40
Acenaphthylene	ND		120	115		ug/L		96	50 - 150	5	40
Anthracene	ND		120	115		ug/L		96	50 - 150	7	40
Benzo[a]anthracene	ND		120	119		ug/L		99	50 - 150	6	40
Benzo[a]pyrene	ND		120	121		ug/L		100	50 - 150	7	40
Benzo[b]fluoranthene	ND		120	126		ug/L		105	50 - 150	4	40
Benzo[g,h,i]perylene	ND		120	116		ug/L		97	50 - 150	6	40
Benzo[k]fluoranthene	ND		120	125		ug/L		104	50 - 150	7	40
Chrysene	ND		120	113		ug/L		94	50 - 150	6	40
Dibenz(a,h)anthracene	ND		120	128		ug/L		106	50 - 150	8	40
Fluoranthene	ND		120	117		ug/L		97	50 - 150	8	40
Fluorene	ND		120	114		ug/L		95	50 - 150	5	40

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 400-249331-5 MSD
Matrix: Water
Analysis Batch: 657220

Client Sample ID: MW26-ROX-010524
Prep Type: Total/NA
Prep Batch: 657077

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Indeno[1,2,3-cd]pyrene	ND		120	130		ug/L		108	50 - 150	8	40
Phenanthrene	ND		120	117		ug/L		98	50 - 150	7	40
Pyrene	ND		120	112		ug/L		93	50 - 150	5	40
1-Methylnaphthalene	ND		120	75.3		ug/L		63	50 - 150	0	40
2-Methylnaphthalene	ND		120	78.3		ug/L		65	50 - 150	0	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*85*		*18 - 147*
2-Fluorobiphenyl	*89*		*15 - 128*
Nitrobenzene-d5	*69*		*10 - 144*

Lab Sample ID: 400-249331-12 MS
Matrix: Water
Analysis Batch: 657220

Client Sample ID: MW28-ROX-010524
Prep Type: Total/NA
Prep Batch: 657077

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		126	117		ug/L		93	50 - 150
Acenaphthylene	ND		126	121		ug/L		96	50 - 150
Anthracene	ND		126	121		ug/L		96	50 - 150
Benzo[a]anthracene	ND		126	125		ug/L		99	50 - 150
Benzo[a]pyrene	ND		126	125		ug/L		99	50 - 150
Benzo[b]fluoranthene	ND		126	135		ug/L		107	50 - 150
Benzo[g,h,i]perylene	ND		126	123		ug/L		98	50 - 150
Benzo[k]fluoranthene	ND		126	123		ug/L		97	50 - 150
Chrysene	ND		126	115		ug/L		92	50 - 150
Dibenz(a,h)anthracene	ND		126	133		ug/L		105	50 - 150
Fluoranthene	ND		126	123		ug/L		98	50 - 150
Fluorene	ND		126	121		ug/L		96	50 - 150
Indeno[1,2,3-cd]pyrene	ND		126	137		ug/L		108	50 - 150
Phenanthrene	ND		126	122		ug/L		97	50 - 150
Pyrene	ND		126	116		ug/L		92	50 - 150
1-Methylnaphthalene	ND		126	78.9		ug/L		63	50 - 150
2-Methylnaphthalene	ND		126	82.1		ug/L		65	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*81*		*18 - 147*
2-Fluorobiphenyl	*90*		*15 - 128*
Nitrobenzene-d5	*70*		*10 - 144*

Lab Sample ID: 400-249331-12 MSD
Matrix: Water
Analysis Batch: 657220

Client Sample ID: MW28-ROX-010524
Prep Type: Total/NA
Prep Batch: 657077

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		122	112		ug/L		92	50 - 150	5	40
Acenaphthylene	ND		122	115		ug/L		95	50 - 150	4	40
Anthracene	ND		122	114		ug/L		94	50 - 150	6	40
Benzo[a]anthracene	ND		122	117		ug/L		96	50 - 150	7	40

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 400-249331-12 MSD
Matrix: Water
Analysis Batch: 657220

Client Sample ID: MW28-ROX-010524
Prep Type: Total/NA
Prep Batch: 657077

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[a]pyrene	ND		122	119		ug/L		98	50 - 150	5	40
Benzo[b]fluoranthene	ND		122	132		ug/L		108	50 - 150	2	40
Benzo[g,h,i]perylene	ND		122	120		ug/L		98	50 - 150	3	40
Benzo[k]fluoranthene	ND		122	116		ug/L		95	50 - 150	6	40
Chrysene	ND		122	110		ug/L		90	50 - 150	5	40
Dibenz(a,h)anthracene	ND		122	131		ug/L		108	50 - 150	1	40
Fluoranthene	ND		122	115		ug/L		95	50 - 150	7	40
Fluorene	ND		122	115		ug/L		94	50 - 150	5	40
Indeno[1,2,3-cd]pyrene	ND		122	133		ug/L		109	50 - 150	3	40
Phenanthrene	ND		122	116		ug/L		95	50 - 150	5	40
Pyrene	ND		122	111		ug/L		91	50 - 150	5	40
1-Methylnaphthalene	ND		122	74.5		ug/L		61	50 - 150	6	40
2-Methylnaphthalene	ND		122	77.1		ug/L		63	50 - 150	6	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*80*		*18 - 147*
2-Fluorobiphenyl	*88*		*15 - 128*
Nitrobenzene-d5	*68*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-657281/1-A
Matrix: Water
Analysis Batch: 657319

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657281

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		01/10/24 14:08	01/10/24 17:10	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/10/24 14:08	01/10/24 17:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*74*	*p*	*51 - 149*	*01/10/24 14:08*	*01/10/24 17:10*	*1*

Lab Sample ID: LCS 400-657281/2-A
Matrix: Water
Analysis Batch: 657319

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657281

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.102		ug/L		102	60 - 140		
1,2-Dibromoethane			0.100	0.106		ug/L		106	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*89*	*p*	*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-657281/3-A
Matrix: Water
Analysis Batch: 657319

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657281

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0921		ug/L		92	60 - 140	11	30
1,2-Dibromoethane			0.100	0.0930		ug/L		93	60 - 140	13	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*71*	*p*	*51 - 149*

Lab Sample ID: 400-249331-5 MS
Matrix: Water
Analysis Batch: 657341

Client Sample ID: MW26-ROX-010524
Prep Type: Total/NA
Prep Batch: 657281

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane	ND		0.0995	0.0937		ug/L		94	10 - 150		
1,2-Dibromoethane	ND		0.0991	0.103		ug/L		104	39 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*82*		*51 - 149*

Lab Sample ID: 400-249331-5 MSD
Matrix: Water
Analysis Batch: 657341

Client Sample ID: MW26-ROX-010524
Prep Type: Total/NA
Prep Batch: 657281

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		0.0992	0.111		ug/L		112	10 - 150	17	20
1,2-Dibromoethane	ND		0.0988	0.112		ug/L		113	39 - 150	8	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*51 149*

Lab Sample ID: 400-249331-12 MS
Matrix: Water
Analysis Batch: 657341

Client Sample ID: MW28-ROX-010524
Prep Type: Total/NA
Prep Batch: 657281

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane	ND		0.0992	0.0953		ug/L		96	10 - 150		
1,2-Dibromoethane	ND		0.0988	0.114		ug/L		116	39 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*80*		*51 - 149*

Lab Sample ID: 400-249331-12 MSD
Matrix: Water
Analysis Batch: 657341

Client Sample ID: MW28-ROX-010524
Prep Type: Total/NA
Prep Batch: 657281

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	0.101		ug/L		100	10 - 150	6	20
1,2-Dibromoethane	ND		0.101	0.106		ug/L		105	39 - 150	8	20

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: 400-249331-12 MSD
Matrix: Water
Analysis Batch: 657341

Client Sample ID: MW28-ROX-010524
Prep Type: Total/NA
Prep Batch: 657281

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	90		51 - 149

LAB (LOCATION)

400-249331 COC

Shell Oil Products US Chain Of Custody Record

AECOM

☐ 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
Melissa Remiger	25278	DATE: 1/5/2024
PO #	**GSAP Project ID**	PAGE: 1 of 2
60721927 3.1.2	USPC/00114/R/02	

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS: Street and City	State	AECOM Project / Task Number:
AECOM		900 South Central Ave; ROXANA	IL	Roxana Quarterly GW 60721927 3.1.2

ADDRESS:	EDF DELIVERABLE TO (Name, Company, Office Location):	PHONE NO.:	E-MAIL:	AECOM Other ID:
100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA	Melissa Remiger - please see special instructions	314-802-1207	melissa.remiger@aecom.com	

PROJECT CONTACT (Hardcopy or PDF Report to):	SAMPLER NAME(S) (Print):	LAB USE ONLY
Melissa Remiger, Mary Massa, Brett Howell	C. McDavid, T. Jenkins	

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

* Please include "J" values on Reports.
* Please provide sample receipt upon login.
* Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 3.1.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°
0.1°C
0.0°C → TR 8

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 8270 SIMS
	TB-ROX-010524-8260-A	1/5/2024	0000	Water	2					2	X			
	TB-ROX-010524-8011-A	1/5/2024	0000	Water	2					2		X		
	MW1-ROX-010524-EB	1/5/2024	0940	Water	6			2		8	X	X	X	X
	MW1-ROX-010524	1/5/2024	1100	Water	6			2		8	X	X	X	X
	MW26-ROX-010524	1/5/2024	1230	Water	6			2		8	X	X	X	X
	MW26-ROX-010524-MS	1/5/2024	1230	Water	6			2		8	X	X	X	X
	MW26-ROX-010524-MSD	1/5/2024	1230	Water	6			2		8	X	X	X	X
	MW11-ROX-010524	1/5/2024	1350	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 6339 6595 3318, 6339 6596 8148	1/5/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	Tammy Earnest	1/5/24	0959
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: 1599806, 1599807, 1599808, 1599809

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
Melissa Remiger	25278	DATE: 1/5/2024
PO #	**GSAP Project ID**	PAGE: 2 of 2
60721927 – 3.1.2	USPC/00114/R/02	

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS: Street and City	State	AECOM Project / Task Number:
AECOM		900 South Central Ave; ROXANA	IL	Roxana Quarterly GW 60721927 – 3.1.2

ADDRESS:	EDF DELIVERABLE TO (Name, Company, Office Location):	PHONE NO.:	E-MAIL:	AECOM Other ID:
100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA	Melissa Remiger - please see special instructions	314-802-1207	melissa.remiger@aecom.com	

PROJECT CONTACT (Hardcopy or PDF Report to):
Melissa Remiger, Mary Massa, Brett Howell

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@aecom.com

SAMPLER NAME(S) (Print):
J . MAYER , E. CHALFANT

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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

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Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

* Please include "J" values on Reports.
* Please provide sample receipt upon login.
* Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; loredana.filimon@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.1.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°
0.1°C IR8
0.0°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 8270 SIMS
	TB-ROX-010524-8011-B	1/5/2024	0000	H2O	2						X			
	TB-ROX-010524-8260-B	1/5/2024	0000	H2O	2							X		
	MW9-ROX-010524-EB	1/5/2024	0945	H2O	6	0	0	2	0	8	X	X	X	X
	MW9-ROX-010524	1/5/2024	1055	H2O	6	0	0	2	0	8	X	X	X	X
	MW10-ROX-010524	1/5/2024	1155	H2O	6	0	0	2	0	8	X	X	X	X
	MW28-ROX-010524	1/5/2024	1350	H2O	6	0	0	2	0	8	X	X	X	X
	MW28-ROX-010524-MS	1/5/2024	1350	H2O	6	0	0	2	0	8	X	X	X	X
	MW28-ROX-010524-MSD	1/5/2024	1350	H2O	6	0	0	2	0	8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
E. CHALFANT	FEDEX: See page 1		
Relinquished by: (Signature)	Received by: (Signature) Danny Earnest	Date: 1/5/24	Time: 0959
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS - See page 1

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-249331-1

Login Number: 249331
List Number: 1
Creator: Earnest, Tamantha

List Source: Eurofins 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	
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").	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. Job ID: 400-249331-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Roxana Groundwater Quarterly – 1st Quarter 2024 Data Review

Laboratory SDG: 400-249385-1-Rev. 1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 2/27/2024

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

Sample Identification	Sample Identification
TB-ROX-010824-8260-B	TB-ROX-010824-8011-B
ROST4PZG-ROX-010824	ROST4PZC-ROX-010824
MW16-ROX-010824	TB-ROX-010824-8260-A
TB-ROX-010824-8011-A	MW27-ROX-010824
ROST3MW-ROX-010824	P54-ROX-010824

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 that several SVOC LCS/LCSD RPDs were outside evaluation criteria. The surrogate recovery for terphenyl-d_{14} was outside criteria in a PAH method blank. Several VOC, SVOC, and PAH MS/MSD recoveries, and/or MS/MSD RPDs, were outside evaluation criteria in sample ROST3MW-ROX-010824. The internal standard area recovery for perylene-d_{12} was outside criteria in a PAH method blank. The continuing calibration verification (CCV) for multiple analytes were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review. The L4 laboratory report was revised on March 1, 2024, to include missing QC that had inadvertently been omitted by the laboratory.

Three of 70 (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/LCSD 400-657287/2-A/3-A	SVOCs	Aniline	26/41	**45**	10-127/40
LCS/LCSD 400-657287/2-A/3-A	SVOCs	Pyridine	10/18	**58**	10-82/40

Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification.

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MB 400-657287/1-A	PAHs	Terphenyl-d_{14}	**155**	18-147

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 ROST3MW-ROX-010824 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
ROST3MW-ROX-010824 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/ 50
ROST3MW-ROX-010824 MS/MSD	SVOCs	Aniline	**33/36**	7	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	Benzoic acid	57/102	**57**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	Benzyl alcohol	**43**/61	35	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	bis(2-Chloroethoxy) methane	**33**/60	**59**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	bis(2-Chloroethyl)ether	**46**/75	**49**	50-150/ 40

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD /RPD Criteria
ROST3MW-ROX-010824 MS/MSD	SVOCs	bis(2-Chloroisopropyl) ether	**29**/58	**67**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	bis(2-Ethylhexyl) phthalate	**45**/92	**70**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	4-Bromophenyl phenyl ether	**43**/88	**68**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	Butyl benzyl phthalate	**45**/92	**68**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	4-Chloroaniline	**46**/62	30	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	4-Chloro-3-methylphenol	**39**/73	**61**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	2-Chloronaphthalene	**39**/82	**71**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	2-Chlorophenol	**40**/68	**52**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	4-Chlorophenyl phenyl ether	**44**/87	**66**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	Dibenz[a,h]acridine	64/124	**64**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	Dibenzofuran	**41**/84	**69**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	2,4-Dichlorophenol	**40**/76	**63**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	Diethyl phthalate	**47**/92	**64**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	2,4-Dimethylphenol	54/96	**57**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	Dimethyl phthalate	**45**/88	**64**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	Di-n-butyl phthalate	**47**/100	**72**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	4,6-Dinitro-ortho-cresol	**41**/85	**70**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	2,4-Dinitrophenol	**32**/65	**69**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	2,4-Dinitrotoluene	**44**/87	**65**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	2,6-Dinitrotoluene	**41**/80	**65**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	Di-n-octyl phthalate	**45**/92	**68**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	1,4-Dioxane	**13**/**17**	27	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	**43**/84	**65**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	Hexachlorobenzene	**48**/96	**68**	50-150/ 40

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD /RPD Criteria
ROST3MW-ROX-010824 MS/MSD	SVOCs	Hexachlorocyclopentadiene	**27**/74	**95**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	Hexachloroethane	**32**/67	**70**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	Indene	**42**/80	**63**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	Isophorone	**38**/74	**65**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	2-Methylphenol	**49**/82	**51**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	3 & 4 Methylphenol	**45**/68	**41**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	2-Nitroaniline	**46**/81	**55**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	4-Nitroaniline	**47**/75	**46**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	Nitrobenzene	**38**/72	**62**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	2-Nitrophenol	**41**/80	**64**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	4-Nitrophenol	54/89	**49**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	n-Nitrosodimethylamine	**37**/68	**59**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	n-Nitrosodi-n-propylamine	**41**/75	**58**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	n-Nitrosodiphenylamine	**45**/88	**65**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	Pentachlorophenol	**27**/60	**77**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	Phenol	**34**/50	38	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	Pyridine	**19/19**	2	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	2,4,5-Trichlorophenol	**42**/82	**65**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	SVOCs	2,4,6-Trichlorophenol	**42**/81	**65**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	PAHs	Acenaphthene	51/94	**59**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	PAHs	Acenaphthylene	51/96	**61**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	PAHs	Anthracene	50/99	**65**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	PAHs	Benzo[a]anthracene	53/99	**62**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	PAHs	Benzo[a]pyrene	54/102	**62**	50-150/ 40

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD /RPD Criteria
ROST3MW-ROX-010824 MS/MSD	PAHs	Benzo[b]fluoranthene	58/119	**69**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	PAHs	Benzo[g,h,i]perylene	**48**/ 89	**60**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	PAHs	Benzo[k]fluoranthene	59/ 102	**54**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	PAHs	Chrysene	52/94	**59**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	PAHs	Dibenz(a,h)anthracene	52/99	**61**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	PAHs	Fluoranthene	51/101	**66**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	PAHs	Fluorene	52/97	**59**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	PAHs	Indeno[1,2,3-cd]pyrene	54/101	**60**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	PAHs	Phenanthrene	52/100	**64**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	PAHs	Pyrene	51/92	**57**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	PAHs	1-Methylnaphthalene	**24**/60	**86**	50-150/ 40
ROST3MW-ROX-010824 MS/MSD	PAHs	2-Methylnaphthalene	**25**/62	**86**	50-150/ 40

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 2-chloroethyl vinyl ether due to acceptable LCS recoveries 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.

Sample ID	Parameter	Analyte	Qualification
ROST3MW-ROX- 010824	VOCs	2-Chloroethyl vinyl ether	**UJ**
ROST3MW-ROX- 010824	SVOCs	Aniline	**UJ**
ROST3MW-ROX- 010824	SVOCs	Benzyl alcohol	**UJ**
ROST3MW-ROX- 010824	SVOCs	bis(2-Chloroethoxy)methane	**UJ**
ROST3MW-ROX- 010824	SVOCs	bis(2-Chloroethyl)ether	**UJ**
ROST3MW-ROX- 010824	SVOCs	bis(2-Chloroisopropyl) ether	**UJ**
ROST3MW-ROX- 010824	SVOCs	bis(2-Ethylhexyl) phthalate	**UJ**
ROST3MW-ROX- 010824	SVOCs	4-Bromophenyl phenyl ether	**UJ**
ROST3MW-ROX- 010824	SVOCs	Butyl benzyl phthalate	**UJ**
ROST3MW-ROX- 010824	SVOCs	4-Chloroaniline	**UJ**
ROST3MW-ROX- 010824	SVOCs	4-Chloro-3-methylphenol	**UJ**
ROST3MW-ROX- 010824	SVOCs	2-Chloronaphthalene	**UJ**
ROST3MW-ROX- 010824	SVOCs	2-Chlorophenol	**UJ**
ROST3MW-ROX- 010824	SVOCs	4-Chlorophenyl phenyl ether	**UJ**
ROST3MW-ROX- 010824	SVOCs	Dibenzofuran	**UJ**

Sample ID	Parameter	Analyte	Qualification
ROST3MW-ROX- 010824	SVOCs	2,4-Dichlorophenol	UJ
ROST3MW-ROX- 010824	SVOCs	Diethyl phthalate	UJ
ROST3MW-ROX- 010824	SVOCs	Dimethyl phthalate	UJ
ROST3MW-ROX- 010824	SVOCs	Di-n-butyl phthalate	UJ
ROST3MW-ROX- 010824	SVOCs	4,6-Dinitro-ortho-cresol	UJ
ROST3MW-ROX- 010824	SVOCs	2,4-Dinitrophenol	UJ
ROST3MW-ROX- 010824	SVOCs	2,4-Dinitrotoluene	UJ
ROST3MW-ROX- 010824	SVOCs	2,6-Dinitrotoluene	UJ
ROST3MW-ROX- 010824	SVOCs	Di-n-octyl phthalate	UJ
ROST3MW-ROX- 010824	SVOCs	1,4-Dioxane	UJ
ROST3MW-ROX- 010824	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	UJ
ROST3MW-ROX- 010824	SVOCs	Hexachlorobenzene	UJ
ROST3MW-ROX- 010824	SVOCs	Hexachlorocyclopentadiene	UJ
ROST3MW-ROX- 010824	SVOCs	Hexachloroethane	UJ
ROST3MW-ROX- 010824	SVOCs	Indene	UJ
ROST3MW-ROX- 010824	SVOCs	Isophorone	UJ
ROST3MW-ROX- 010824	SVOCs	2-Methylphenol	UJ
ROST3MW-ROX- 010824	SVOCs	3 & 4 Methylphenol	UJ
ROST3MW-ROX- 010824	SVOCs	2-Nitroaniline	UJ
ROST3MW-ROX- 010824	SVOCs	4-Nitroaniline	UJ
ROST3MW-ROX- 010824	SVOCs	Nitrobenzene	UJ
ROST3MW-ROX- 010824	SVOCs	2-Nitrophenol	UJ
ROST3MW-ROX- 010824	SVOCs	n-Nitrosodimethylamine	UJ
ROST3MW-ROX- 010824	SVOCs	n-Nitrosodi-n-propylamine	UJ
ROST3MW-ROX- 010824	SVOCs	n-Nitrosodiphenylamine	UJ
ROST3MW-ROX- 010824	SVOCs	Pentachlorophenol	UJ
ROST3MW-ROX- 010824	SVOCs	Phenol	UJ
ROST3MW-ROX- 010824	SVOCs	Pyridine	UJ
ROST3MW-ROX- 010824	SVOCs	2,4,5-Trichlorophenol	UJ
ROST3MW-ROX- 010824	SVOCs	2,4,6-Trichlorophenol	UJ
ROST3MW-ROX- 010824	PAHs	Benzo[g,h,i]perylene	UJ
ROST3MW-ROX- 010824	PAHs	1-Methylnaphthalene	J
ROST3MW-ROX- 010824	PAHs	2-Methylnaphthalene	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
MB 400-657287/1-A	PAHs	Perylene-d_{12}	**7164**	15667	7834-31334

Method blanks 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?

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 (CCV) for pyridine, aniline, and bis(2-chloroethoxy) methane were outside evaluation criteria, biased low. Pyridine, aniline, and bis(2-chloroethoxy) methane in sample ROST3MW-ROX-010824 were previously qualified in Section 7.0 of this data review due to MS/MSD outside evaluation criteria; no further qualification is required. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
ROST4PZG-ROX-010824	SVOCs	Pyridine	**UJ**
ROST4PZG-ROX-010824	SVOCs	Aniline	**UJ**
ROST4PZG-ROX-010824	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
ROST4PZC-ROX-010824	SVOCs	Pyridine	**UJ**
ROST4PZC-ROX-010824	SVOCs	Aniline	**UJ**
ROST4PZC-ROX-010824	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
MW16-ROX-010824	SVOCs	Pyridine	**UJ**
MW16-ROX-010824	SVOCs	Aniline	**UJ**
MW16-ROX-010824	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
MW27-ROX-010824	SVOCs	Pyridine	**UJ**
MW27-ROX-010824	SVOCs	Aniline	**UJ**
MW27-ROX-010824	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
P54-ROX-010824	SVOCs	Pyridine	**UJ**
P54-ROX-010824	SVOCs	Aniline	**UJ**
P54-ROX-010824	SVOCs	bis(2-Chloroethoxy) methane	**UJ**

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ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-249385-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

my EOL

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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Job Narrative
400-249385-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 1/9/2024 11:02 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 1.9°C

GC/MS VOA
Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-657479 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260D: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-657479 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: 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-010824-8260-B (400-249385-1), ROST4PZG-ROX-010824 (400-249385-3), ROST4PZC-ROX-010824 (400-249385-4), MW16-ROX-010824 (400-249385-5), TB-ROX-010824-8260-A (400-249385-6), MW27-ROX-010824 (400-249385-8), ROST3MW-ROX-010824 (400-249385-9) and P54-ROX-010824 (400-249385-10). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades 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 8270E: The initial calibration verification (ICV) analyzed in batch 400-653222 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-657287 and analytical batch 400-657431 recovered outside control limits for the following analytes: Aniline and Pyridine.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-657431 recovered above the upper control limit for N-Nitrosodimethylamine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-657431 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 8270E: The continuing calibration verification (CCV) associated with batch 400-657431 recovered outside acceptance criteria, low biased, for Pyridine, Aniline and Bis(2-chloroethoxy)methane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-657287 and analytical batch 400-657431 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Job ID: 400-249385-1 (Continued) Eurofins Pensacola

Method 8270E: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 400-657287 and analytical batch 400-657431 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.

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 400-657341 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. The associated sample is impacted: (CCV 400-657281/32-A).

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

Sample Summary

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

Job ID: 400-249385-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-249385-1	TB-ROX-010824-8260-B	Water	01/08/24 00:00	01/09/24 11:02
400-249385-2	TB-ROX-010824-8011-B	Water	01/08/24 00:00	01/09/24 11:02
400-249385-3	ROST4PZG-ROX-010824	Water	01/08/24 09:30	01/09/24 11:02
400-249385-4	ROST4PZC-ROX-010824	Water	01/08/24 10:30	01/09/24 11:02
400-249385-5	MW16-ROX-010824	Water	01/08/24 12:00	01/09/24 11:02
400-249385-6	TB-ROX-010824-8260-A	Water	01/08/24 00:00	01/09/24 11:02
400-249385-7	TB-ROX-010824-8011-A	Water	01/08/24 00:00	01/09/24 11:02
400-249385-8	MW27-ROX-010824	Water	01/08/24 09:25	01/09/24 11:02
400-249385-9	ROST3MW-ROX-010824	Water	01/08/24 10:45	01/09/24 11:02
400-249385-10	P54-ROX-010824	Water	01/08/24 12:35	01/09/24 11:02

Detection Summary

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

Job ID: 400-249385-1

Client Sample ID: TB-ROX-010824-8260-B — Lab Sample ID: 400-249385-1

No Detections.

Client Sample ID: TB-ROX-010824-8011-B — Lab Sample ID: 400-249385-2

No Detections.

Client Sample ID: ROST4PZG-ROX-010824 — Lab Sample ID: 400-249385-3

No Detections.

Client Sample ID: ROST4PZC-ROX-010824 — Lab Sample ID: 400-249385-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.10	J	0.20	0.10	ug/L	1		8270E SIM	Total/NA
Anthracene	0.14	J	0.20	0.048	ug/L	1		8270E SIM	Total/NA
Fluorene	0.17	J	0.20	0.091	ug/L	1		8270E SIM	Total/NA
Pyrene	0.057	J	0.20	0.040	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW16-ROX-010824 — Lab Sample ID: 400-249385-5

No Detections.

Client Sample ID: TB-ROX-010824-8260-A — Lab Sample ID: 400-249385-6

No Detections.

Client Sample ID: TB-ROX-010824-8011-A — Lab Sample ID: 400-249385-7

No Detections.

Client Sample ID: MW27-ROX-010824 — Lab Sample ID: 400-249385-8

No Detections.

Client Sample ID: ROST3MW-ROX-010824 — Lab Sample ID: 400-249385-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.14	J	0.19	0.095	ug/L	1		8270E SIM	Total/NA
Fluorene	0.15	J	0.19	0.086	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.087	J	0.19	0.087	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	0.29		0.19	0.077	ug/L	1		8270E SIM	Total/NA

Client Sample ID: P54-ROX-010824 — Lab Sample ID: 400-249385-10

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-249385-1

Client Sample ID: TB-ROX-010824-8260-B
Date Collected: 01/08/24 00:00
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/12/24 09:01	1
Acrolein	ND		20	3.3	ug/L			01/12/24 09:01	1
Acrylonitrile	ND		10	2.8	ug/L			01/12/24 09:01	1
Benzene	ND		1.0	0.50	ug/L			01/12/24 09:01	1
Bromobenzene	ND		1.0	0.54	ug/L			01/12/24 09:01	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/12/24 09:01	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/12/24 09:01	1
Bromoform	ND		5.0	0.25	ug/L			01/12/24 09:01	1
Bromomethane	ND		1.0	0.98	ug/L			01/12/24 09:01	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/12/24 09:01	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/12/24 09:01	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/12/24 09:01	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/12/24 09:01	1
Chloroethane	ND		1.0	0.76	ug/L			01/12/24 09:01	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/12/24 09:01	1
Chloroform	ND		1.0	0.90	ug/L			01/12/24 09:01	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/12/24 09:01	1
Chloromethane	ND		1.0	0.90	ug/L			01/12/24 09:01	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/12/24 09:01	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/12/24 09:01	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/12/24 09:01	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/12/24 09:01	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/12/24 09:01	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/12/24 09:01	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/12/24 09:01	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/12/24 09:01	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/12/24 09:01	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 09:01	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 09:01	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 09:01	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 09:01	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/12/24 09:01	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/12/24 09:01	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/12/24 09:01	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/12/24 09:01	1
2-Hexanone	ND		25	1.4	ug/L			01/12/24 09:01	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/12/24 09:01	1
Methylene bromide	ND		5.0	0.22	ug/L			01/12/24 09:01	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/12/24 09:01	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/12/24 09:01	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/12/24 09:01	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/12/24 09:01	1
Naphthalene	ND		5.0	3.0	ug/L			01/12/24 09:01	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/12/24 09:01	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/12/24 09:01	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/12/24 09:01	1
o-Xylene	ND		5.0	0.60	ug/L			01/12/24 09:01	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/12/24 09:01	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/12/24 09:01	1

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

Job ID: 400-249385-1

Client Sample ID: TB-ROX-010824-8260-B
Date Collected: 01/08/24 00:00
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/12/24 09:01	1
Styrene	ND		1.0	1.0	ug/L			01/12/24 09:01	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/12/24 09:01	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/12/24 09:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/12/24 09:01	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/12/24 09:01	1
Toluene	ND		1.0	0.90	ug/L			01/12/24 09:01	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 09:01	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/12/24 09:01	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/12/24 09:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/12/24 09:01	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/12/24 09:01	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/12/24 09:01	1
Trichloroethene	ND		1.0	0.15	ug/L			01/12/24 09:01	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/12/24 09:01	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/12/24 09:01	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/12/24 09:01	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/12/24 09:01	1
Vinyl acetate	ND		25	0.93	ug/L			01/12/24 09:01	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/12/24 09:01	1
Xylenes, Total	ND		10	1.6	ug/L			01/12/24 09:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*01/12/24 09:01*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/12/24 09:01*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*01/12/24 09:01*	*1*

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

Job ID: 400-249385-1

Client Sample ID: TB-ROX-010824-8011-B
Date Collected: 01/08/24 00:00
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-2
Matrix: Water

Method: EPA 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		01/10/24 14:08	01/10/24 18:14	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		01/10/24 14:08	01/10/24 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*51 - 149*	*01/10/24 14:08*	*01/10/24 18:14*	*1*

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

Job ID: 400-249385-1

Client Sample ID: ROST4PZG-ROX-010824
Date Collected: 01/08/24 09:30
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/12/24 11:03	1
Acrolein	ND		20	3.3	ug/L			01/12/24 11:03	1
Acrylonitrile	ND		10	2.8	ug/L			01/12/24 11:03	1
Benzene	ND		1.0	0.50	ug/L			01/12/24 11:03	1
Bromobenzene	ND		1.0	0.54	ug/L			01/12/24 11:03	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/12/24 11:03	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/12/24 11:03	1
Bromoform	ND		5.0	0.25	ug/L			01/12/24 11:03	1
Bromomethane	ND		1.0	0.98	ug/L			01/12/24 11:03	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/12/24 11:03	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/12/24 11:03	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/12/24 11:03	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/12/24 11:03	1
Chloroethane	ND		1.0	0.76	ug/L			01/12/24 11:03	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/12/24 11:03	1
Chloroform	ND		1.0	0.90	ug/L			01/12/24 11:03	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/12/24 11:03	1
Chloromethane	ND		1.0	0.90	ug/L			01/12/24 11:03	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/12/24 11:03	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/12/24 11:03	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/12/24 11:03	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/12/24 11:03	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/12/24 11:03	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/12/24 11:03	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/12/24 11:03	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/12/24 11:03	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/12/24 11:03	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 11:03	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 11:03	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 11:03	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 11:03	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/12/24 11:03	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/12/24 11:03	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/12/24 11:03	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/12/24 11:03	1
2-Hexanone	ND		25	1.4	ug/L			01/12/24 11:03	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/12/24 11:03	1
Methylene bromide	ND		5.0	0.22	ug/L			01/12/24 11:03	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/12/24 11:03	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/12/24 11:03	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/12/24 11:03	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/12/24 11:03	1
Naphthalene	ND		5.0	3.0	ug/L			01/12/24 11:03	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/12/24 11:03	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/12/24 11:03	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/12/24 11:03	1
o-Xylene	ND		5.0	0.60	ug/L			01/12/24 11:03	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/12/24 11:03	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/12/24 11:03	1

Client Sample ID: ROST4PZG-ROX-010824

Date Collected: 01/08/24 09:30
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-3

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/12/24 11:03	1
Styrene	ND		1.0	1.0	ug/L			01/12/24 11:03	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/12/24 11:03	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/12/24 11:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/12/24 11:03	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/12/24 11:03	1
Toluene	ND		1.0	0.90	ug/L			01/12/24 11:03	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 11:03	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/12/24 11:03	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/12/24 11:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/12/24 11:03	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/12/24 11:03	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/12/24 11:03	1
Trichloroethene	ND		1.0	0.15	ug/L			01/12/24 11:03	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/12/24 11:03	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/12/24 11:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/12/24 11:03	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/12/24 11:03	1
Vinyl acetate	ND		25	0.93	ug/L			01/12/24 11:03	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/12/24 11:03	1
Xylenes, Total	ND		10	1.6	ug/L			01/12/24 11:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*72 - 130*		*01/12/24 11:03*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/12/24 11:03*	*1*
Toluene-d8 (Surr)	*86*		*64 - 132*		*01/12/24 11:03*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.10	ug/L		01/11/24 09:49	01/12/24 17:49	1
Acenaphthylene	ND		0.21	0.046	ug/L		01/11/24 09:49	01/12/24 17:49	1
Anthracene	ND		0.21	0.049	ug/L		01/11/24 09:49	01/12/24 17:49	1
Benzo[a]anthracene	ND		0.21	0.035	ug/L		01/11/24 09:49	01/12/24 17:49	1
Benzo[a]pyrene	ND		0.21	0.067	ug/L		01/11/24 09:49	01/12/24 17:49	1
Benzo[b]fluoranthene	ND		0.21	0.039	ug/L		01/11/24 09:49	01/12/24 17:49	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		01/11/24 09:49	01/12/24 17:49	1
Benzo[k]fluoranthene	ND		0.21	0.065	ug/L		01/11/24 09:49	01/12/24 17:49	1
Chrysene	ND		0.21	0.034	ug/L		01/11/24 09:49	01/12/24 17:49	1
Dibenz(a,h)anthracene	ND		0.21	0.050	ug/L		01/11/24 09:49	01/12/24 17:49	1
Fluoranthene	ND		0.21	0.035	ug/L		01/11/24 09:49	01/12/24 17:49	1
Fluorene	ND		0.21	0.093	ug/L		01/11/24 09:49	01/12/24 17:49	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.035	ug/L		01/11/24 09:49	01/12/24 17:49	1
Phenanthrene	ND		0.21	0.094	ug/L		01/11/24 09:49	01/12/24 17:49	1
Pyrene	ND		0.21	0.041	ug/L		01/11/24 09:49	01/12/24 17:49	1
1-Methylnaphthalene	ND		0.21	0.083	ug/L		01/11/24 09:49	01/12/24 17:49	1
2-Methylnaphthalene	ND		0.21	0.069	ug/L		01/11/24 09:49	01/12/24 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*61*		*18 - 147*	*01/11/24 09:49*	*01/12/24 17:49*	*1*
2-Fluorobiphenyl	*48*		*15 - 128*	*01/11/24 09:49*	*01/12/24 17:49*	*1*

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

Job ID: 400-249385-1

Client Sample ID: ROST4PZG-ROX-010824
Date Collected: 01/08/24 09:30
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-3
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*47*		*10 - 144*	*01/11/24 09:49*	*01/12/24 17:49*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	10	9.1	ug/L		01/11/24 09:49	01/11/24 19:39	1
Benzenethiol	ND		10	10	ug/L		01/11/24 09:49	01/11/24 19:39	1
Benzoic acid	ND		31	25	ug/L		01/11/24 09:49	01/11/24 19:39	1
Benzyl alcohol	ND		10	7.6	ug/L		01/11/24 09:49	01/11/24 19:39	1
Bis(2-chloroethoxy)methane	ND		10	4.8	ug/L		01/11/24 09:49	01/11/24 19:39	1
Bis(2-chloroethyl)ether	ND		10	4.1	ug/L		01/11/24 09:49	01/11/24 19:39	1
bis (2-chloroisopropyl) ether	ND		10	1.9	ug/L		01/11/24 09:49	01/11/24 19:39	1
Bis(2-ethylhexyl) phthalate	ND		10	9.3	ug/L		01/11/24 09:49	01/11/24 19:39	1
4-Bromophenyl phenyl ether	ND		10	9.0	ug/L		01/11/24 09:49	01/11/24 19:39	1
Butyl benzyl phthalate	ND		10	6.0	ug/L		01/11/24 09:49	01/11/24 19:39	1
4-Chloroaniline	ND		10	4.9	ug/L		01/11/24 09:49	01/11/24 19:39	1
4-Chloro-3-methylphenol	ND		10	5.5	ug/L		01/11/24 09:49	01/11/24 19:39	1
2-Chloronaphthalene	ND		10	4.0	ug/L		01/11/24 09:49	01/11/24 19:39	1
2-Chlorophenol	ND		10	4.3	ug/L		01/11/24 09:49	01/11/24 19:39	1
4-Chlorophenyl phenyl ether	ND		10	3.9	ug/L		01/11/24 09:49	01/11/24 19:39	1
Dibenz[a,h]acridine	ND		10	2.9	ug/L		01/11/24 09:49	01/11/24 19:39	1
Dibenzofuran	ND		10	4.2	ug/L		01/11/24 09:49	01/11/24 19:39	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/11/24 09:49	01/11/24 19:39	1
2,4-Dichlorophenol	ND		10	4.5	ug/L		01/11/24 09:49	01/11/24 19:39	1
Diethyl phthalate	ND		10	4.6	ug/L		01/11/24 09:49	01/11/24 19:39	1
2,4-Dimethylphenol	ND		10	5.4	ug/L		01/11/24 09:49	01/11/24 19:39	1
Dimethyl phthalate	ND		10	4.4	ug/L		01/11/24 09:49	01/11/24 19:39	1
Di-n-butyl phthalate	ND		10	4.8	ug/L		01/11/24 09:49	01/11/24 19:39	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/11/24 09:49	01/11/24 19:39	1
2,4-Dinitrophenol	ND		31	4.8	ug/L		01/11/24 09:49	01/11/24 19:39	1
2,4-Dinitrotoluene	ND		10	5.3	ug/L		01/11/24 09:49	01/11/24 19:39	1
2,6-Dinitrotoluene	ND		10	4.1	ug/L		01/11/24 09:49	01/11/24 19:39	1
Di-n-octyl phthalate	ND		10	6.3	ug/L		01/11/24 09:49	01/11/24 19:39	1
1,4-Dioxane	ND		10	4.5	ug/L		01/11/24 09:49	01/11/24 19:39	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.4	ug/L		01/11/24 09:49	01/11/24 19:39	1
Hexachlorobenzene	ND		10	10	ug/L		01/11/24 09:49	01/11/24 19:39	1
Hexachlorocyclopentadiene	ND		21	4.7	ug/L		01/11/24 09:49	01/11/24 19:39	1
Hexachloroethane	ND		10	5.4	ug/L		01/11/24 09:49	01/11/24 19:39	1
Indene	ND		10	3.8	ug/L		01/11/24 09:49	01/11/24 19:39	1
Isophorone	ND		10	5.4	ug/L		01/11/24 09:49	01/11/24 19:39	1
2-Methylphenol	ND		10	3.3	ug/L		01/11/24 09:49	01/11/24 19:39	1
3 & 4 Methylphenol	ND		21	4.8	ug/L		01/11/24 09:49	01/11/24 19:39	1
2-Nitroaniline	ND		10	5.2	ug/L		01/11/24 09:49	01/11/24 19:39	1
3-Nitroaniline	ND		10	4.9	ug/L		01/11/24 09:49	01/11/24 19:39	1
4-Nitroaniline	ND		10	4.3	ug/L		01/11/24 09:49	01/11/24 19:39	1
Nitrobenzene	ND		10	4.9	ug/L		01/11/24 09:49	01/11/24 19:39	1
2-Nitrophenol	ND		10	4.8	ug/L		01/11/24 09:49	01/11/24 19:39	1
4-Nitrophenol	ND		10	3.4	ug/L		01/11/24 09:49	01/11/24 19:39	1
N-Nitrosodimethylamine	ND		10	2.3	ug/L		01/11/24 09:49	01/11/24 19:39	1

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

Job ID: 400-249385-1

Client Sample ID: ROST4PZG-ROX-010824
Date Collected: 01/08/24 09:30
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-3
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.6	ug/L		01/11/24 09:49	01/11/24 19:39	1
N-Nitrosodiphenylamine	ND		10	3.9	ug/L		01/11/24 09:49	01/11/24 19:39	1
Pentachlorophenol	ND		21	12	ug/L		01/11/24 09:49	01/11/24 19:39	1
Phenol	ND		10	4.4	ug/L		01/11/24 09:49	01/11/24 19:39	1
Pyridine	ND	*1	10	10	ug/L		01/11/24 09:49	01/11/24 19:39	1
Quinoline	ND		10	2.5	ug/L		01/11/24 09:49	01/11/24 19:39	1
2,4,5-Trichlorophenol	ND		10	4.2	ug/L		01/11/24 09:49	01/11/24 19:39	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		01/11/24 09:49	01/11/24 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*51*		*21 - 114*	*01/11/24 09:49*	*01/11/24 19:39*	*1*
2-Fluorophenol	*34*		*10 - 105*	*01/11/24 09:49*	*01/11/24 19:39*	*1*
Nitrobenzene-d5	*44*		*16 - 127*	*01/11/24 09:49*	*01/11/24 19:39*	*1*
Phenol-d5	*26*		*10 - 129*	*01/11/24 09:49*	*01/11/24 19:39*	*1*
Terphenyl-d14	*67*		*13 - 150*	*01/11/24 09:49*	*01/11/24 19:39*	*1*
2,4,6-Tribromophenol	*48*		*10 - 150*	*01/11/24 09:49*	*01/11/24 19:39*	*1*

Method: EPA 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		01/10/24 14:08	01/10/24 18:36	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/10/24 14:08	01/10/24 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*51 - 149*	*01/10/24 14:08*	*01/10/24 18:36*	*1*

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

Job ID: 400-249385-1

Client Sample ID: ROST4PZC-ROX-010824
Date Collected: 01/08/24 10:30
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/12/24 11:26	1
Acrolein	ND		20	3.3	ug/L			01/12/24 11:26	1
Acrylonitrile	ND		10	2.8	ug/L			01/12/24 11:26	1
Benzene	ND		1.0	0.50	ug/L			01/12/24 11:26	1
Bromobenzene	ND		1.0	0.54	ug/L			01/12/24 11:26	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/12/24 11:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/12/24 11:26	1
Bromoform	ND		5.0	0.25	ug/L			01/12/24 11:26	1
Bromomethane	ND		1.0	0.98	ug/L			01/12/24 11:26	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/12/24 11:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/12/24 11:26	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/12/24 11:26	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/12/24 11:26	1
Chloroethane	ND		1.0	0.76	ug/L			01/12/24 11:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/12/24 11:26	1
Chloroform	ND		1.0	0.90	ug/L			01/12/24 11:26	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/12/24 11:26	1
Chloromethane	ND		1.0	0.90	ug/L			01/12/24 11:26	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/12/24 11:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/12/24 11:26	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/12/24 11:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/12/24 11:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/12/24 11:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/12/24 11:26	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/12/24 11:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/12/24 11:26	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/12/24 11:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 11:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 11:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 11:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 11:26	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/12/24 11:26	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/12/24 11:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/12/24 11:26	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/12/24 11:26	1
2-Hexanone	ND		25	1.4	ug/L			01/12/24 11:26	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/12/24 11:26	1
Methylene bromide	ND		5.0	0.22	ug/L			01/12/24 11:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/12/24 11:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/12/24 11:26	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/12/24 11:26	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/12/24 11:26	1
Naphthalene	ND		5.0	3.0	ug/L			01/12/24 11:26	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/12/24 11:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/12/24 11:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/12/24 11:26	1
o-Xylene	ND		5.0	0.60	ug/L			01/12/24 11:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/12/24 11:26	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/12/24 11:26	1

Client Sample ID: ROST4PZC-ROX-010824
Date Collected: 01/08/24 10:30
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/12/24 11:26	1
Styrene	ND		1.0	1.0	ug/L			01/12/24 11:26	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/12/24 11:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/12/24 11:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/12/24 11:26	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/12/24 11:26	1
Toluene	ND		1.0	0.90	ug/L			01/12/24 11:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 11:26	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/12/24 11:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/12/24 11:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/12/24 11:26	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/12/24 11:26	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/12/24 11:26	1
Trichloroethene	ND		1.0	0.15	ug/L			01/12/24 11:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/12/24 11:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/12/24 11:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/12/24 11:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/12/24 11:26	1
Vinyl acetate	ND		25	0.93	ug/L			01/12/24 11:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/12/24 11:26	1
Xylenes, Total	ND		10	1.6	ug/L			01/12/24 11:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 130*		*01/12/24 11:26*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*01/12/24 11:26*	*1*
Toluene-d8 (Surr)	*88*		*64 - 132*		*01/12/24 11:26*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.10**	**J**	0.20	0.10	ug/L		01/11/24 09:49	01/11/24 16:33	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/11/24 09:49	01/11/24 16:33	1
Anthracene	**0.14**	**J**	0.20	0.048	ug/L		01/11/24 09:49	01/11/24 16:33	1
Benzo[a]anthracene	ND		0.20	0.035	ug/L		01/11/24 09:49	01/11/24 16:33	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		01/11/24 09:49	01/11/24 16:33	1
Benzo[b]fluoranthene	ND		0.20	0.038	ug/L		01/11/24 09:49	01/11/24 16:33	1
Benzo[g,h,i]perylene	ND		0.20	0.028	ug/L		01/11/24 09:49	01/11/24 16:33	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		01/11/24 09:49	01/11/24 16:33	1
Chrysene	ND		0.20	0.034	ug/L		01/11/24 09:49	01/11/24 16:33	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		01/11/24 09:49	01/11/24 16:33	1
Fluoranthene	ND		0.20	0.035	ug/L		01/11/24 09:49	01/11/24 16:33	1
Fluorene	**0.17**	**J**	0.20	0.091	ug/L		01/11/24 09:49	01/11/24 16:33	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.035	ug/L		01/11/24 09:49	01/11/24 16:33	1
Phenanthrene	ND		0.20	0.092	ug/L		01/11/24 09:49	01/11/24 16:33	1
Pyrene	**0.057**	**J**	0.20	0.040	ug/L		01/11/24 09:49	01/11/24 16:33	1
1-Methylnaphthalene	ND		0.20	0.082	ug/L		01/11/24 09:49	01/11/24 16:33	1
2-Methylnaphthalene	ND		0.20	0.068	ug/L		01/11/24 09:49	01/11/24 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*78*		*18 - 147*	*01/11/24 09:49*	*01/11/24 16:33*	*1*
2-Fluorobiphenyl	*65*		*15 - 128*	*01/11/24 09:49*	*01/11/24 16:33*	*1*

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

Job ID: 400-249385-1

Client Sample ID: ROST4PZC-ROX-010824
Date Collected: 01/08/24 10:30
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-4
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*67*		*10 - 144*	*01/11/24 09:49*	*01/11/24 16:33*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	10	8.9	ug/L		01/11/24 09:49	01/11/24 20:05	1
Benzenethiol	ND		10	10	ug/L		01/11/24 09:49	01/11/24 20:05	1
Benzoic acid	ND		31	25	ug/L		01/11/24 09:49	01/11/24 20:05	1
Benzyl alcohol	ND		10	7.5	ug/L		01/11/24 09:49	01/11/24 20:05	1
Bis(2-chloroethoxy)methane	ND		10	4.7	ug/L		01/11/24 09:49	01/11/24 20:05	1
Bis(2-chloroethyl)ether	ND		10	4.0	ug/L		01/11/24 09:49	01/11/24 20:05	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		01/11/24 09:49	01/11/24 20:05	1
Bis(2-ethylhexyl) phthalate	ND		10	9.1	ug/L		01/11/24 09:49	01/11/24 20:05	1
4-Bromophenyl phenyl ether	ND		10	8.8	ug/L		01/11/24 09:49	01/11/24 20:05	1
Butyl benzyl phthalate	ND		10	5.9	ug/L		01/11/24 09:49	01/11/24 20:05	1
4-Chloroaniline	ND		10	4.8	ug/L		01/11/24 09:49	01/11/24 20:05	1
4-Chloro-3-methylphenol	ND		10	5.4	ug/L		01/11/24 09:49	01/11/24 20:05	1
2-Chloronaphthalene	ND		10	3.9	ug/L		01/11/24 09:49	01/11/24 20:05	1
2-Chlorophenol	ND		10	4.2	ug/L		01/11/24 09:49	01/11/24 20:05	1
4-Chlorophenyl phenyl ether	ND		10	3.8	ug/L		01/11/24 09:49	01/11/24 20:05	1
Dibenz[a,h]acridine	ND		10	2.9	ug/L		01/11/24 09:49	01/11/24 20:05	1
Dibenzofuran	ND		10	4.1	ug/L		01/11/24 09:49	01/11/24 20:05	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/11/24 09:49	01/11/24 20:05	1
2,4-Dichlorophenol	ND		10	4.4	ug/L		01/11/24 09:49	01/11/24 20:05	1
Diethyl phthalate	ND		10	4.5	ug/L		01/11/24 09:49	01/11/24 20:05	1
2,4-Dimethylphenol	ND		10	5.3	ug/L		01/11/24 09:49	01/11/24 20:05	1
Dimethyl phthalate	ND		10	4.3	ug/L		01/11/24 09:49	01/11/24 20:05	1
Di-n-butyl phthalate	ND		10	4.7	ug/L		01/11/24 09:49	01/11/24 20:05	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/11/24 09:49	01/11/24 20:05	1
2,4-Dinitrophenol	ND		31	4.7	ug/L		01/11/24 09:49	01/11/24 20:05	1
2,4-Dinitrotoluene	ND		10	5.2	ug/L		01/11/24 09:49	01/11/24 20:05	1
2,6-Dinitrotoluene	ND		10	4.0	ug/L		01/11/24 09:49	01/11/24 20:05	1
Di-n-octyl phthalate	ND		10	6.1	ug/L		01/11/24 09:49	01/11/24 20:05	1
1,4-Dioxane	ND		10	4.4	ug/L		01/11/24 09:49	01/11/24 20:05	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.4	ug/L		01/11/24 09:49	01/11/24 20:05	1
Hexachlorobenzene	ND		10	9.9	ug/L		01/11/24 09:49	01/11/24 20:05	1
Hexachlorocyclopentadiene	ND		20	4.6	ug/L		01/11/24 09:49	01/11/24 20:05	1
Hexachloroethane	ND		10	5.3	ug/L		01/11/24 09:49	01/11/24 20:05	1
Indene	ND		10	3.7	ug/L		01/11/24 09:49	01/11/24 20:05	1
Isophorone	ND		10	5.3	ug/L		01/11/24 09:49	01/11/24 20:05	1
2-Methylphenol	ND		10	3.3	ug/L		01/11/24 09:49	01/11/24 20:05	1
3 & 4 Methylphenol	ND		20	4.7	ug/L		01/11/24 09:49	01/11/24 20:05	1
2-Nitroaniline	ND		10	5.1	ug/L		01/11/24 09:49	01/11/24 20:05	1
3-Nitroaniline	ND		10	4.8	ug/L		01/11/24 09:49	01/11/24 20:05	1
4-Nitroaniline	ND		10	4.2	ug/L		01/11/24 09:49	01/11/24 20:05	1
Nitrobenzene	ND		10	4.8	ug/L		01/11/24 09:49	01/11/24 20:05	1
2-Nitrophenol	ND		10	4.7	ug/L		01/11/24 09:49	01/11/24 20:05	1
4-Nitrophenol	ND		10	3.4	ug/L		01/11/24 09:49	01/11/24 20:05	1
N-Nitrosodimethylamine	ND		10	2.3	ug/L		01/11/24 09:49	01/11/24 20:05	1

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

Job ID: 400-249385-1

Client Sample ID: ROST4PZC-ROX-010824
Date Collected: 01/08/24 10:30
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-4
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.6	ug/L		01/11/24 09:49	01/11/24 20:05	1
N-Nitrosodiphenylamine	ND		10	3.8	ug/L		01/11/24 09:49	01/11/24 20:05	1
Pentachlorophenol	ND		20	12	ug/L		01/11/24 09:49	01/11/24 20:05	1
Phenol	ND		10	4.3	ug/L		01/11/24 09:49	01/11/24 20:05	1
Pyridine	ND	*1	10	10	ug/L		01/11/24 09:49	01/11/24 20:05	1
Quinoline	ND		10	2.5	ug/L		01/11/24 09:49	01/11/24 20:05	1
2,4,5-Trichlorophenol	ND		10	4.1	ug/L		01/11/24 09:49	01/11/24 20:05	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		01/11/24 09:49	01/11/24 20:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*21 - 114*	*01/11/24 09:49*	*01/11/24 20:05*	*1*
2-Fluorophenol	*41*		*10 - 105*	*01/11/24 09:49*	*01/11/24 20:05*	*1*
Nitrobenzene-d5	*61*		*16 - 127*	*01/11/24 09:49*	*01/11/24 20:05*	*1*
Phenol-d5	*31*		*10 - 129*	*01/11/24 09:49*	*01/11/24 20:05*	*1*
Terphenyl-d14	*79*		*13 - 150*	*01/11/24 09:49*	*01/11/24 20:05*	*1*
2,4,6-Tribromophenol	*67*		*10 - 150*	*01/11/24 09:49*	*01/11/24 20:05*	*1*

Method: EPA 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		01/10/24 14:08	01/11/24 11:34	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/10/24 14:08	01/11/24 11:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*51 - 149*	*01/10/24 14:08*	*01/11/24 11:34*	*1*

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

Job ID: 400-249385-1

Client Sample ID: MW16-ROX-010824
Date Collected: 01/08/24 12:00
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/12/24 11:49	1
Acrolein	ND		20	3.3	ug/L			01/12/24 11:49	1
Acrylonitrile	ND		10	2.8	ug/L			01/12/24 11:49	1
Benzene	ND		1.0	0.50	ug/L			01/12/24 11:49	1
Bromobenzene	ND		1.0	0.54	ug/L			01/12/24 11:49	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/12/24 11:49	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/12/24 11:49	1
Bromoform	ND		5.0	0.25	ug/L			01/12/24 11:49	1
Bromomethane	ND		1.0	0.98	ug/L			01/12/24 11:49	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/12/24 11:49	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/12/24 11:49	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/12/24 11:49	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/12/24 11:49	1
Chloroethane	ND		1.0	0.76	ug/L			01/12/24 11:49	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/12/24 11:49	1
Chloroform	ND		1.0	0.90	ug/L			01/12/24 11:49	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/12/24 11:49	1
Chloromethane	ND		1.0	0.90	ug/L			01/12/24 11:49	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/12/24 11:49	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/12/24 11:49	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/12/24 11:49	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/12/24 11:49	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/12/24 11:49	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/12/24 11:49	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/12/24 11:49	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/12/24 11:49	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/12/24 11:49	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 11:49	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 11:49	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 11:49	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 11:49	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/12/24 11:49	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/12/24 11:49	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/12/24 11:49	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/12/24 11:49	1
2-Hexanone	ND		25	1.4	ug/L			01/12/24 11:49	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/12/24 11:49	1
Methylene bromide	ND		5.0	0.22	ug/L			01/12/24 11:49	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/12/24 11:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/12/24 11:49	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/12/24 11:49	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/12/24 11:49	1
Naphthalene	ND		5.0	3.0	ug/L			01/12/24 11:49	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/12/24 11:49	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/12/24 11:49	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/12/24 11:49	1
o-Xylene	ND		5.0	0.60	ug/L			01/12/24 11:49	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/12/24 11:49	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/12/24 11:49	1

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

Job ID: 400-249385-1

Client Sample ID: MW16-ROX-010824

Lab Sample ID: 400-249385-5

Date Collected: 01/08/24 12:00

Matrix: Water

Date Received: 01/09/24 11:02

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/12/24 11:49	1
Styrene	ND		1.0	1.0	ug/L			01/12/24 11:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/12/24 11:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/12/24 11:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/12/24 11:49	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/12/24 11:49	1
Toluene	ND		1.0	0.90	ug/L			01/12/24 11:49	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 11:49	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/12/24 11:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/12/24 11:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/12/24 11:49	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/12/24 11:49	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/12/24 11:49	1
Trichloroethene	ND		1.0	0.15	ug/L			01/12/24 11:49	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/12/24 11:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/12/24 11:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/12/24 11:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/12/24 11:49	1
Vinyl acetate	ND		25	0.93	ug/L			01/12/24 11:49	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/12/24 11:49	1
Xylenes, Total	ND		10	1.6	ug/L			01/12/24 11:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 130*		*01/12/24 11:49*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/12/24 11:49*	*1*
Toluene-d8 (Surr)	*89*		*64 - 132*		*01/12/24 11:49*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.10	ug/L		01/11/24 09:49	01/11/24 16:54	1
Acenaphthylene	ND		0.21	0.045	ug/L		01/11/24 09:49	01/11/24 16:54	1
Anthracene	ND		0.21	0.048	ug/L		01/11/24 09:49	01/11/24 16:54	1
Benzo[a]anthracene	ND		0.21	0.035	ug/L		01/11/24 09:49	01/11/24 16:54	1
Benzo[a]pyrene	ND		0.21	0.066	ug/L		01/11/24 09:49	01/11/24 16:54	1
Benzo[b]fluoranthene	ND		0.21	0.038	ug/L		01/11/24 09:49	01/11/24 16:54	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		01/11/24 09:49	01/11/24 16:54	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		01/11/24 09:49	01/11/24 16:54	1
Chrysene	ND		0.21	0.034	ug/L		01/11/24 09:49	01/11/24 16:54	1
Dibenz(a,h)anthracene	ND		0.21	0.049	ug/L		01/11/24 09:49	01/11/24 16:54	1
Fluoranthene	ND		0.21	0.035	ug/L		01/11/24 09:49	01/11/24 16:54	1
Fluorene	ND		0.21	0.092	ug/L		01/11/24 09:49	01/11/24 16:54	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.035	ug/L		01/11/24 09:49	01/11/24 16:54	1
Phenanthrene	ND		0.21	0.093	ug/L		01/11/24 09:49	01/11/24 16:54	1
Pyrene	ND		0.21	0.040	ug/L		01/11/24 09:49	01/11/24 16:54	1
1-Methylnaphthalene	ND		0.21	0.082	ug/L		01/11/24 09:49	01/11/24 16:54	1
2-Methylnaphthalene	ND		0.21	0.068	ug/L		01/11/24 09:49	01/11/24 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*78*		*18 - 147*	*01/11/24 09:49*	*01/11/24 16:54*	*1*
2-Fluorobiphenyl	*64*		*15 - 128*	*01/11/24 09:49*	*01/11/24 16:54*	*1*

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

Job ID: 400-249385-1

Client Sample ID: MW16-ROX-010824
Date Collected: 01/08/24 12:00
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-5
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*64*		*10 - 144*	*01/11/24 09:49*	*01/11/24 16:54*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	10	9.0	ug/L		01/11/24 09:49	01/11/24 20:32	1
Benzenethiol	ND		10	10	ug/L		01/11/24 09:49	01/11/24 20:32	1
Benzoic acid	ND		31	25	ug/L		01/11/24 09:49	01/11/24 20:32	1
Benzyl alcohol	ND		10	7.5	ug/L		01/11/24 09:49	01/11/24 20:32	1
Bis(2-chloroethoxy)methane	ND		10	4.7	ug/L		01/11/24 09:49	01/11/24 20:32	1
Bis(2-chloroethyl)ether	ND		10	4.0	ug/L		01/11/24 09:49	01/11/24 20:32	1
bis (2-chloroisopropyl) ether	ND		10	1.9	ug/L		01/11/24 09:49	01/11/24 20:32	1
Bis(2-ethylhexyl) phthalate	ND		10	9.2	ug/L		01/11/24 09:49	01/11/24 20:32	1
4-Bromophenyl phenyl ether	ND		10	8.9	ug/L		01/11/24 09:49	01/11/24 20:32	1
Butyl benzyl phthalate	ND		10	6.0	ug/L		01/11/24 09:49	01/11/24 20:32	1
4-Chloroaniline	ND		10	4.8	ug/L		01/11/24 09:49	01/11/24 20:32	1
4-Chloro-3-methylphenol	ND		10	5.5	ug/L		01/11/24 09:49	01/11/24 20:32	1
2-Chloronaphthalene	ND		10	3.9	ug/L		01/11/24 09:49	01/11/24 20:32	1
2-Chlorophenol	ND		10	4.2	ug/L		01/11/24 09:49	01/11/24 20:32	1
4-Chlorophenyl phenyl ether	ND		10	3.8	ug/L		01/11/24 09:49	01/11/24 20:32	1
Dibenz[a,h]acridine	ND		10	2.9	ug/L		01/11/24 09:49	01/11/24 20:32	1
Dibenzofuran	ND		10	4.1	ug/L		01/11/24 09:49	01/11/24 20:32	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/11/24 09:49	01/11/24 20:32	1
2,4-Dichlorophenol	ND		10	4.4	ug/L		01/11/24 09:49	01/11/24 20:32	1
Diethyl phthalate	ND		10	4.5	ug/L		01/11/24 09:49	01/11/24 20:32	1
2,4-Dimethylphenol	ND		10	5.4	ug/L		01/11/24 09:49	01/11/24 20:32	1
Dimethyl phthalate	ND		10	4.3	ug/L		01/11/24 09:49	01/11/24 20:32	1
Di-n-butyl phthalate	ND		10	4.7	ug/L		01/11/24 09:49	01/11/24 20:32	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/11/24 09:49	01/11/24 20:32	1
2,4-Dinitrophenol	ND		31	4.7	ug/L		01/11/24 09:49	01/11/24 20:32	1
2,4-Dinitrotoluene	ND		10	5.3	ug/L		01/11/24 09:49	01/11/24 20:32	1
2,6-Dinitrotoluene	ND		10	4.0	ug/L		01/11/24 09:49	01/11/24 20:32	1
Di-n-octyl phthalate	ND		10	6.2	ug/L		01/11/24 09:49	01/11/24 20:32	1
1,4-Dioxane	ND		10	4.4	ug/L		01/11/24 09:49	01/11/24 20:32	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.4	ug/L		01/11/24 09:49	01/11/24 20:32	1
Hexachlorobenzene	ND		10	10	ug/L		01/11/24 09:49	01/11/24 20:32	1
Hexachlorocyclopentadiene	ND		21	4.6	ug/L		01/11/24 09:49	01/11/24 20:32	1
Hexachloroethane	ND		10	5.4	ug/L		01/11/24 09:49	01/11/24 20:32	1
Indene	ND		10	3.7	ug/L		01/11/24 09:49	01/11/24 20:32	1
Isophorone	ND		10	5.4	ug/L		01/11/24 09:49	01/11/24 20:32	1
2-Methylphenol	ND		10	3.3	ug/L		01/11/24 09:49	01/11/24 20:32	1
3 & 4 Methylphenol	ND		21	4.7	ug/L		01/11/24 09:49	01/11/24 20:32	1
2-Nitroaniline	ND		10	5.1	ug/L		01/11/24 09:49	01/11/24 20:32	1
3-Nitroaniline	ND		10	4.8	ug/L		01/11/24 09:49	01/11/24 20:32	1
4-Nitroaniline	ND		10	4.2	ug/L		01/11/24 09:49	01/11/24 20:32	1
Nitrobenzene	ND		10	4.8	ug/L		01/11/24 09:49	01/11/24 20:32	1
2-Nitrophenol	ND		10	4.7	ug/L		01/11/24 09:49	01/11/24 20:32	1
4-Nitrophenol	ND		10	3.4	ug/L		01/11/24 09:49	01/11/24 20:32	1
N-Nitrosodimethylamine	ND		10	2.3	ug/L		01/11/24 09:49	01/11/24 20:32	1

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

Job ID: 400-249385-1

Client Sample ID: MW16-ROX-010824
Date Collected: 01/08/24 12:00
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-5
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.6	ug/L		01/11/24 09:49	01/11/24 20:32	1
N-Nitrosodiphenylamine	ND		10	3.8	ug/L		01/11/24 09:49	01/11/24 20:32	1
Pentachlorophenol	ND		21	12	ug/L		01/11/24 09:49	01/11/24 20:32	1
Phenol	ND		10	4.3	ug/L		01/11/24 09:49	01/11/24 20:32	1
Pyridine	ND	*1	10	10	ug/L		01/11/24 09:49	01/11/24 20:32	1
Quinoline	ND		10	2.5	ug/L		01/11/24 09:49	01/11/24 20:32	1
2,4,5-Trichlorophenol	ND		10	4.1	ug/L		01/11/24 09:49	01/11/24 20:32	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		01/11/24 09:49	01/11/24 20:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*21 - 114*	*01/11/24 09:49*	*01/11/24 20:32*	*1*
2-Fluorophenol	*37*		*10 - 105*	*01/11/24 09:49*	*01/11/24 20:32*	*1*
Nitrobenzene-d5	*53*		*16 - 127*	*01/11/24 09:49*	*01/11/24 20:32*	*1*
Phenol-d5	*29*		*10 - 129*	*01/11/24 09:49*	*01/11/24 20:32*	*1*
Terphenyl-d14	*80*		*13 - 150*	*01/11/24 09:49*	*01/11/24 20:32*	*1*
2,4,6-Tribromophenol	*67*		*10 - 150*	*01/11/24 09:49*	*01/11/24 20:32*	*1*

Method: EPA 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		01/10/24 14:08	01/10/24 18:57	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/10/24 14:08	01/10/24 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*142*		*51 - 149*	*01/10/24 14:08*	*01/10/24 18:57*	*1*

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

Job ID: 400-249385-1

Client Sample ID: TB-ROX-010824-8260-A
Date Collected: 01/08/24 00:00
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/12/24 14:15	1
Acrolein	ND		20	3.3	ug/L			01/12/24 14:15	1
Acrylonitrile	ND		10	2.8	ug/L			01/12/24 14:15	1
Benzene	ND		1.0	0.50	ug/L			01/12/24 14:15	1
Bromobenzene	ND		1.0	0.54	ug/L			01/12/24 14:15	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/12/24 14:15	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/12/24 14:15	1
Bromoform	ND		5.0	0.25	ug/L			01/12/24 14:15	1
Bromomethane	ND		1.0	0.98	ug/L			01/12/24 14:15	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/12/24 14:15	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/12/24 14:15	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/12/24 14:15	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/12/24 14:15	1
Chloroethane	ND		1.0	0.76	ug/L			01/12/24 14:15	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/12/24 14:15	1
Chloroform	ND		1.0	0.90	ug/L			01/12/24 14:15	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/12/24 14:15	1
Chloromethane	ND		1.0	0.90	ug/L			01/12/24 14:15	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/12/24 14:15	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/12/24 14:15	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/12/24 14:15	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/12/24 14:15	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/12/24 14:15	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/12/24 14:15	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/12/24 14:15	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/12/24 14:15	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/12/24 14:15	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 14:15	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 14:15	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 14:15	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 14:15	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/12/24 14:15	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/12/24 14:15	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/12/24 14:15	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/12/24 14:15	1
2-Hexanone	ND		25	1.4	ug/L			01/12/24 14:15	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/12/24 14:15	1
Methylene bromide	ND		5.0	0.22	ug/L			01/12/24 14:15	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/12/24 14:15	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/12/24 14:15	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/12/24 14:15	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/12/24 14:15	1
Naphthalene	ND		5.0	3.0	ug/L			01/12/24 14:15	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/12/24 14:15	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/12/24 14:15	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/12/24 14:15	1
o-Xylene	ND		5.0	0.60	ug/L			01/12/24 14:15	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/12/24 14:15	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/12/24 14:15	1

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

Job ID: 400-249385-1

Client Sample ID: TB-ROX-010824-8260-A
Date Collected: 01/08/24 00:00
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/12/24 14:15	1
Styrene	ND		1.0	1.0	ug/L			01/12/24 14:15	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/12/24 14:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/12/24 14:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/12/24 14:15	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/12/24 14:15	1
Toluene	ND		1.0	0.90	ug/L			01/12/24 14:15	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 14:15	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/12/24 14:15	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/12/24 14:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/12/24 14:15	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/12/24 14:15	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/12/24 14:15	1
Trichloroethene	ND		1.0	0.15	ug/L			01/12/24 14:15	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/12/24 14:15	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/12/24 14:15	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/12/24 14:15	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/12/24 14:15	1
Vinyl acetate	ND		25	0.93	ug/L			01/12/24 14:15	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/12/24 14:15	1
Xylenes, Total	ND		10	1.6	ug/L			01/12/24 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 130*		*01/12/24 14:15*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/12/24 14:15*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*01/12/24 14:15*	*1*

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

Job ID: 400-249385-1

Client Sample ID: TB-ROX-010824-8011-A
Date Collected: 01/08/24 00:00
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-7
Matrix: Water

Method: EPA 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		01/10/24 14:08	01/10/24 19:18	1
1,2-Dibromoethane	ND		0.021	0.015	ug/L		01/10/24 14:08	01/10/24 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*138*		*51 - 149*	*01/10/24 14:08*	*01/10/24 19:18*	*1*

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

Job ID: 400-249385-1

Client Sample ID: MW27-ROX-010824
Date Collected: 01/08/24 09:25
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-8
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/12/24 16:43	1
Acrolein	ND		20	3.3	ug/L			01/12/24 16:43	1
Acrylonitrile	ND		10	2.8	ug/L			01/12/24 16:43	1
Benzene	ND		1.0	0.50	ug/L			01/12/24 16:43	1
Bromobenzene	ND		1.0	0.54	ug/L			01/12/24 16:43	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/12/24 16:43	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/12/24 16:43	1
Bromoform	ND		5.0	0.25	ug/L			01/12/24 16:43	1
Bromomethane	ND		1.0	0.98	ug/L			01/12/24 16:43	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/12/24 16:43	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/12/24 16:43	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/12/24 16:43	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/12/24 16:43	1
Chloroethane	ND		1.0	0.76	ug/L			01/12/24 16:43	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/12/24 16:43	1
Chloroform	ND		1.0	0.90	ug/L			01/12/24 16:43	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/12/24 16:43	1
Chloromethane	ND		1.0	0.90	ug/L			01/12/24 16:43	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/12/24 16:43	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/12/24 16:43	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/12/24 16:43	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/12/24 16:43	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/12/24 16:43	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/12/24 16:43	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/12/24 16:43	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/12/24 16:43	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/12/24 16:43	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 16:43	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 16:43	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 16:43	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 16:43	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/12/24 16:43	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/12/24 16:43	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/12/24 16:43	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/12/24 16:43	1
2-Hexanone	ND		25	1.4	ug/L			01/12/24 16:43	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/12/24 16:43	1
Methylene bromide	ND		5.0	0.22	ug/L			01/12/24 16:43	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/12/24 16:43	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/12/24 16:43	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/12/24 16:43	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/12/24 16:43	1
Naphthalene	ND		5.0	3.0	ug/L			01/12/24 16:43	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/12/24 16:43	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/12/24 16:43	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/12/24 16:43	1
o-Xylene	ND		5.0	0.60	ug/L			01/12/24 16:43	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/12/24 16:43	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/12/24 16:43	1

Client Sample ID: MW27-ROX-010824
Date Collected: 01/08/24 09:25
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-8
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/12/24 16:43	1
Styrene	ND		1.0	1.0	ug/L			01/12/24 16:43	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/12/24 16:43	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/12/24 16:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/12/24 16:43	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/12/24 16:43	1
Toluene	ND		1.0	0.90	ug/L			01/12/24 16:43	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 16:43	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/12/24 16:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/12/24 16:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/12/24 16:43	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/12/24 16:43	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/12/24 16:43	1
Trichloroethene	ND		1.0	0.15	ug/L			01/12/24 16:43	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/12/24 16:43	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/12/24 16:43	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/12/24 16:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/12/24 16:43	1
Vinyl acetate	ND		25	0.93	ug/L			01/12/24 16:43	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/12/24 16:43	1
Xylenes, Total	ND		10	1.6	ug/L			01/12/24 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 130*		*01/12/24 16:43*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*01/12/24 16:43*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*01/12/24 16:43*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.094	ug/L		01/11/24 09:49	01/11/24 17:15	1
Acenaphthylene	ND		0.19	0.042	ug/L		01/11/24 09:49	01/11/24 17:15	1
Anthracene	ND		0.19	0.044	ug/L		01/11/24 09:49	01/11/24 17:15	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		01/11/24 09:49	01/11/24 17:15	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		01/11/24 09:49	01/11/24 17:15	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		01/11/24 09:49	01/11/24 17:15	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		01/11/24 09:49	01/11/24 17:15	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		01/11/24 09:49	01/11/24 17:15	1
Chrysene	ND		0.19	0.031	ug/L		01/11/24 09:49	01/11/24 17:15	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		01/11/24 09:49	01/11/24 17:15	1
Fluoranthene	ND		0.19	0.032	ug/L		01/11/24 09:49	01/11/24 17:15	1
Fluorene	ND		0.19	0.084	ug/L		01/11/24 09:49	01/11/24 17:15	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		01/11/24 09:49	01/11/24 17:15	1
Phenanthrene	ND		0.19	0.085	ug/L		01/11/24 09:49	01/11/24 17:15	1
Pyrene	ND		0.19	0.037	ug/L		01/11/24 09:49	01/11/24 17:15	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		01/11/24 09:49	01/11/24 17:15	1
2-Methylnaphthalene	ND		0.19	0.062	ug/L		01/11/24 09:49	01/11/24 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*86*		*18 - 147*	*01/11/24 09:49*	*01/11/24 17:15*	*1*
2-Fluorobiphenyl	*62*		*15 - 128*	*01/11/24 09:49*	*01/11/24 17:15*	*1*

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

Job ID: 400-249385-1

Client Sample ID: MW27-ROX-010824
Date Collected: 01/08/24 09:25
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-8
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*60*		*10 - 144*	*01/11/24 09:49*	*01/11/24 17:15*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.5	8.2	ug/L		01/11/24 09:49	01/11/24 20:59	1
Benzenethiol	ND		9.5	9.4	ug/L		01/11/24 09:49	01/11/24 20:59	1
Benzoic acid	ND		28	23	ug/L		01/11/24 09:49	01/11/24 20:59	1
Benzyl alcohol	ND		9.5	6.9	ug/L		01/11/24 09:49	01/11/24 20:59	1
Bis(2-chloroethoxy)methane	ND		9.5	4.4	ug/L		01/11/24 09:49	01/11/24 20:59	1
Bis(2-chloroethyl)ether	ND		9.5	3.7	ug/L		01/11/24 09:49	01/11/24 20:59	1
bis (2-chloroisopropyl) ether	ND		9.5	1.7	ug/L		01/11/24 09:49	01/11/24 20:59	1
Bis(2-ethylhexyl) phthalate	ND		9.5	8.4	ug/L		01/11/24 09:49	01/11/24 20:59	1
4-Bromophenyl phenyl ether	ND		9.5	8.1	ug/L		01/11/24 09:49	01/11/24 20:59	1
Butyl benzyl phthalate	ND		9.5	5.5	ug/L		01/11/24 09:49	01/11/24 20:59	1
4-Chloroaniline	ND		9.5	4.4	ug/L		01/11/24 09:49	01/11/24 20:59	1
4-Chloro-3-methylphenol	ND		9.5	5.0	ug/L		01/11/24 09:49	01/11/24 20:59	1
2-Chloronaphthalene	ND		9.5	3.6	ug/L		01/11/24 09:49	01/11/24 20:59	1
2-Chlorophenol	ND		9.5	3.9	ug/L		01/11/24 09:49	01/11/24 20:59	1
4-Chlorophenyl phenyl ether	ND		9.5	3.5	ug/L		01/11/24 09:49	01/11/24 20:59	1
Dibenz[a,h]acridine	ND		9.5	2.6	ug/L		01/11/24 09:49	01/11/24 20:59	1
Dibenzofuran	ND		9.5	3.8	ug/L		01/11/24 09:49	01/11/24 20:59	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		01/11/24 09:49	01/11/24 20:59	1
2,4-Dichlorophenol	ND		9.5	4.1	ug/L		01/11/24 09:49	01/11/24 20:59	1
Diethyl phthalate	ND		9.5	4.2	ug/L		01/11/24 09:49	01/11/24 20:59	1
2,4-Dimethylphenol	ND		9.5	4.9	ug/L		01/11/24 09:49	01/11/24 20:59	1
Dimethyl phthalate	ND		9.5	4.0	ug/L		01/11/24 09:49	01/11/24 20:59	1
Di-n-butyl phthalate	ND		9.5	4.4	ug/L		01/11/24 09:49	01/11/24 20:59	1
4,6-Dinitro-ortho-cresol	ND		9.5	9.5	ug/L		01/11/24 09:49	01/11/24 20:59	1
2,4-Dinitrophenol	ND		28	4.4	ug/L		01/11/24 09:49	01/11/24 20:59	1
2,4-Dinitrotoluene	ND		9.5	4.8	ug/L		01/11/24 09:49	01/11/24 20:59	1
2,6-Dinitrotoluene	ND		9.5	3.7	ug/L		01/11/24 09:49	01/11/24 20:59	1
Di-n-octyl phthalate	ND		9.5	5.7	ug/L		01/11/24 09:49	01/11/24 20:59	1
1,4-Dioxane	ND		9.5	4.1	ug/L		01/11/24 09:49	01/11/24 20:59	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	3.1	ug/L		01/11/24 09:49	01/11/24 20:59	1
Hexachlorobenzene	ND		9.5	9.2	ug/L		01/11/24 09:49	01/11/24 20:59	1
Hexachlorocyclopentadiene	ND		19	4.3	ug/L		01/11/24 09:49	01/11/24 20:59	1
Hexachloroethane	ND		9.5	4.9	ug/L		01/11/24 09:49	01/11/24 20:59	1
Indene	ND		9.5	3.4	ug/L		01/11/24 09:49	01/11/24 20:59	1
Isophorone	ND		9.5	4.9	ug/L		01/11/24 09:49	01/11/24 20:59	1
2-Methylphenol	ND		9.5	3.0	ug/L		01/11/24 09:49	01/11/24 20:59	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		01/11/24 09:49	01/11/24 20:59	1
2-Nitroaniline	ND		9.5	4.7	ug/L		01/11/24 09:49	01/11/24 20:59	1
3-Nitroaniline	ND		9.5	4.4	ug/L		01/11/24 09:49	01/11/24 20:59	1
4-Nitroaniline	ND		9.5	3.9	ug/L		01/11/24 09:49	01/11/24 20:59	1
Nitrobenzene	ND		9.5	4.4	ug/L		01/11/24 09:49	01/11/24 20:59	1
2-Nitrophenol	ND		9.5	4.4	ug/L		01/11/24 09:49	01/11/24 20:59	1
4-Nitrophenol	ND		9.5	3.1	ug/L		01/11/24 09:49	01/11/24 20:59	1
N-Nitrosodimethylamine	ND		9.5	2.1	ug/L		01/11/24 09:49	01/11/24 20:59	1

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

Job ID: 400-249385-1

Client Sample ID: MW27-ROX-010824
Date Collected: 01/08/24 09:25
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-8
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	2.4	ug/L		01/11/24 09:49	01/11/24 20:59	1
N-Nitrosodiphenylamine	ND		9.5	3.5	ug/L		01/11/24 09:49	01/11/24 20:59	1
Pentachlorophenol	ND		19	11	ug/L		01/11/24 09:49	01/11/24 20:59	1
Phenol	ND		9.5	4.0	ug/L		01/11/24 09:49	01/11/24 20:59	1
Pyridine	ND	*1	9.5	9.5	ug/L		01/11/24 09:49	01/11/24 20:59	1
Quinoline	ND		9.5	2.3	ug/L		01/11/24 09:49	01/11/24 20:59	1
2,4,5-Trichlorophenol	ND		9.5	3.8	ug/L		01/11/24 09:49	01/11/24 20:59	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/11/24 09:49	01/11/24 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*53*		*21 - 114*	*01/11/24 09:49*	*01/11/24 20:59*	*1*
2-Fluorophenol	*29*		*10 - 105*	*01/11/24 09:49*	*01/11/24 20:59*	*1*
Nitrobenzene-d5	*45*		*16 - 127*	*01/11/24 09:49*	*01/11/24 20:59*	*1*
Phenol-d5	*22*		*10 - 129*	*01/11/24 09:49*	*01/11/24 20:59*	*1*
Terphenyl-d14	*66*		*13 - 150*	*01/11/24 09:49*	*01/11/24 20:59*	*1*
2,4,6-Tribromophenol	*52*		*10 - 150*	*01/11/24 09:49*	*01/11/24 20:59*	*1*

Method: EPA 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		01/10/24 14:08	01/10/24 19:40	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/10/24 14:08	01/10/24 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*51 - 149*	*01/10/24 14:08*	*01/10/24 19:40*	*1*

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

Job ID: 400-249385-1

Client Sample ID: ROST3MW-ROX-010824
Date Collected: 01/08/24 10:45
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-9
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/12/24 09:26	1
Acrolein	ND		20	3.3	ug/L			01/12/24 09:26	1
Acrylonitrile	ND		10	2.8	ug/L			01/12/24 09:26	1
Benzene	ND		1.0	0.50	ug/L			01/12/24 09:26	1
Bromobenzene	ND		1.0	0.54	ug/L			01/12/24 09:26	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/12/24 09:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/12/24 09:26	1
Bromoform	ND		5.0	0.25	ug/L			01/12/24 09:26	1
Bromomethane	ND		1.0	0.98	ug/L			01/12/24 09:26	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/12/24 09:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/12/24 09:26	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/12/24 09:26	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/12/24 09:26	1
Chloroethane	ND		1.0	0.76	ug/L			01/12/24 09:26	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			01/12/24 09:26	1
Chloroform	ND		1.0	0.90	ug/L			01/12/24 09:26	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/12/24 09:26	1
Chloromethane	ND		1.0	0.90	ug/L			01/12/24 09:26	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/12/24 09:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/12/24 09:26	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/12/24 09:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/12/24 09:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/12/24 09:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/12/24 09:26	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/12/24 09:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/12/24 09:26	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/12/24 09:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 09:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 09:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 09:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 09:26	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/12/24 09:26	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/12/24 09:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/12/24 09:26	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/12/24 09:26	1
2-Hexanone	ND		25	1.4	ug/L			01/12/24 09:26	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/12/24 09:26	1
Methylene bromide	ND		5.0	0.22	ug/L			01/12/24 09:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/12/24 09:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/12/24 09:26	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/12/24 09:26	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/12/24 09:26	1
Naphthalene	ND		5.0	3.0	ug/L			01/12/24 09:26	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/12/24 09:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/12/24 09:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/12/24 09:26	1
o-Xylene	ND		5.0	0.60	ug/L			01/12/24 09:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/12/24 09:26	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/12/24 09:26	1

Client Sample ID: ROST3MW-ROX-010824
Date Collected: 01/08/24 10:45
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-9
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/12/24 09:26	1
Styrene	ND		1.0	1.0	ug/L			01/12/24 09:26	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/12/24 09:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/12/24 09:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/12/24 09:26	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/12/24 09:26	1
Toluene	ND		1.0	0.90	ug/L			01/12/24 09:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 09:26	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/12/24 09:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/12/24 09:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/12/24 09:26	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/12/24 09:26	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/12/24 09:26	1
Trichloroethene	ND		1.0	0.15	ug/L			01/12/24 09:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/12/24 09:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/12/24 09:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/12/24 09:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/12/24 09:26	1
Vinyl acetate	ND		25	0.93	ug/L			01/12/24 09:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/12/24 09:26	1
Xylenes, Total	ND		10	1.6	ug/L			01/12/24 09:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 130*		*01/12/24 09:26*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*01/12/24 09:26*	*1*
Toluene-d8 (Surr)	*87*		*64 - 132*		*01/12/24 09:26*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.14**	**J**	0.19	0.095	ug/L		01/11/24 09:49	01/11/24 17:36	1
Acenaphthylene	ND		0.19	0.042	ug/L		01/11/24 09:49	01/11/24 17:36	1
Anthracene	ND		0.19	0.045	ug/L		01/11/24 09:49	01/11/24 17:36	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		01/11/24 09:49	01/11/24 17:36	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		01/11/24 09:49	01/11/24 17:36	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		01/11/24 09:49	01/11/24 17:36	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		01/11/24 09:49	01/11/24 17:36	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		01/11/24 09:49	01/11/24 17:36	1
Chrysene	ND		0.19	0.032	ug/L		01/11/24 09:49	01/11/24 17:36	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		01/11/24 09:49	01/11/24 17:36	1
Fluoranthene	ND		0.19	0.033	ug/L		01/11/24 09:49	01/11/24 17:36	1
Fluorene	**0.15**	**J**	0.19	0.086	ug/L		01/11/24 09:49	01/11/24 17:36	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		01/11/24 09:49	01/11/24 17:36	1
Phenanthrene	**0.087**	**J**	0.19	0.087	ug/L		01/11/24 09:49	01/11/24 17:36	1
Pyrene	ND		0.19	0.038	ug/L		01/11/24 09:49	01/11/24 17:36	1
1-Methylnaphthalene	**0.29**		0.19	0.077	ug/L		01/11/24 09:49	01/11/24 17:36	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		01/11/24 09:49	01/11/24 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*96*		*18 - 147*	*01/11/24 09:49*	*01/11/24 17:36*	*1*
2-Fluorobiphenyl	*76*		*15 - 128*	*01/11/24 09:49*	*01/11/24 17:36*	*1*

Client Sample ID: ROST3MW-ROX-010824
Date Collected: 01/08/24 10:45
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-9
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*78*		*10 - 144*	*01/11/24 09:49*	*01/11/24 17:36*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	F1 *1	9.6	8.4	ug/L		01/11/24 09:49	01/11/24 21:25	1
Benzenethiol	ND		9.6	9.5	ug/L		01/11/24 09:49	01/11/24 21:25	1
Benzoic acid	ND	F2	29	23	ug/L		01/11/24 09:49	01/11/24 21:25	1
Benzyl alcohol	ND	F1	9.6	7.0	ug/L		01/11/24 09:49	01/11/24 21:25	1
Bis(2-chloroethoxy)methane	ND	F2 F1	9.6	4.4	ug/L		01/11/24 09:49	01/11/24 21:25	1
Bis(2-chloroethyl)ether	ND	F2 F1	9.6	3.8	ug/L		01/11/24 09:49	01/11/24 21:25	1
bis (2-chloroisopropyl) ether	ND	F2 F1	9.6	1.7	ug/L		01/11/24 09:49	01/11/24 21:25	1
Bis(2-ethylhexyl) phthalate	ND	F2 F1	9.6	8.6	ug/L		01/11/24 09:49	01/11/24 21:25	1
4-Bromophenyl phenyl ether	ND	F2 F1	9.6	8.3	ug/L		01/11/24 09:49	01/11/24 21:25	1
Butyl benzyl phthalate	ND	F2 F1	9.6	5.6	ug/L		01/11/24 09:49	01/11/24 21:25	1
4-Chloroaniline	ND	F1	9.6	4.5	ug/L		01/11/24 09:49	01/11/24 21:25	1
4-Chloro-3-methylphenol	ND	F2 F1	9.6	5.1	ug/L		01/11/24 09:49	01/11/24 21:25	1
2-Chloronaphthalene	ND	F2 F1	9.6	3.7	ug/L		01/11/24 09:49	01/11/24 21:25	1
2-Chlorophenol	ND	F2 F1	9.6	3.9	ug/L		01/11/24 09:49	01/11/24 21:25	1
4-Chlorophenyl phenyl ether	ND	F2 F1	9.6	3.6	ug/L		01/11/24 09:49	01/11/24 21:25	1
Dibenz[a,h]acridine	ND	F2	9.6	2.7	ug/L		01/11/24 09:49	01/11/24 21:25	1
Dibenzofuran	ND	F2 F1	9.6	3.8	ug/L		01/11/24 09:49	01/11/24 21:25	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/11/24 09:49	01/11/24 21:25	1
2,4-Dichlorophenol	ND	F2 F1	9.6	4.1	ug/L		01/11/24 09:49	01/11/24 21:25	1
Diethyl phthalate	ND	F2 F1	9.6	4.2	ug/L		01/11/24 09:49	01/11/24 21:25	1
2,4-Dimethylphenol	ND	F2	9.6	5.0	ug/L		01/11/24 09:49	01/11/24 21:25	1
Dimethyl phthalate	ND	F2 F1	9.6	4.0	ug/L		01/11/24 09:49	01/11/24 21:25	1
Di-n-butyl phthalate	ND	F2 F1	9.6	4.4	ug/L		01/11/24 09:49	01/11/24 21:25	1
4,6-Dinitro-ortho-cresol	ND	F2 F1	9.6	9.6	ug/L		01/11/24 09:49	01/11/24 21:25	1
2,4-Dinitrophenol	ND	F2 F1	29	4.4	ug/L		01/11/24 09:49	01/11/24 21:25	1
2,4-Dinitrotoluene	ND	F2 F1	9.6	4.9	ug/L		01/11/24 09:49	01/11/24 21:25	1
2,6-Dinitrotoluene	ND	F2 F1	9.6	3.8	ug/L		01/11/24 09:49	01/11/24 21:25	1
Di-n-octyl phthalate	ND	F2 F1	9.6	5.8	ug/L		01/11/24 09:49	01/11/24 21:25	1
1,4-Dioxane	ND	F1	9.6	4.1	ug/L		01/11/24 09:49	01/11/24 21:25	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	F2 F1	9.6	3.2	ug/L		01/11/24 09:49	01/11/24 21:25	1
Hexachlorobenzene	ND	F2 F1	9.6	9.3	ug/L		01/11/24 09:49	01/11/24 21:25	1
Hexachlorocyclopentadiene	ND	F2 F1	19	4.3	ug/L		01/11/24 09:49	01/11/24 21:25	1
Hexachloroethane	ND	F2 F1	9.6	5.0	ug/L		01/11/24 09:49	01/11/24 21:25	1
Indene	ND	F2 F1	9.6	3.5	ug/L		01/11/24 09:49	01/11/24 21:25	1
Isophorone	ND	F2 F1	9.6	5.0	ug/L		01/11/24 09:49	01/11/24 21:25	1
2-Methylphenol	ND	F2 F1	9.6	3.1	ug/L		01/11/24 09:49	01/11/24 21:25	1
3 & 4 Methylphenol	ND	F2 F1	19	4.4	ug/L		01/11/24 09:49	01/11/24 21:25	1
2-Nitroaniline	ND	F2 F1	9.6	4.8	ug/L		01/11/24 09:49	01/11/24 21:25	1
3-Nitroaniline	ND		9.6	4.5	ug/L		01/11/24 09:49	01/11/24 21:25	1
4-Nitroaniline	ND	F2 F1	9.6	3.9	ug/L		01/11/24 09:49	01/11/24 21:25	1
Nitrobenzene	ND	F2 F1	9.6	4.5	ug/L		01/11/24 09:49	01/11/24 21:25	1
2-Nitrophenol	ND	F2 F1	9.6	4.4	ug/L		01/11/24 09:49	01/11/24 21:25	1
4-Nitrophenol	ND	F2	9.6	3.2	ug/L		01/11/24 09:49	01/11/24 21:25	1
N-Nitrosodimethylamine	ND	F2 F1	9.6	2.1	ug/L		01/11/24 09:49	01/11/24 21:25	1

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

Job ID: 400-249385-1

Client Sample ID: ROST3MW-ROX-010824

Lab Sample ID: 400-249385-9

Date Collected: 01/08/24 10:45

Matrix: Water

Date Received: 01/09/24 11:02

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND	F2 F1	9.6	2.4	ug/L		01/11/24 09:49	01/11/24 21:25	1
N-Nitrosodiphenylamine	ND	F2 F1	9.6	3.6	ug/L		01/11/24 09:49	01/11/24 21:25	1
Pentachlorophenol	ND	F2 F1	19	11	ug/L		01/11/24 09:49	01/11/24 21:25	1
Phenol	ND	F1	9.6	4.0	ug/L		01/11/24 09:49	01/11/24 21:25	1
Pyridine	ND	F1 *1	9.6	9.6	ug/L		01/11/24 09:49	01/11/24 21:25	1
Quinoline	ND		9.6	2.3	ug/L		01/11/24 09:49	01/11/24 21:25	1
2,4,5-Trichlorophenol	ND	F2 F1	9.6	3.8	ug/L		01/11/24 09:49	01/11/24 21:25	1
2,4,6-Trichlorophenol	ND	F2 F1	9.6	3.4	ug/L		01/11/24 09:49	01/11/24 21:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*21 - 114*	*01/11/24 09:49*	*01/11/24 21:25*	*1*
2-Fluorophenol	*39*		*10 - 105*	*01/11/24 09:49*	*01/11/24 21:25*	*1*
Nitrobenzene-d5	*62*		*16 - 127*	*01/11/24 09:49*	*01/11/24 21:25*	*1*
Phenol-d5	*32*		*10 - 129*	*01/11/24 09:49*	*01/11/24 21:25*	*1*
Terphenyl-d14	*81*		*13 - 150*	*01/11/24 09:49*	*01/11/24 21:25*	*1*
2,4,6-Tribromophenol	*70*		*10 - 150*	*01/11/24 09:49*	*01/11/24 21:25*	*1*

Method: EPA 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		01/10/24 14:08	01/10/24 20:01	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/10/24 14:08	01/10/24 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*51 - 149*	*01/10/24 14:08*	*01/10/24 20:01*	*1*

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

Job ID: 400-249385-1

Client Sample ID: P54-ROX-010824
Date Collected: 01/08/24 12:35
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-10
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/12/24 17:07	1
Acrolein	ND		20	3.3	ug/L			01/12/24 17:07	1
Acrylonitrile	ND		10	2.8	ug/L			01/12/24 17:07	1
Benzene	ND		1.0	0.50	ug/L			01/12/24 17:07	1
Bromobenzene	ND		1.0	0.54	ug/L			01/12/24 17:07	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/12/24 17:07	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/12/24 17:07	1
Bromoform	ND		5.0	0.25	ug/L			01/12/24 17:07	1
Bromomethane	ND		1.0	0.98	ug/L			01/12/24 17:07	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/12/24 17:07	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/12/24 17:07	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/12/24 17:07	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/12/24 17:07	1
Chloroethane	ND		1.0	0.76	ug/L			01/12/24 17:07	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/12/24 17:07	1
Chloroform	ND		1.0	0.90	ug/L			01/12/24 17:07	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/12/24 17:07	1
Chloromethane	ND		1.0	0.90	ug/L			01/12/24 17:07	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/12/24 17:07	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/12/24 17:07	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/12/24 17:07	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/12/24 17:07	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/12/24 17:07	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/12/24 17:07	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/12/24 17:07	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/12/24 17:07	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/12/24 17:07	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 17:07	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 17:07	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 17:07	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 17:07	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/12/24 17:07	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/12/24 17:07	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/12/24 17:07	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/12/24 17:07	1
2-Hexanone	ND		25	1.4	ug/L			01/12/24 17:07	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/12/24 17:07	1
Methylene bromide	ND		5.0	0.22	ug/L			01/12/24 17:07	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/12/24 17:07	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/12/24 17:07	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/12/24 17:07	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/12/24 17:07	1
Naphthalene	ND		5.0	3.0	ug/L			01/12/24 17:07	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/12/24 17:07	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/12/24 17:07	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/12/24 17:07	1
o-Xylene	ND		5.0	0.60	ug/L			01/12/24 17:07	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/12/24 17:07	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/12/24 17:07	1

Client Sample ID: P54-ROX-010824

Date Collected: 01/08/24 12:35
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-10

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/12/24 17:07	1
Styrene	ND		1.0	1.0	ug/L			01/12/24 17:07	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/12/24 17:07	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/12/24 17:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/12/24 17:07	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/12/24 17:07	1
Toluene	ND		1.0	0.90	ug/L			01/12/24 17:07	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 17:07	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/12/24 17:07	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/12/24 17:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/12/24 17:07	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/12/24 17:07	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/12/24 17:07	1
Trichloroethene	ND		1.0	0.15	ug/L			01/12/24 17:07	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/12/24 17:07	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/12/24 17:07	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/12/24 17:07	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/12/24 17:07	1
Vinyl acetate	ND		25	0.93	ug/L			01/12/24 17:07	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/12/24 17:07	1
Xylenes, Total	ND		10	1.6	ug/L			01/12/24 17:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 130*		*01/12/24 17:07*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*01/12/24 17:07*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*01/12/24 17:07*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.098	ug/L		01/11/24 09:49	01/11/24 18:38	1
Acenaphthylene	ND		0.20	0.044	ug/L		01/11/24 09:49	01/11/24 18:38	1
Anthracene	ND		0.20	0.047	ug/L		01/11/24 09:49	01/11/24 18:38	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		01/11/24 09:49	01/11/24 18:38	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		01/11/24 09:49	01/11/24 18:38	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		01/11/24 09:49	01/11/24 18:38	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/11/24 09:49	01/11/24 18:38	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		01/11/24 09:49	01/11/24 18:38	1
Chrysene	ND		0.20	0.033	ug/L		01/11/24 09:49	01/11/24 18:38	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		01/11/24 09:49	01/11/24 18:38	1
Fluoranthene	ND		0.20	0.034	ug/L		01/11/24 09:49	01/11/24 18:38	1
Fluorene	ND		0.20	0.088	ug/L		01/11/24 09:49	01/11/24 18:38	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		01/11/24 09:49	01/11/24 18:38	1
Phenanthrene	ND		0.20	0.089	ug/L		01/11/24 09:49	01/11/24 18:38	1
Pyrene	ND		0.20	0.039	ug/L		01/11/24 09:49	01/11/24 18:38	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		01/11/24 09:49	01/11/24 18:38	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		01/11/24 09:49	01/11/24 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*93*		*18 - 147*	*01/11/24 09:49*	*01/11/24 18:38*	*1*
2-Fluorobiphenyl	*80*		*15 - 128*	*01/11/24 09:49*	*01/11/24 18:38*	*1*

Client Sample ID: P54-ROX-010824
Date Collected: 01/08/24 12:35
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-10
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*82*		*10 - 144*	*01/11/24 09:49*	*01/11/24 18:38*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.9	8.6	ug/L		01/11/24 09:49	01/11/24 22:45	1
Benzenethiol	ND		9.9	9.8	ug/L		01/11/24 09:49	01/11/24 22:45	1
Benzoic acid	ND		30	24	ug/L		01/11/24 09:49	01/11/24 22:45	1
Benzyl alcohol	ND		9.9	7.2	ug/L		01/11/24 09:49	01/11/24 22:45	1
Bis(2-chloroethoxy)methane	ND		9.9	4.6	ug/L		01/11/24 09:49	01/11/24 22:45	1
Bis(2-chloroethyl)ether	ND		9.9	3.9	ug/L		01/11/24 09:49	01/11/24 22:45	1
bis (2-chloroisopropyl) ether	ND		9.9	1.8	ug/L		01/11/24 09:49	01/11/24 22:45	1
Bis(2-ethylhexyl) phthalate	ND		9.9	8.8	ug/L		01/11/24 09:49	01/11/24 22:45	1
4-Bromophenyl phenyl ether	ND		9.9	8.5	ug/L		01/11/24 09:49	01/11/24 22:45	1
Butyl benzyl phthalate	ND		9.9	5.7	ug/L		01/11/24 09:49	01/11/24 22:45	1
4-Chloroaniline	ND		9.9	4.7	ug/L		01/11/24 09:49	01/11/24 22:45	1
4-Chloro-3-methylphenol	ND		9.9	5.2	ug/L		01/11/24 09:49	01/11/24 22:45	1
2-Chloronaphthalene	ND		9.9	3.8	ug/L		01/11/24 09:49	01/11/24 22:45	1
2-Chlorophenol	ND		9.9	4.1	ug/L		01/11/24 09:49	01/11/24 22:45	1
4-Chlorophenyl phenyl ether	ND		9.9	3.7	ug/L		01/11/24 09:49	01/11/24 22:45	1
Dibenz[a,h]acridine	ND		9.9	2.8	ug/L		01/11/24 09:49	01/11/24 22:45	1
Dibenzofuran	ND		9.9	4.0	ug/L		01/11/24 09:49	01/11/24 22:45	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/11/24 09:49	01/11/24 22:45	1
2,4-Dichlorophenol	ND		9.9	4.3	ug/L		01/11/24 09:49	01/11/24 22:45	1
Diethyl phthalate	ND		9.9	4.4	ug/L		01/11/24 09:49	01/11/24 22:45	1
2,4-Dimethylphenol	ND		9.9	5.2	ug/L		01/11/24 09:49	01/11/24 22:45	1
Dimethyl phthalate	ND		9.9	4.2	ug/L		01/11/24 09:49	01/11/24 22:45	1
Di-n-butyl phthalate	ND		9.9	4.6	ug/L		01/11/24 09:49	01/11/24 22:45	1
4,6-Dinitro-ortho-cresol	ND		9.9	9.9	ug/L		01/11/24 09:49	01/11/24 22:45	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		01/11/24 09:49	01/11/24 22:45	1
2,4-Dinitrotoluene	ND		9.9	5.1	ug/L		01/11/24 09:49	01/11/24 22:45	1
2,6-Dinitrotoluene	ND		9.9	3.9	ug/L		01/11/24 09:49	01/11/24 22:45	1
Di-n-octyl phthalate	ND		9.9	5.9	ug/L		01/11/24 09:49	01/11/24 22:45	1
1,4-Dioxane	ND		9.9	4.3	ug/L		01/11/24 09:49	01/11/24 22:45	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	3.3	ug/L		01/11/24 09:49	01/11/24 22:45	1
Hexachlorobenzene	ND		9.9	9.6	ug/L		01/11/24 09:49	01/11/24 22:45	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		01/11/24 09:49	01/11/24 22:45	1
Hexachloroethane	ND		9.9	5.2	ug/L		01/11/24 09:49	01/11/24 22:45	1
Indene	ND		9.9	3.6	ug/L		01/11/24 09:49	01/11/24 22:45	1
Isophorone	ND		9.9	5.2	ug/L		01/11/24 09:49	01/11/24 22:45	1
2-Methylphenol	ND		9.9	3.2	ug/L		01/11/24 09:49	01/11/24 22:45	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		01/11/24 09:49	01/11/24 22:45	1
2-Nitroaniline	ND		9.9	5.0	ug/L		01/11/24 09:49	01/11/24 22:45	1
3-Nitroaniline	ND		9.9	4.7	ug/L		01/11/24 09:49	01/11/24 22:45	1
4-Nitroaniline	ND		9.9	4.1	ug/L		01/11/24 09:49	01/11/24 22:45	1
Nitrobenzene	ND		9.9	4.7	ug/L		01/11/24 09:49	01/11/24 22:45	1
2-Nitrophenol	ND		9.9	4.6	ug/L		01/11/24 09:49	01/11/24 22:45	1
4-Nitrophenol	ND		9.9	3.3	ug/L		01/11/24 09:49	01/11/24 22:45	1
N-Nitrosodimethylamine	ND		9.9	2.2	ug/L		01/11/24 09:49	01/11/24 22:45	1

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

Job ID: 400-249385-1

Client Sample ID: P54-ROX-010824
Date Collected: 01/08/24 12:35
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-10
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.9	2.5	ug/L		01/11/24 09:49	01/11/24 22:45	1
N-Nitrosodiphenylamine	ND		9.9	3.7	ug/L		01/11/24 09:49	01/11/24 22:45	1
Pentachlorophenol	ND		20	12	ug/L		01/11/24 09:49	01/11/24 22:45	1
Phenol	ND		9.9	4.2	ug/L		01/11/24 09:49	01/11/24 22:45	1
Pyridine	ND	*1	9.9	9.9	ug/L		01/11/24 09:49	01/11/24 22:45	1
Quinoline	ND		9.9	2.4	ug/L		01/11/24 09:49	01/11/24 22:45	1
2,4,5-Trichlorophenol	ND		9.9	4.0	ug/L		01/11/24 09:49	01/11/24 22:45	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		01/11/24 09:49	01/11/24 22:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*21 - 114*	*01/11/24 09:49*	*01/11/24 22:45*	*1*
2-Fluorophenol	*46*		*10 - 105*	*01/11/24 09:49*	*01/11/24 22:45*	*1*
Nitrobenzene-d5	*69*		*16 - 127*	*01/11/24 09:49*	*01/11/24 22:45*	*1*
Phenol-d5	*34*		*10 - 129*	*01/11/24 09:49*	*01/11/24 22:45*	*1*
Terphenyl-d14	*89*		*13 - 150*	*01/11/24 09:49*	*01/11/24 22:45*	*1*
2,4,6-Tribromophenol	*72*		*10 - 150*	*01/11/24 09:49*	*01/11/24 22:45*	*1*

Method: EPA 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		01/10/24 14:08	01/10/24 21:26	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/10/24 14:08	01/10/24 21:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*131*		*51 - 149*	*01/10/24 14:08*	*01/10/24 21:26*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
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 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: 400-249385-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-130)	(75-126)	(64-132)
400-249385-1	TB-ROX-010824-8260-B	90	104	90
400-249385-3	ROST4PZG-ROX-010824	89	105	86
400-249385-4	ROST4PZC-ROX-010824	91	107	88
400-249385-5	MW16-ROX-010824	91	104	89
400-249385-6	TB-ROX-010824-8260-A	92	104	90
400-249385-8	MW27-ROX-010824	92	108	91
400-249385-9	ROST3MW-ROX-010824	91	106	87
400-249385-9 MS	ROST3MW-ROX-010824	96	100	97
400-249385-9 MSD	ROST3MW-ROX-010824	96	101	95
400-249385-10	P54-ROX-010824	91	106	91
LCS 400-657479/1002	Lab Control Sample	94	99	98
MB 400-657479/5	Method Blank	92	106	91

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - 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	(21-114)	(10-105)	(16-127)	(10-129)	(13-150)	(10-150)
400-249385-3	ROST4PZG-ROX-010824	51	34	44	26	67	48
400-249385-4	ROST4PZC-ROX-010824	69	41	61	31	79	67
400-249385-5	MW16-ROX-010824	66	37	53	29	80	67
400-249385-8	MW27-ROX-010824	53	29	45	22	66	52
400-249385-9	ROST3MW-ROX-010824	71	39	62	32	81	70
400-249385-9 MS	ROST3MW-ROX-010824	42	35	45	30	58	44
400-249385-9 MSD	ROST3MW-ROX-010824	84	54	88	45	93	89
400-249385-10	P54-ROX-010824	79	46	69	34	89	72
LCS 400-657287/2-A	Lab Control Sample	75	54	87	39	89	78
LCS 400-657287/4-A	Lab Control Sample	75	46	67	37	86	76
LCSD 400-657287/3-A	Lab Control Sample Dup	54	42	57	37	66	58
LCSD 400-657287/5-A	Lab Control Sample Dup	80	46	72	38	90	75
MB 400-657287/1-A	Method Blank	81	47	69	35	87	76

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: 400-249385-1
Project/Site: ROXANA QUARTERLY GW

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-249385-3	ROST4PZG-ROX-010824	61	48	47
400-249385-4	ROST4PZC-ROX-010824	78	65	67
400-249385-5	MW16-ROX-010824	78	64	64
400-249385-8	MW27-ROX-010824	86	62	60
400-249385-9	ROST3MW-ROX-010824	96	76	78
400-249385-9 MS	ROST3MW-ROX-010824	57	50	25
400-249385-9 MSD	ROST3MW-ROX-010824	82	90	65
400-249385-10	P54-ROX-010824	93	80	82
LCS 400-657287/2-A	Lab Control Sample	80	86	64

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-249385-2	TB-ROX-010824-8011-B	113
400-249385-3	ROST4PZG-ROX-010824	91
400-249385-4	ROST4PZC-ROX-010824	105
400-249385-5	MW16-ROX-010824	142
400-249385-7	TB-ROX-010824-8011-A	138
400-249385-8	MW27-ROX-010824	98
400-249385-9	ROST3MW-ROX-010824	90
400-249385-9 MS	ROST3MW-ROX-010824	84
400-249385-9 MSD	ROST3MW-ROX-010824	103
400-249385-10	P54-ROX-010824	131
LCS 400-657281/2-A	Lab Control Sample	89 p
LCSD 400-657281/3-A	Lab Control Sample Dup	71 p
MB 400-657281/1-A	Method Blank	74 p

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-249385-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins 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: 400-249385-1

Client Sample ID: TB-ROX-010824-8260-B
Lab Sample ID: 400-249385-1
Date Collected: 01/08/24 00:00
Matrix: Water
Date Received: 01/09/24 11:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657479	01/12/24 09:01	WPD	EET PEN

Client Sample ID: TB-ROX-010824-8011-B
Lab Sample ID: 400-249385-2
Date Collected: 01/08/24 00:00
Matrix: Water
Date Received: 01/09/24 11:02

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	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657319	01/10/24 18:14	DS	EET PEN

Client Sample ID: ROST4PZG-ROX-010824
Lab Sample ID: 400-249385-3
Date Collected: 01/08/24 09:30
Matrix: Water
Date Received: 01/09/24 11:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657479	01/12/24 11:03	WPD	EET PEN
Total/NA	Prep	3510C			240 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/11/24 19:39	S1B	EET PEN
Total/NA	Prep	3510C			240 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657585	01/12/24 17:49	S1B	EET PEN
Total/NA	Prep	8011			35.2 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657319	01/10/24 18:36	DS	EET PEN

Client Sample ID: ROST4PZC-ROX-010824
Lab Sample ID: 400-249385-4
Date Collected: 01/08/24 10:30
Matrix: Water
Date Received: 01/09/24 11:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657479	01/12/24 11:26	WPD	EET PEN
Total/NA	Prep	3510C			244.4 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/11/24 20:05	S1B	EET PEN
Total/NA	Prep	3510C			244.4 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657398	01/11/24 16:33	TH	EET PEN
Total/NA	Prep	8011			35.1 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657341	01/11/24 11:34	PG	EET PEN

Client Sample ID: MW16-ROX-010824
Lab Sample ID: 400-249385-5
Date Collected: 01/08/24 12:00
Matrix: Water
Date Received: 01/09/24 11:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657479	01/12/24 11:49	WPD	EET PEN
Total/NA	Prep	3510C			242.8 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/11/24 20:32	S1B	EET PEN

Client Sample ID: MW16-ROX-010824

Lab Sample ID: 400-249385-5

Date Collected: 01/08/24 12:00

Matrix: Water

Date Received: 01/09/24 11:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			242.8 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657398	01/11/24 16:54	TH	EET PEN
Total/NA	Prep	8011			34.5 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657319	01/10/24 18:57	DS	EET PEN

Client Sample ID: TB-ROX-010824-8260-A

Lab Sample ID: 400-249385-6

Date Collected: 01/08/24 00:00

Matrix: Water

Date Received: 01/09/24 11:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657479	01/12/24 14:15	WPD	EET PEN

Client Sample ID: TB-ROX-010824-8011-A

Lab Sample ID: 400-249385-7

Date Collected: 01/08/24 00:00

Matrix: Water

Date Received: 01/09/24 11:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			33.9 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657319	01/10/24 19:18	DS	EET PEN

Client Sample ID: MW27-ROX-010824

Lab Sample ID: 400-249385-8

Date Collected: 01/08/24 09:25

Matrix: Water

Date Received: 01/09/24 11:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657479	01/12/24 16:43	WPD	EET PEN
Total/NA	Prep	3510C			264.2 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/11/24 20:59	S1B	EET PEN
Total/NA	Prep	3510C			264.2 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657398	01/11/24 17:15	TH	EET PEN
Total/NA	Prep	8011			34.7 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657319	01/10/24 19:40	DS	EET PEN

Client Sample ID: ROST3MW-ROX-010824

Lab Sample ID: 400-249385-9

Date Collected: 01/08/24 10:45

Matrix: Water

Date Received: 01/09/24 11:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657479	01/12/24 09:26	WPD	EET PEN
Total/NA	Prep	3510C			260 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/11/24 21:25	S1B	EET PEN
Total/NA	Prep	3510C			260 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657398	01/11/24 17:36	TH	EET PEN
Total/NA	Prep	8011			35.5 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657319	01/10/24 20:01	DS	EET PEN

Client Sample ID: P54-ROX-010824

Lab Sample ID: 400-249385-10

Date Collected: 01/08/24 12:35

Matrix: Water

Date Received: 01/09/24 11:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657479	01/12/24 17:07	WPD	EET PEN
Total/NA	Prep	3510C			252.4 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/11/24 22:45	S1B	EET PEN
Total/NA	Prep	3510C			252.4 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657398	01/11/24 18:38	TH	EET PEN
Total/NA	Prep	8011			34.5 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657319	01/10/24 21:26	DS	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-657281/1-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	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657319	01/10/24 17:10	DS	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-657287/1-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	3510C			250 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/11/24 17:24	S1B	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-657479/5

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	8260D		1	5 mL	5 mL	657479	01/12/24 08:36	WPD	EET PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-657281/2-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	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657319	01/10/24 17:32	DS	EET PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-657287/2-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	3510C			250 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/11/24 17:51	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-249385-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657287/2-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	3510C			250 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	657398	01/11/24 15:31	TH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657287/4-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	3510C			250 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/11/24 18:45	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657479/1002
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	8260D		1	5 mL	5 mL	657479	01/12/24 07:22	WPD	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657281/3-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	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657319	01/10/24 17:53	DS	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657287/3-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	3510C			250 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/11/24 18:18	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657287/5-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	3510C			250 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/11/24 19:12	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-249385-1

Client Sample ID: ROST3MW-ROX-010824
Date Collected: 01/08/24 10:45
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-9 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	8260D		1	5 mL	5 mL	657479	01/12/24 13:03	WPD	EET PEN
Total/NA	Prep	3510C			265.2 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/11/24 21:52	S1B	EET PEN
Total/NA	Prep	3510C			265.2 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	657398	01/11/24 17:56	TH	EET PEN
Total/NA	Prep	8011			33.7 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657319	01/10/24 20:22	DS	EET PEN

Client Sample ID: ROST3MW-ROX-010824
Date Collected: 01/08/24 10:45
Date Received: 01/09/24 11:02

Lab Sample ID: 400-249385-9 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	8260D		1	5 mL	5 mL	657479	01/12/24 13:27	WPD	EET PEN
Total/NA	Prep	3510C			264.6 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/11/24 22:18	S1B	EET PEN
Total/NA	Prep	3510C			264.6 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	657398	01/11/24 18:17	TH	EET PEN
Total/NA	Prep	8011			35.2 mL	35 mL	657281	01/10/24 14:08	PG	EET PEN
Total/NA	Analysis	8011		1			657319	01/10/24 21:05	DS	EET PEN

Laboratory References:
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 657479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249385-1	TB-ROX-010824-8260-B	Total/NA	Water	8260D	
400-249385-3	ROST4PZG-ROX-010824	Total/NA	Water	8260D	
400-249385-4	ROST4PZC-ROX-010824	Total/NA	Water	8260D	
400-249385-5	MW16-ROX-010824	Total/NA	Water	8260D	
400-249385-6	TB-ROX-010824-8260-A	Total/NA	Water	8260D	
400-249385-8	MW27-ROX-010824	Total/NA	Water	8260D	
400-249385-9	ROST3MW-ROX-010824	Total/NA	Water	8260D	
400-249385-10	P54-ROX-010824	Total/NA	Water	8260D	
MB 400-657479/5	Method Blank	Total/NA	Water	8260D	
LCS 400-657479/1002	Lab Control Sample	Total/NA	Water	8260D	
400-249385-9 MS	ROST3MW-ROX-010824	Total/NA	Water	8260D	
400-249385-9 MSD	ROST3MW-ROX-010824	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 657287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249385-3	ROST4PZG-ROX-010824	Total/NA	Water	3510C	
400-249385-4	ROST4PZC-ROX-010824	Total/NA	Water	3510C	
400-249385-5	MW16-ROX-010824	Total/NA	Water	3510C	
400-249385-8	MW27-ROX-010824	Total/NA	Water	3510C	
400-249385-9	ROST3MW-ROX-010824	Total/NA	Water	3510C	
400-249385-10	P54-ROX-010824	Total/NA	Water	3510C	
MB 400-657287/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-657287/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-657287/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-657287/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-657287/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
400-249385-9 MS	ROST3MW-ROX-010824	Total/NA	Water	3510C	
400-249385-9 MSD	ROST3MW-ROX-010824	Total/NA	Water	3510C	

Analysis Batch: 657398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249385-4	ROST4PZC-ROX-010824	Total/NA	Water	8270E SIM	657287
400-249385-5	MW16-ROX-010824	Total/NA	Water	8270E SIM	657287
400-249385-8	MW27-ROX-010824	Total/NA	Water	8270E SIM	657287
400-249385-9	ROST3MW-ROX-010824	Total/NA	Water	8270E SIM	657287
400-249385-10	P54-ROX-010824	Total/NA	Water	8270E SIM	657287
LCS 400-657287/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	657287
400-249385-9 MS	ROST3MW-ROX-010824	Total/NA	Water	8270E SIM	657287
400-249385-9 MSD	ROST3MW-ROX-010824	Total/NA	Water	8270E SIM	657287

Analysis Batch: 657431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249385-3	ROST4PZG-ROX-010824	Total/NA	Water	8270E	657287
400-249385-4	ROST4PZC-ROX-010824	Total/NA	Water	8270E	657287
400-249385-5	MW16-ROX-010824	Total/NA	Water	8270E	657287
400-249385-8	MW27-ROX-010824	Total/NA	Water	8270E	657287
400-249385-9	ROST3MW-ROX-010824	Total/NA	Water	8270E	657287
400-249385-10	P54-ROX-010824	Total/NA	Water	8270E	657287
MB 400-657287/1-A	Method Blank	Total/NA	Water	8270E	657287

GC/MS Semi VOA (Continued)

Analysis Batch: 657431 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-657287/2-A	Lab Control Sample	Total/NA	Water	8270E	657287
LCS 400-657287/4-A	Lab Control Sample	Total/NA	Water	8270E	657287
LCSD 400-657287/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	657287
LCSD 400-657287/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	657287
400-249385-9 MS	ROST3MW-ROX-010824	Total/NA	Water	8270E	657287
400-249385-9 MSD	ROST3MW-ROX-010824	Total/NA	Water	8270E	657287

Analysis Batch: 657585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249385-3	ROST4PZG-ROX-010824	Total/NA	Water	8270E SIM	657287

GC Semi VOA

Prep Batch: 657281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249385-2	TB-ROX-010824-8011-B	Total/NA	Water	8011	
400-249385-3	ROST4PZG-ROX-010824	Total/NA	Water	8011	
400-249385-4	ROST4PZC-ROX-010824	Total/NA	Water	8011	
400-249385-5	MW16-ROX-010824	Total/NA	Water	8011	
400-249385-7	TB-ROX-010824-8011-A	Total/NA	Water	8011	
400-249385-8	MW27-ROX-010824	Total/NA	Water	8011	
400-249385-9	ROST3MW-ROX-010824	Total/NA	Water	8011	
400-249385-10	P54-ROX-010824	Total/NA	Water	8011	
MB 400-657281/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-657281/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-657281/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-249385-9 MS	ROST3MW-ROX-010824	Total/NA	Water	8011	
400-249385-9 MSD	ROST3MW-ROX-010824	Total/NA	Water	8011	

Analysis Batch: 657319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249385-2	TB-ROX-010824-8011-B	Total/NA	Water	8011	657281
400-249385-3	ROST4PZG-ROX-010824	Total/NA	Water	8011	657281
400-249385-5	MW16-ROX-010824	Total/NA	Water	8011	657281
400-249385-7	TB-ROX-010824-8011-A	Total/NA	Water	8011	657281
400-249385-8	MW27-ROX-010824	Total/NA	Water	8011	657281
400-249385-9	ROST3MW-ROX-010824	Total/NA	Water	8011	657281
400-249385-10	P54-ROX-010824	Total/NA	Water	8011	657281
MB 400-657281/1-A	Method Blank	Total/NA	Water	8011	657281
LCS 400-657281/2-A	Lab Control Sample	Total/NA	Water	8011	657281
LCSD 400-657281/3-A	Lab Control Sample Dup	Total/NA	Water	8011	657281
400-249385-9 MS	ROST3MW-ROX-010824	Total/NA	Water	8011	657281
400-249385-9 MSD	ROST3MW-ROX-010824	Total/NA	Water	8011	657281

Analysis Batch: 657341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249385-4	ROST4PZC-ROX-010824	Total/NA	Water	8011	657281

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-657479/5
Matrix: Water
Analysis Batch: 657479

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			01/12/24 08:36	1
Acrolein	ND		20	3.3	ug/L			01/12/24 08:36	1
Acrylonitrile	ND		10	2.8	ug/L			01/12/24 08:36	1
Benzene	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Bromobenzene	ND		1.0	0.54	ug/L			01/12/24 08:36	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/12/24 08:36	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Bromoform	ND		5.0	0.25	ug/L			01/12/24 08:36	1
Bromomethane	ND		1.0	0.98	ug/L			01/12/24 08:36	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/12/24 08:36	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/12/24 08:36	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/12/24 08:36	1
Chloroethane	ND		1.0	0.76	ug/L			01/12/24 08:36	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/12/24 08:36	1
Chloroform	ND		1.0	0.90	ug/L			01/12/24 08:36	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/12/24 08:36	1
Chloromethane	ND		1.0	0.90	ug/L			01/12/24 08:36	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/12/24 08:36	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/12/24 08:36	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/12/24 08:36	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/12/24 08:36	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/12/24 08:36	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/12/24 08:36	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/12/24 08:36	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/12/24 08:36	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/12/24 08:36	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 08:36	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 08:36	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 08:36	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 08:36	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/12/24 08:36	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/12/24 08:36	1
2-Hexanone	ND		25	1.4	ug/L			01/12/24 08:36	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/12/24 08:36	1
Methylene bromide	ND		5.0	0.22	ug/L			01/12/24 08:36	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/12/24 08:36	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/12/24 08:36	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/12/24 08:36	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/12/24 08:36	1
Naphthalene	ND		5.0	3.0	ug/L			01/12/24 08:36	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/12/24 08:36	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/12/24 08:36	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/12/24 08:36	1
o-Xylene	ND		5.0	0.60	ug/L			01/12/24 08:36	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/12/24 08:36	1

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

Lab Sample ID: MB 400-657479/5
Matrix: Water
Analysis Batch: 657479

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			01/12/24 08:36	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/12/24 08:36	1
Styrene	ND		1.0	1.0	ug/L			01/12/24 08:36	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/12/24 08:36	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/12/24 08:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/12/24 08:36	1
Toluene	ND		1.0	0.90	ug/L			01/12/24 08:36	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 08:36	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/12/24 08:36	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/12/24 08:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/12/24 08:36	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/12/24 08:36	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/12/24 08:36	1
Trichloroethene	ND		1.0	0.15	ug/L			01/12/24 08:36	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/12/24 08:36	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/12/24 08:36	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/12/24 08:36	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/12/24 08:36	1
Vinyl acetate	ND		25	0.93	ug/L			01/12/24 08:36	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Xylenes, Total	ND		10	1.6	ug/L			01/12/24 08:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 130*		*01/12/24 08:36*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*01/12/24 08:36*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*01/12/24 08:36*	*1*

Lab Sample ID: LCS 400-657479/1002
Matrix: Water
Analysis Batch: 657479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	183		ug/L		92	43 - 160
Acrolein	500	491		ug/L		98	38 - 160
Acrylonitrile	500	433		ug/L		87	64 - 142
Benzene	50.0	46.0		ug/L		92	70 - 130
Bromobenzene	50.0	45.8		ug/L		92	70 - 132
Bromochloromethane	50.0	47.8		ug/L		96	70 - 130
Bromodichloromethane	50.0	50.1		ug/L		100	67 - 133
Bromoform	50.0	52.3		ug/L		105	57 - 140
Bromomethane	50.0	49.7		ug/L		99	10 - 160
2-Butanone (MEK)	200	190		ug/L		95	61 - 145
Carbon disulfide	50.0	35.4		ug/L		71	61 - 137
Carbon tetrachloride	50.0	49.7		ug/L		99	61 - 137
Chlorobenzene	50.0	47.7		ug/L		95	70 - 130
Chloroethane	50.0	45.7		ug/L		91	55 - 141
2-Chloroethyl vinyl ether	50.0	42.4		ug/L		85	10 - 160

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

Lab Sample ID: LCS 400-657479/1002
Matrix: Water
Analysis Batch: 657479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	45.4		ug/L		91	69 - 130
1-Chlorohexane	50.0	42.7		ug/L		85	69 - 130
Chloromethane	50.0	41.4		ug/L		83	58 - 137
cis-1,2-Dichloroethene	50.0	47.5		ug/L		95	68 - 130
cis-1,3-Dichloropropene	50.0	49.5		ug/L		99	69 - 132
Dibromochloromethane	50.0	51.1		ug/L		102	67 - 135
1,2-Dichlorobenzene	50.0	47.3		ug/L		95	67 - 130
1,3-Dichlorobenzene	50.0	47.6		ug/L		95	70 - 130
1,4-Dichlorobenzene	50.0	48.4		ug/L		97	70 - 130
Dichlorodifluoromethane	50.0	40.9		ug/L		82	41 - 146
1,1-Dichloroethane	50.0	45.9		ug/L		92	70 - 130
1,2-Dichloroethane	50.0	47.2		ug/L		94	69 - 130
1,1-Dichloroethene	50.0	42.7		ug/L		85	63 - 134
1,2-Dichloropropane	50.0	46.2		ug/L		92	70 - 130
1,3-Dichloropropane	50.0	44.4		ug/L		89	70 - 130
2,2-Dichloropropane	50.0	45.9		ug/L		92	52 - 135
1,1-Dichloropropene	50.0	45.0		ug/L		90	70 - 130
Ethylbenzene	50.0	46.4		ug/L		93	70 - 130
Ethyl methacrylate	50.0	45.7		ug/L		91	68 - 130
Hexachlorobutadiene	50.0	50.2		ug/L		100	53 - 140
2-Hexanone	200	169		ug/L		84	65 - 137
Isopropylbenzene	50.0	49.0		ug/L		98	70 - 130
Methylene bromide	50.0	47.7		ug/L		95	70 - 130
Methylene Chloride	50.0	45.1		ug/L		90	66 - 135
4-Methyl-2-pentanone (MIBK)	200	179		ug/L		89	69 - 138
Methyl tert-butyl ether	50.0	47.2		ug/L		94	66 - 130
m-Xylene & p-Xylene	50.0	47.7		ug/L		95	70 - 130
Naphthalene	50.0	43.4		ug/L		87	47 - 149
n-Butylbenzene	50.0	46.0		ug/L		92	67 - 130
N-Propylbenzene	50.0	46.4		ug/L		93	70 - 130
o-Chlorotoluene	50.0	44.9		ug/L		90	70 - 130
o-Xylene	50.0	47.9		ug/L		96	70 - 130
p-Chlorotoluene	50.0	44.4		ug/L		89	70 - 130
p-Isopropyltoluene	50.0	47.5		ug/L		95	65 - 130
sec-Butylbenzene	50.0	47.1		ug/L		94	66 - 130
Styrene	50.0	47.5		ug/L		95	70 - 130
tert-Butylbenzene	50.0	44.9		ug/L		90	64 - 139
1,1,1,2-Tetrachloroethane	50.0	50.4		ug/L		101	67 - 131
1,1,2,2-Tetrachloroethane	50.0	42.2		ug/L		84	70 - 131
Tetrachloroethene	50.0	46.8		ug/L		94	65 - 130
Toluene	50.0	46.6		ug/L		93	70 - 130
trans-1,2-Dichloroethene	50.0	44.3		ug/L		89	70 - 130
trans-1,3-Dichloropropene	50.0	47.2		ug/L		94	63 - 130
1,2,3-Trichlorobenzene	50.0	45.0		ug/L		90	60 - 138
1,2,4-Trichlorobenzene	50.0	46.4		ug/L		93	60 - 140
1,1,1-Trichloroethane	50.0	47.6		ug/L		95	68 - 130
1,1,2-Trichloroethane	50.0	47.4		ug/L		95	70 - 130
Trichloroethene	50.0	49.4		ug/L		99	70 - 130
Trichlorofluoromethane	50.0	44.7		ug/L		89	65 - 138

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

Lab Sample ID: LCS 400-657479/1002
Matrix: Water
Analysis Batch: 657479

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	45.0		ug/L		90	70 - 130
1,2,4-Trimethylbenzene	50.0	45.4		ug/L		91	70 - 130
1,3,5-Trimethylbenzene	50.0	46.2		ug/L		92	69 - 130
Vinyl acetate	100	103		ug/L		103	26 - 160
Vinyl chloride	50.0	43.6		ug/L		87	59 - 136
Xylenes, Total	100	95.6		ug/L		96	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*72 - 130*
Dibromofluoromethane	*99*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Lab Sample ID: 400-249385-9 MS
Matrix: Water
Analysis Batch: 657479

Client Sample ID: ROST3MW-ROX-010824
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND		200	207		ug/L		104	43 - 150
Acrolein	ND		500	517		ug/L		103	38 - 150
Acrylonitrile	ND		500	493		ug/L		99	62 - 149
Benzene	ND		50.0	47.2		ug/L		94	56 - 142
Bromobenzene	ND		50.0	37.5		ug/L		75	59 - 136
Bromochloromethane	ND		50.0	50.6		ug/L		101	64 - 140
Bromodichloromethane	ND		50.0	50.7		ug/L		101	59 - 143
Bromoform	ND		50.0	49.9		ug/L		100	50 - 140
Bromomethane	ND		50.0	56.4		ug/L		113	10 - 150
2-Butanone (MEK)	ND		200	202		ug/L		101	55 - 150
Carbon disulfide	ND		50.0	44.9		ug/L		90	48 - 150
Carbon tetrachloride	ND		50.0	50.5		ug/L		101	55 - 145
Chlorobenzene	ND		50.0	41.3		ug/L		83	64 - 130
Chloroethane	ND		50.0	47.3		ug/L		95	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	46.4		ug/L		93	60 - 141
1-Chlorohexane	ND		50.0	36.8		ug/L		74	56 - 136
Chloromethane	ND		50.0	41.3		ug/L		83	49 - 148
cis-1,2-Dichloroethene	ND		50.0	48.3		ug/L		97	59 - 143
cis-1,3-Dichloropropene	ND		50.0	46.4		ug/L		93	57 - 140
Dibromochloromethane	ND		50.0	49.6		ug/L		99	56 - 143
1,2-Dichlorobenzene	ND		50.0	33.8		ug/L		68	52 - 137
1,3-Dichlorobenzene	ND		50.0	33.4		ug/L		67	54 - 135
1,4-Dichlorobenzene	ND		50.0	32.7		ug/L		65	53 - 135
Dichlorodifluoromethane	ND		50.0	40.3		ug/L		81	16 - 150
1,1-Dichloroethane	ND		50.0	47.9		ug/L		96	61 - 144
1,2-Dichloroethane	ND		50.0	49.5		ug/L		99	60 - 141
1,1-Dichloroethene	ND		50.0	44.2		ug/L		88	54 - 147
1,2-Dichloropropane	ND		50.0	46.3		ug/L		93	66 - 137
1,3-Dichloropropane	ND		50.0	44.9		ug/L		90	66 - 133
2,2-Dichloropropane	ND		50.0	46.6		ug/L		93	42 - 144

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

Lab Sample ID: 400-249385-9 MS
Matrix: Water
Analysis Batch: 657479

Client Sample ID: ROST3MW-ROX-010824
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	44.7		ug/L		89	65 - 136
Ethylbenzene	ND		50.0	39.5		ug/L		79	58 - 131
Ethyl methacrylate	ND		50.0	47.5		ug/L		95	64 - 130
Hexachlorobutadiene	ND		50.0	28.8		ug/L		58	31 - 149
2-Hexanone	ND		200	175		ug/L		88	65 - 140
Isopropylbenzene	ND		50.0	38.9		ug/L		78	56 - 133
Methylene bromide	ND		50.0	50.4		ug/L		101	63 - 138
Methylene Chloride	ND		50.0	46.1		ug/L		92	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	202		ug/L		101	63 - 146
Methyl tert-butyl ether	ND		50.0	52.4		ug/L		105	59 - 137
m-Xylene & p-Xylene	ND		50.0	39.3		ug/L		79	57 - 130
Naphthalene	ND		50.0	32.8		ug/L		66	25 - 150
n-Butylbenzene	ND		50.0	29.5		ug/L		59	41 - 142
N-Propylbenzene	ND		50.0	34.6		ug/L		69	51 - 138
o-Chlorotoluene	ND		50.0	34.5		ug/L		69	53 - 134
o-Xylene	ND		50.0	39.8		ug/L		80	61 - 130
p-Chlorotoluene	ND		50.0	32.6		ug/L		65	54 - 133
p-Isopropyltoluene	ND		50.0	32.6		ug/L		65	48 - 139
sec-Butylbenzene	ND		50.0	34.5		ug/L		69	50 - 138
Styrene	ND		50.0	38.3		ug/L		77	58 - 131
tert-Butylbenzene	ND		50.0	37.6		ug/L		75	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	45.8		ug/L		92	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	42.0		ug/L		84	66 - 135
Tetrachloroethene	ND		50.0	42.1		ug/L		84	52 - 133
Toluene	ND		50.0	44.5		ug/L		89	65 - 130
trans-1,2-Dichloroethene	ND		50.0	46.1		ug/L		92	61 - 143
trans-1,3-Dichloropropene	ND		50.0	45.3		ug/L		91	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	27.8		ug/L		56	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	27.7		ug/L		55	39 - 148
1,1,1-Trichloroethane	ND		50.0	49.1		ug/L		98	57 - 142
1,1,2-Trichloroethane	ND		50.0	47.6		ug/L		95	66 - 131
Trichloroethene	ND		50.0	49.6		ug/L		99	64 - 136
Trichlorofluoromethane	ND		50.0	45.1		ug/L		90	54 - 150
1,2,3-Trichloropropane	ND		50.0	44.7		ug/L		89	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	32.9		ug/L		66	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	34.8		ug/L		70	52 - 135
Vinyl acetate	ND		100	112		ug/L		112	26 - 150
Vinyl chloride	ND		50.0	44.2		ug/L		88	46 - 150
Xylenes, Total	ND		100	79.1		ug/L		79	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*72 - 130*
Dibromofluoromethane	*100*		*75 - 126*
Toluene-d8 (Surr)	*97*		*64 - 132*

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

Lab Sample ID: 400-249385-9 MSD
Matrix: Water
Analysis Batch: 657479

Client Sample ID: ROST3MW-ROX-010824
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	185		ug/L		93	43 - 150	11	30
Acrolein	ND		500	516		ug/L		103	38 - 150	0	31
Acrylonitrile	ND		500	456		ug/L		91	62 - 149	8	30
Benzene	ND		50.0	47.0		ug/L		94	56 - 142	0	30
Bromobenzene	ND		50.0	36.9		ug/L		74	59 - 136	2	30
Bromochloromethane	ND		50.0	48.8		ug/L		98	64 - 140	4	30
Bromodichloromethane	ND		50.0	50.2		ug/L		100	59 - 143	1	30
Bromoform	ND		50.0	50.2		ug/L		100	50 - 140	1	30
Bromomethane	ND		50.0	56.9		ug/L		114	10 - 150	1	50
2-Butanone (MEK)	ND		200	191		ug/L		95	55 - 150	6	30
Carbon disulfide	ND		50.0	43.6		ug/L		87	48 - 150	3	30
Carbon tetrachloride	ND		50.0	50.2		ug/L		100	55 - 145	1	30
Chlorobenzene	ND		50.0	41.4		ug/L		83	64 - 130	0	30
Chloroethane	ND		50.0	47.6		ug/L		95	50 - 150	1	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	46.2		ug/L		92	60 - 141	1	30
1-Chlorohexane	ND		50.0	35.3		ug/L		71	56 - 136	4	30
Chloromethane	ND		50.0	41.5		ug/L		83	49 - 148	0	31
cis-1,2-Dichloroethene	ND		50.0	47.3		ug/L		95	59 - 143	2	30
cis-1,3-Dichloropropene	ND		50.0	46.2		ug/L		92	57 - 140	0	30
Dibromochloromethane	ND		50.0	48.7		ug/L		97	56 - 143	2	30
1,2-Dichlorobenzene	ND		50.0	34.7		ug/L		69	52 - 137	2	30
1,3-Dichlorobenzene	ND		50.0	32.7		ug/L		65	54 - 135	2	30
1,4-Dichlorobenzene	ND		50.0	33.0		ug/L		66	53 - 135	1	30
Dichlorodifluoromethane	ND		50.0	41.7		ug/L		83	16 - 150	3	31
1,1-Dichloroethane	ND		50.0	47.2		ug/L		94	61 - 144	2	30
1,2-Dichloroethane	ND		50.0	47.8		ug/L		96	60 - 141	3	30
1,1-Dichloroethene	ND		50.0	44.5		ug/L		89	54 - 147	1	30
1,2-Dichloropropane	ND		50.0	46.1		ug/L		92	66 - 137	0	30
1,3-Dichloropropane	ND		50.0	44.1		ug/L		88	66 - 133	2	30
2,2-Dichloropropane	ND		50.0	46.3		ug/L		93	42 - 144	1	31
1,1-Dichloropropene	ND		50.0	44.7		ug/L		89	65 - 136	0	30
Ethylbenzene	ND		50.0	38.5		ug/L		77	58 - 131	2	30
Ethyl methacrylate	ND		50.0	46.6		ug/L		93	64 - 130	2	30
Hexachlorobutadiene	ND		50.0	24.2		ug/L		48	31 - 149	17	36
2-Hexanone	ND		200	174		ug/L		87	65 - 140	1	30
Isopropylbenzene	ND		50.0	37.7		ug/L		75	56 - 133	3	30
Methylene bromide	ND		50.0	49.5		ug/L		99	63 - 138	2	30
Methylene Chloride	ND		50.0	45.0		ug/L		90	60 - 146	2	32
4-Methyl-2-pentanone (MIBK)	ND		200	197		ug/L		98	63 - 146	3	30
Methyl tert-butyl ether	ND		50.0	50.2		ug/L		100	59 - 137	4	30
m-Xylene & p-Xylene	ND		50.0	38.4		ug/L		77	57 - 130	2	30
Naphthalene	ND		50.0	36.5		ug/L		73	25 - 150	11	30
n-Butylbenzene	ND		50.0	26.5		ug/L		53	41 - 142	11	31
N-Propylbenzene	ND		50.0	33.4		ug/L		67	51 - 138	4	30
o-Chlorotoluene	ND		50.0	33.6		ug/L		67	53 - 134	3	30
o-Xylene	ND		50.0	39.4		ug/L		79	61 - 130	1	30
p-Chlorotoluene	ND		50.0	33.8		ug/L		68	54 - 133	3	30

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

Lab Sample ID: 400-249385-9 MSD
Matrix: Water
Analysis Batch: 657479

Client Sample ID: ROST3MW-ROX-010824
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	30.6		ug/L		61	48 - 139	6	30
sec-Butylbenzene	ND		50.0	33.0		ug/L		66	50 - 138	5	30
Styrene	ND		50.0	38.6		ug/L		77	58 - 131	1	30
tert-Butylbenzene	ND		50.0	33.6		ug/L		67	54 - 146	11	30
1,1,1,2-Tetrachloroethane	ND		50.0	46.3		ug/L		93	59 - 137	1	30
1,1,2,2-Tetrachloroethane	ND		50.0	42.7		ug/L		85	66 - 135	2	30
Tetrachloroethene	ND		50.0	42.0		ug/L		84	52 - 133	0	30
Toluene	ND		50.0	43.9		ug/L		88	65 - 130	1	30
trans-1,2-Dichloroethene	ND		50.0	45.7		ug/L		91	61 - 143	1	30
trans-1,3-Dichloropropene	ND		50.0	45.1		ug/L		90	53 - 133	0	30
1,2,3-Trichlorobenzene	ND		50.0	29.2		ug/L		58	43 - 145	5	30
1,2,4-Trichlorobenzene	ND		50.0	29.0		ug/L		58	39 - 148	5	30
1,1,1-Trichloroethane	ND		50.0	49.0		ug/L		98	57 - 142	0	30
1,1,2-Trichloroethane	ND		50.0	46.4		ug/L		93	66 - 131	2	30
Trichloroethene	ND		50.0	48.7		ug/L		97	64 - 136	2	30
Trichlorofluoromethane	ND		50.0	46.5		ug/L		93	54 - 150	3	30
1,2,3-Trichloropropane	ND		50.0	45.6		ug/L		91	65 - 133	2	30
1,2,4-Trimethylbenzene	ND		50.0	31.3		ug/L		63	50 - 139	5	30
1,3,5-Trimethylbenzene	ND		50.0	33.6		ug/L		67	52 - 135	4	30
Vinyl acetate	ND		100	108		ug/L		108	26 - 150	4	33
Vinyl chloride	ND		50.0	44.2		ug/L		88	46 - 150	0	30
Xylenes, Total	ND		100	77.7		ug/L		78	59 - 130	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*72 - 130*
Dibromofluoromethane	*101*		*75 - 126*
Toluene-d8 (Surr)	*95*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-657287/1-A
Matrix: Water
Analysis Batch: 657431

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657287

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		01/11/24 09:49	01/11/24 17:24	1
Benzenethiol	ND		10	9.9	ug/L		01/11/24 09:49	01/11/24 17:24	1
Benzoic acid	ND		30	24	ug/L		01/11/24 09:49	01/11/24 17:24	1
Benzyl alcohol	ND		10	7.3	ug/L		01/11/24 09:49	01/11/24 17:24	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		01/11/24 09:49	01/11/24 17:24	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		01/11/24 09:49	01/11/24 17:24	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		01/11/24 09:49	01/11/24 17:24	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		01/11/24 09:49	01/11/24 17:24	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		01/11/24 09:49	01/11/24 17:24	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		01/11/24 09:49	01/11/24 17:24	1
4-Chloroaniline	ND		10	4.7	ug/L		01/11/24 09:49	01/11/24 17:24	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		01/11/24 09:49	01/11/24 17:24	1
2-Chloronaphthalene	ND		10	3.8	ug/L		01/11/24 09:49	01/11/24 17:24	1
2-Chlorophenol	ND		10	4.1	ug/L		01/11/24 09:49	01/11/24 17:24	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-657287/1-A
Matrix: Water
Analysis Batch: 657431

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657287

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		01/11/24 09:49	01/11/24 17:24	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		01/11/24 09:49	01/11/24 17:24	1
Dibenzofuran	ND		10	4.0	ug/L		01/11/24 09:49	01/11/24 17:24	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/11/24 09:49	01/11/24 17:24	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		01/11/24 09:49	01/11/24 17:24	1
Diethyl phthalate	ND		10	4.4	ug/L		01/11/24 09:49	01/11/24 17:24	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		01/11/24 09:49	01/11/24 17:24	1
Dimethyl phthalate	ND		10	4.2	ug/L		01/11/24 09:49	01/11/24 17:24	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		01/11/24 09:49	01/11/24 17:24	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/11/24 09:49	01/11/24 17:24	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		01/11/24 09:49	01/11/24 17:24	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		01/11/24 09:49	01/11/24 17:24	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		01/11/24 09:49	01/11/24 17:24	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		01/11/24 09:49	01/11/24 17:24	1
1,4-Dioxane	ND		10	4.3	ug/L		01/11/24 09:49	01/11/24 17:24	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		01/11/24 09:49	01/11/24 17:24	1
Hexachlorobenzene	ND		10	9.7	ug/L		01/11/24 09:49	01/11/24 17:24	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		01/11/24 09:49	01/11/24 17:24	1
Hexachloroethane	ND		10	5.2	ug/L		01/11/24 09:49	01/11/24 17:24	1
Indene	ND		10	3.6	ug/L		01/11/24 09:49	01/11/24 17:24	1
Isophorone	ND		10	5.2	ug/L		01/11/24 09:49	01/11/24 17:24	1
2-Methylphenol	ND		10	3.2	ug/L		01/11/24 09:49	01/11/24 17:24	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		01/11/24 09:49	01/11/24 17:24	1
2-Nitroaniline	ND		10	5.0	ug/L		01/11/24 09:49	01/11/24 17:24	1
3-Nitroaniline	ND		10	4.7	ug/L		01/11/24 09:49	01/11/24 17:24	1
4-Nitroaniline	ND		10	4.1	ug/L		01/11/24 09:49	01/11/24 17:24	1
Nitrobenzene	ND		10	4.7	ug/L		01/11/24 09:49	01/11/24 17:24	1
2-Nitrophenol	ND		10	4.6	ug/L		01/11/24 09:49	01/11/24 17:24	1
4-Nitrophenol	ND		10	3.3	ug/L		01/11/24 09:49	01/11/24 17:24	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		01/11/24 09:49	01/11/24 17:24	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		01/11/24 09:49	01/11/24 17:24	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		01/11/24 09:49	01/11/24 17:24	1
Pentachlorophenol	ND		20	12	ug/L		01/11/24 09:49	01/11/24 17:24	1
Phenol	ND		10	4.2	ug/L		01/11/24 09:49	01/11/24 17:24	1
Pyridine	ND		10	10	ug/L		01/11/24 09:49	01/11/24 17:24	1
Quinoline	ND		10	2.4	ug/L		01/11/24 09:49	01/11/24 17:24	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		01/11/24 09:49	01/11/24 17:24	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/11/24 09:49	01/11/24 17:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*21 - 114*	*01/11/24 09:49*	*01/11/24 17:24*	*1*
2-Fluorophenol	*47*		*10 - 105*	*01/11/24 09:49*	*01/11/24 17:24*	*1*
Nitrobenzene-d5	*69*		*16 - 127*	*01/11/24 09:49*	*01/11/24 17:24*	*1*
Phenol-d5	*35*		*10 - 129*	*01/11/24 09:49*	*01/11/24 17:24*	*1*
Terphenyl-d14	*87*		*13 - 150*	*01/11/24 09:49*	*01/11/24 17:24*	*1*
2,4,6-Tribromophenol	*76*		*10 - 150*	*01/11/24 09:49*	*01/11/24 17:24*	*1*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-657287/2-A
Matrix: Water
Analysis Batch: 657431

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657287

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	31.3		ug/L		26	10 - 127
Benzoic acid	120	99.7		ug/L		83	19 - 126
Benzyl alcohol	120	71.5		ug/L		60	17 - 109
Bis(2-chloroethoxy)methane	120	66.1		ug/L		55	24 - 125
Bis(2-chloroethyl)ether	120	74.8		ug/L		62	10 - 121
bis (2-chloroisopropyl) ether	120	60.7		ug/L		51	14 - 123
Bis(2-ethylhexyl) phthalate	120	101		ug/L		84	16 - 150
4-Bromophenyl phenyl ether	120	91.2		ug/L		76	17 - 150
Butyl benzyl phthalate	120	96.2		ug/L		80	21 - 150
4-Chloroaniline	120	62.0		ug/L		52	10 - 124
4-Chloro-3-methylphenol	120	79.6		ug/L		66	37 - 131
2-Chloronaphthalene	120	83.5		ug/L		70	24 - 132
2-Chlorophenol	120	74.7		ug/L		62	27 - 124
4-Chlorophenyl phenyl ether	120	90.0		ug/L		75	27 - 147
Dibenz[a,h]acridine	114	113		ug/L		99	40 - 140
Dibenzofuran	120	87.3		ug/L		73	30 - 135
3,3'-Dichlorobenzidine	160	130		ug/L		81	10 - 150
2,4-Dichlorophenol	120	84.1		ug/L		70	33 - 132
Diethyl phthalate	120	97.4		ug/L		81	37 - 145
2,4-Dimethylphenol	120	104		ug/L		87	38 - 132
Dimethyl phthalate	120	87.3		ug/L		73	32 - 137
Di-n-butyl phthalate	120	104		ug/L		87	27 - 150
4,6-Dinitro-ortho-cresol	240	163		ug/L		68	14 - 150
2,4-Dinitrophenol	240	121		ug/L		50	15 - 150
2,4-Dinitrotoluene	120	92.6		ug/L		77	35 - 136
2,6-Dinitrotoluene	120	86.6		ug/L		72	29 - 140
Di-n-octyl phthalate	120	99.4		ug/L		83	26 - 150
1,4-Dioxane	120	47.3		ug/L		39	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	90.3		ug/L		75	23 - 138
Hexachlorobenzene	120	101		ug/L		84	10 - 150
Hexachlorocyclopentadiene	120	77.6		ug/L		65	10 - 124
Hexachloroethane	120	75.2		ug/L		63	10 - 127
Indene	120	85.4		ug/L		71	18 - 150
Isophorone	120	78.9		ug/L		66	28 - 127
2-Methylphenol	120	79.9		ug/L		67	34 - 124
3 & 4 Methylphenol	120	72.0		ug/L		60	32 - 122
2-Nitroaniline	120	82.7		ug/L		69	24 - 139
3-Nitroaniline	120	73.3		ug/L		61	10 - 128
4-Nitroaniline	120	71.7		ug/L		60	28 - 118
Nitrobenzene	120	78.9		ug/L		66	29 - 120
2-Nitrophenol	120	87.4		ug/L		73	25 - 148
4-Nitrophenol	240	178		ug/L		74	12 - 129
N-Nitrosodimethylamine	120	59.5		ug/L		50	10 - 115
N-Nitrosodi-n-propylamine	120	80.5		ug/L		67	24 - 142
N-Nitrosodiphenylamine	119	93.5		ug/L		79	29 - 138
Pentachlorophenol	240	128		ug/L		53	19 - 150
Phenol	120	52.6		ug/L		44	11 - 95
Pyridine	240	24.0		ug/L		10	10 - 82

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-657287/2-A
Matrix: Water
Analysis Batch: 657431

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657287

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Quinoline			114	78.5		ug/L		69	40 - 140		
2,4,5-Trichlorophenol			120	88.2		ug/L		73	30 - 144		
2,4,6-Trichlorophenol			120	86.0		ug/L		72	27 - 147		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*21 - 114*
2-Fluorophenol	*54*		*10 - 105*
Nitrobenzene-d5	*87*		*16 - 127*
Phenol-d5	*39*		*10 - 129*
Terphenyl-d14	*89*		*13 - 150*
2,4,6-Tribromophenol	*78*		*10 - 150*

Lab Sample ID: LCS 400-657287/4-A
Matrix: Water
Analysis Batch: 657431

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657287

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	98.8		ug/L		82	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*21 - 114*
2-Fluorophenol	*46*		*10 - 105*
Nitrobenzene-d5	*67*		*16 - 127*
Phenol-d5	*37*		*10 - 129*
Terphenyl-d14	*86*		*13 - 150*
2,4,6-Tribromophenol	*76*		*10 - 150*

Lab Sample ID: LCSD 400-657287/3-A
Matrix: Water
Analysis Batch: 657431

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657287

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	49.4	*1	ug/L		41	10 - 127	45	40
Benzoic acid			120	101		ug/L		85	19 - 126	2	40
Benzyl alcohol			120	67.8		ug/L		56	17 - 109	5	40
Bis(2-chloroethoxy)methane			120	48.5		ug/L		40	24 - 125	31	40
Bis(2-chloroethyl)ether			120	58.7		ug/L		49	10 - 121	24	40
bis (2-chloroisopropyl) ether			120	46.7		ug/L		39	14 - 123	26	40
Bis(2-ethylhexyl) phthalate			120	70.3		ug/L		59	16 - 150	35	40
4-Bromophenyl phenyl ether			120	66.5		ug/L		55	17 - 150	31	40
Butyl benzyl phthalate			120	66.5		ug/L		55	21 - 150	36	40
4-Chloroaniline			120	61.3		ug/L		51	10 - 124	1	40
4-Chloro-3-methylphenol			120	61.1		ug/L		51	37 - 131	26	40
2-Chloronaphthalene			120	64.5		ug/L		54	24 - 132	26	40
2-Chlorophenol			120	61.0		ug/L		51	27 - 124	20	40
4-Chlorophenyl phenyl ether			120	66.8		ug/L		56	27 - 147	30	40
Dibenz[a,h]acridine			114	94.2		ug/L		83	40 - 140	18	40
Dibenzofuran			120	63.3		ug/L		53	30 - 135	32	40

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

Job ID: 400-249385-1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-657287/3-A
Matrix: Water
Analysis Batch: 657431

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657287

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine			160	128		ug/L		80	10 - 150	1	40
2,4-Dichlorophenol			120	64.6		ug/L		54	33 - 132	26	40
Diethyl phthalate			120	72.4		ug/L		60	37 - 145	29	40
2,4-Dimethylphenol			120	80.7		ug/L		67	38 - 132	26	40
Dimethyl phthalate			120	67.5		ug/L		56	32 - 137	26	40
Di-n-butyl phthalate			120	74.8		ug/L		62	27 - 150	33	40
4,6-Dinitro-ortho-cresol			240	130		ug/L		54	14 - 150	22	40
2,4-Dinitrophenol			240	119		ug/L		49	15 - 150	2	40
2,4-Dinitrotoluene			120	68.3		ug/L		57	35 - 136	30	40
2,6-Dinitrotoluene			120	65.9		ug/L		55	29 - 140	27	40
Di-n-octyl phthalate			120	76.9		ug/L		64	26 - 150	25	40
1,4-Dioxane			120	42.9		ug/L		36	10 - 87	10	40
1,2-Diphenylhydrazine (as Azobenzene)			120	64.7		ug/L		54	23 - 138	33	40
Hexachlorobenzene			120	71.0		ug/L		59	10 - 150	34	40
Hexachlorocyclopentadiene			120	61.7		ug/L		51	10 - 124	23	40
Hexachloroethane			120	57.9		ug/L		48	10 - 127	26	40
Indene			120	63.4		ug/L		53	18 - 150	30	40
Isophorone			120	58.8		ug/L		49	28 - 127	29	40
2-Methylphenol			120	68.9		ug/L		57	34 - 124	15	40
3 & 4 Methylphenol			120	66.8		ug/L		56	32 - 122	8	40
2-Nitroaniline			120	68.4		ug/L		57	24 - 139	19	40
3-Nitroaniline			120	81.1		ug/L		68	10 - 128	10	40
4-Nitroaniline			120	74.0		ug/L		62	28 - 118	3	40
Nitrobenzene			120	57.2		ug/L		48	29 - 120	32	40
2-Nitrophenol			120	64.3		ug/L		54	25 - 148	31	40
4-Nitrophenol			240	177		ug/L		74	12 - 129	0	40
N-Nitrosodimethylamine			120	74.7		ug/L		62	10 - 115	23	40
N-Nitrosodi-n-propylamine			120	64.5		ug/L		54	24 - 142	22	40
N-Nitrosodiphenylamine			119	67.2		ug/L		56	29 - 138	33	40
Pentachlorophenol			240	103		ug/L		43	19 - 150	22	40
Phenol			120	49.8		ug/L		41	11 - 95	6	40
Pyridine			240	43.4	*1	ug/L		18	10 - 82	58	40
Quinoline			114	93.5		ug/L		82	40 - 140	17	40
2,4,5-Trichlorophenol			120	64.9		ug/L		54	30 - 144	30	40
2,4,6-Trichlorophenol			120	63.8		ug/L		53	27 - 147	30	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*54*		*21 - 114*
2-Fluorophenol	*42*		*10 - 105*
Nitrobenzene-d5	*57*		*16 - 127*
Phenol-d5	*37*		*10 - 129*
Terphenyl-d14	*66*		*13 - 150*
2,4,6-Tribromophenol	*58*		*10 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-657287/5-A
Matrix: Water
Analysis Batch: 657431

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657287

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	105		ug/L		87	40 - 140	6	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*80*		*21 - 114*
2-Fluorophenol	*46*		*10 - 105*
Nitrobenzene-d5	*72*		*16 - 127*
Phenol-d5	*38*		*10 - 129*
Terphenyl-d14	*90*		*13 - 150*
2,4,6-Tribromophenol	*75*		*10 - 150*

Lab Sample ID: 400-249385-9 MS
Matrix: Water
Analysis Batch: 657431

Client Sample ID: ROST3MW-ROX-010824
Prep Type: Total/NA
Prep Batch: 657287

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	ND	F1 *1	113	37.7	F1	ug/L		33	50 - 150
Benzoic acid	ND	F2	113	64.6		ug/L		57	50 - 150
Benzyl alcohol	ND	F1	113	48.4	F1	ug/L		43	50 - 150
Bis(2-chloroethoxy)methane	ND	F2 F1	113	37.3	F1	ug/L		33	50 - 150
Bis(2-chloroethyl)ether	ND	F2 F1	113	51.9	F1	ug/L		46	50 - 150
bis (2-chloroisopropyl) ether	ND	F2 F1	113	33.0	F1	ug/L		29	50 - 150
Bis(2-ethylhexyl) phthalate	ND	F2 F1	113	50.4	F1	ug/L		45	50 - 150
4-Bromophenyl phenyl ether	ND	F2 F1	113	49.2	F1	ug/L		43	50 - 150
Butyl benzyl phthalate	ND	F2 F1	113	51.4	F1	ug/L		45	50 - 150
4-Chloroaniline	ND	F1	113	51.8	F1	ug/L		46	50 - 150
4-Chloro-3-methylphenol	ND	F2 F1	113	44.0	F1	ug/L		39	50 - 150
2-Chloronaphthalene	ND	F2 F1	113	44.3	F1	ug/L		39	50 - 150
2-Chlorophenol	ND	F2 F1	113	45.2	F1	ug/L		40	50 - 150
4-Chlorophenyl phenyl ether	ND	F2 F1	113	49.7	F1	ug/L		44	50 - 150
Dibenz[a,h]acridine	ND	F2	107	68.6		ug/L		64	50 - 150
Dibenzofuran	ND	F2 F1	113	46.4	F1	ug/L		41	50 - 150
3,3'-Dichlorobenzidine	ND		151	110		ug/L		73	50 - 150
2,4-Dichlorophenol	ND	F2 F1	113	45.1	F1	ug/L		40	50 - 150
Diethyl phthalate	ND	F2 F1	113	53.5	F1	ug/L		47	50 - 150
2,4-Dimethylphenol	ND	F2	113	60.6		ug/L		54	50 - 150
Dimethyl phthalate	ND	F2 F1	113	51.3	F1	ug/L		45	50 - 150
Di-n-butyl phthalate	ND	F2 F1	113	53.6	F1	ug/L		47	50 - 150
4,6-Dinitro-ortho-cresol	ND	F2 F1	226	92.5	F1	ug/L		41	50 - 150
2,4-Dinitrophenol	ND	F2 F1	226	71.7	F1	ug/L		32	50 - 150
2,4-Dinitrotoluene	ND	F2 F1	113	50.3	F1	ug/L		44	50 - 150
2,6-Dinitrotoluene	ND	F2 F1	113	46.4	F1	ug/L		41	50 - 150
Di-n-octyl phthalate	ND	F2 F1	113	51.1	F1	ug/L		45	50 - 150
1,4-Dioxane	ND	F1	113	15.0	F1	ug/L		13	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND	F2 F1	113	48.8	F1	ug/L		43	50 - 150
Hexachlorobenzene	ND	F2 F1	113	53.9	F1	ug/L		48	50 - 150
Hexachlorocyclopentadiene	ND	F2 F1	113	30.1	F1	ug/L		27	50 - 150
Hexachloroethane	ND	F2 F1	113	36.4	F1	ug/L		32	50 - 150

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-249385-9 MS
Matrix: Water
Analysis Batch: 657431

Client Sample ID: ROST3MW-ROX-010824
Prep Type: Total/NA
Prep Batch: 657287

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Indene	ND	F2 F1	113	47.4	F1	ug/L		42	50 - 150
Isophorone	ND	F2 F1	113	42.9	F1	ug/L		38	50 - 150
2-Methylphenol	ND	F2 F1	113	55.3	F1	ug/L		49	50 - 150
3 & 4 Methylphenol	ND	F2 F1	113	50.9	F1	ug/L		45	50 - 150
2-Nitroaniline	ND	F2 F1	113	52.2	F1	ug/L		46	50 - 150
3-Nitroaniline	ND		113	71.4		ug/L		63	50 - 150
4-Nitroaniline	ND	F2 F1	113	53.2	F1	ug/L		47	50 - 150
Nitrobenzene	ND	F2 F1	113	42.9	F1	ug/L		38	50 - 150
2-Nitrophenol	ND	F2 F1	113	46.7	F1	ug/L		41	50 - 150
4-Nitrophenol	ND	F2	226	122		ug/L		54	50 - 150
N-Nitrosodimethylamine	ND	F2 F1	113	42.2	F1	ug/L		37	50 - 150
N-Nitrosodi-n-propylamine	ND	F2 F1	113	46.7	F1	ug/L		41	50 - 150
N-Nitrosodiphenylamine	ND	F2 F1	112	50.8	F1	ug/L		45	50 - 150
Pentachlorophenol	ND	F2 F1	226	60.7	F1	ug/L		27	50 - 150
Phenol	ND	F1	113	38.6	F1	ug/L		34	50 - 150
Pyridine	ND	F1 *1	226	43.2	F1	ug/L		19	50 - 150
Quinoline	ND		107	79.9		ug/L		74	50 - 150
2,4,5-Trichlorophenol	ND	F2 F1	113	47.5	F1	ug/L		42	50 - 150
2,4,6-Trichlorophenol	ND	F2 F1	113	47.0	F1	ug/L		42	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*42*		*21 - 114*
2-Fluorophenol	*35*		*10 - 105*
Nitrobenzene-d5	*45*		*16 - 127*
Phenol-d5	*30*		*10 - 129*
Terphenyl-d14	*58*		*13 - 150*
2,4,6-Tribromophenol	*44*		*10 - 150*

Lab Sample ID: 400-249385-9 MSD
Matrix: Water
Analysis Batch: 657431

Client Sample ID: ROST3MW-ROX-010824
Prep Type: Total/NA
Prep Batch: 657287

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	ND	F1 *1	113	40.7	F1	ug/L		36	50 - 150	7	40
Benzoic acid	ND	F2	113	116	F2	ug/L		102	50 - 150	57	40
Benzyl alcohol	ND	F1	113	68.6		ug/L		61	50 - 150	35	40
Bis(2-chloroethoxy)methane	ND	F2 F1	113	68.3	F2	ug/L		60	50 - 150	59	40
Bis(2-chloroethyl)ether	ND	F2 F1	113	85.6	F2	ug/L		75	50 - 150	49	40
bis (2-chloroisopropyl) ether	ND	F2 F1	113	66.0	F2	ug/L		58	50 - 150	67	40
Bis(2-ethylhexyl) phthalate	ND	F2 F1	113	104	F2	ug/L		92	50 - 150	70	40
4-Bromophenyl phenyl ether	ND	F2 F1	113	99.6	F2	ug/L		88	50 - 150	68	40
Butyl benzyl phthalate	ND	F2 F1	113	105	F2	ug/L		92	50 - 150	68	40
4-Chloroaniline	ND	F1	113	70.3		ug/L		62	50 - 150	30	40
4-Chloro-3-methylphenol	ND	F2 F1	113	82.6	F2	ug/L		73	50 - 150	61	40
2-Chloronaphthalene	ND	F2 F1	113	92.8	F2	ug/L		82	50 - 150	71	40
2-Chlorophenol	ND	F2 F1	113	76.8	F2	ug/L		68	50 - 150	52	40
4-Chlorophenyl phenyl ether	ND	F2 F1	113	99.1	F2	ug/L		87	50 - 150	66	40
Dibenz[a,h]acridine	ND	F2	108	133	F2	ug/L		124	50 - 150	64	40

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-249385-9 MSD
Matrix: Water
Analysis Batch: 657431

Client Sample ID: ROST3MW-ROX-010824
Prep Type: Total/NA
Prep Batch: 657287

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dibenzofuran	ND	F2 F1	113	95.1	F2	ug/L		84	50 - 150	69	40
3,3'-Dichlorobenzidine	ND		151	151		ug/L		100	50 - 150	31	40
2,4-Dichlorophenol	ND	F2 F1	113	86.7	F2	ug/L		76	50 - 150	63	40
Diethyl phthalate	ND	F2 F1	113	104	F2	ug/L		92	50 - 150	64	40
2,4-Dimethylphenol	ND	F2	113	109	F2	ug/L		96	50 - 150	57	40
Dimethyl phthalate	ND	F2 F1	113	99.3	F2	ug/L		88	50 - 150	64	40
Di-n-butyl phthalate	ND	F2 F1	113	114	F2	ug/L		100	50 - 150	72	40
4,6-Dinitro-ortho-cresol	ND	F2 F1	227	193	F2	ug/L		85	50 - 150	70	40
2,4-Dinitrophenol	ND	F2 F1	227	148	F2	ug/L		65	50 - 150	69	40
2,4-Dinitrotoluene	ND	F2 F1	113	98.9	F2	ug/L		87	50 - 150	65	40
2,6-Dinitrotoluene	ND	F2 F1	113	90.8	F2	ug/L		80	50 - 150	65	40
Di-n-octyl phthalate	ND	F2 F1	113	104	F2	ug/L		92	50 - 150	68	40
1,4-Dioxane	ND	F1	113	19.6	F1	ug/L		17	50 - 150	27	40
1,2-Diphenylhydrazine (as Azobenzene)	ND	F2 F1	113	95.7	F2	ug/L		84	50 - 150	65	40
Hexachlorobenzene	ND	F2 F1	113	109	F2	ug/L		96	50 - 150	68	40
Hexachlorocyclopentadiene	ND	F2 F1	113	84.2	F2	ug/L		74	50 - 150	95	40
Hexachloroethane	ND	F2 F1	113	75.4	F2	ug/L		67	50 - 150	70	40
Indene	ND	F2 F1	113	91.0	F2	ug/L		80	50 - 150	63	40
Isophorone	ND	F2 F1	113	84.0	F2	ug/L		74	50 - 150	65	40
2-Methylphenol	ND	F2 F1	113	93.3	F2	ug/L		82	50 - 150	51	40
3 & 4 Methylphenol	ND	F2 F1	113	77.0	F2	ug/L		68	50 - 150	41	40
2-Nitroaniline	ND	F2 F1	113	91.8	F2	ug/L		81	50 - 150	55	40
3-Nitroaniline	ND		113	85.9		ug/L		76	50 - 150	18	40
4-Nitroaniline	ND	F2 F1	113	84.8	F2	ug/L		75	50 - 150	46	40
Nitrobenzene	ND	F2 F1	113	81.2	F2	ug/L		72	50 - 150	62	40
2-Nitrophenol	ND	F2 F1	113	91.0	F2	ug/L		80	50 - 150	64	40
4-Nitrophenol	ND	F2	227	202	F2	ug/L		89	50 - 150	49	40
N-Nitrosodimethylamine	ND	F2 F1	113	77.6	F2	ug/L		68	50 - 150	59	40
N-Nitrosodi-n-propylamine	ND	F2 F1	113	85.3	F2	ug/L		75	50 - 150	58	40
N-Nitrosodiphenylamine	ND	F2 F1	112	99.3	F2	ug/L		88	50 - 150	65	40
Pentachlorophenol	ND	F2 F1	227	136	F2	ug/L		60	50 - 150	77	40
Phenol	ND	F1	113	56.6		ug/L		50	50 - 150	38	40
Pyridine	ND	F1 *1	227	42.2	F1	ug/L		19	50 - 150	2	40
Quinoline	ND		108	97.6		ug/L		91	50 - 150	20	40
2,4,5-Trichlorophenol	ND	F2 F1	113	92.9	F2	ug/L		82	50 - 150	65	40
2,4,6-Trichlorophenol	ND	F2 F1	113	92.0	F2	ug/L		81	50 - 150	65	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*21 - 114*
2-Fluorophenol	*54*		*10 - 105*
Nitrobenzene-d5	*88*		*16 - 127*
Phenol-d5	*45*		*10 - 129*
Terphenyl-d14	*93*		*13 - 150*
2,4,6-Tribromophenol	*89*		*10 - 150*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: LCS 400-657287/2-A
Matrix: Water
Analysis Batch: 657398

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657287

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	106		ug/L		89	40 - 140
Acenaphthylene	120	109		ug/L		91	40 - 140
Anthracene	120	109		ug/L		91	40 - 140
Benzo[a]anthracene	120	114		ug/L		95	40 - 140
Benzo[a]pyrene	120	116		ug/L		97	40 - 140
Benzo[b]fluoranthene	120	132		ug/L		110	40 - 140
Benzo[g,h,i]perylene	120	108		ug/L		90	40 - 140
Benzo[k]fluoranthene	120	115		ug/L		96	40 - 140
Chrysene	120	106		ug/L		89	40 - 140
Dibenz(a,h)anthracene	120	117		ug/L		98	40 - 140
Fluoranthene	120	111		ug/L		93	40 - 140
Fluorene	120	109		ug/L		91	40 - 140
Indeno[1,2,3-cd]pyrene	120	119		ug/L		100	40 - 140
Phenanthrene	120	110		ug/L		92	40 - 140
Pyrene	120	107		ug/L		89	40 - 140
1-Methylnaphthalene	120	69.0		ug/L		57	40 - 140
2-Methylnaphthalene	120	71.6		ug/L		60	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*80*		*18 - 147*
2-Fluorobiphenyl	*86*		*15 - 128*
Nitrobenzene-d5	*64*		*10 - 144*

Lab Sample ID: 400-249385-9 MS
Matrix: Water
Analysis Batch: 657398

Client Sample ID: ROST3MW-ROX-010824
Prep Type: Total/NA
Prep Batch: 657287

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	0.14	J	113	57.9		ug/L		51	50 - 150
Acenaphthylene	ND		113	58.0		ug/L		51	50 - 150
Anthracene	ND		113	56.9		ug/L		50	50 - 150
Benzo[a]anthracene	ND		113	59.5		ug/L		53	50 - 150
Benzo[a]pyrene	ND		113	60.7		ug/L		54	50 - 150
Benzo[b]fluoranthene	ND		113	65.7		ug/L		58	50 - 150
Benzo[g,h,i]perylene	ND		113	54.7	F1	ug/L		48	50 - 150
Benzo[k]fluoranthene	ND		113	66.2		ug/L		59	50 - 150
Chrysene	ND		113	58.3		ug/L		52	50 - 150
Dibenz(a,h)anthracene	ND		113	59.3		ug/L		52	50 - 150
Fluoranthene	ND		113	57.3		ug/L		51	50 - 150
Fluorene	0.16	J	113	59.5		ug/L		52	50 - 150
Indeno[1,2,3-cd]pyrene	ND		113	61.1		ug/L		54	50 - 150
Phenanthrene	ND		113	58.8		ug/L		52	50 - 150
Pyrene	ND		113	58.0		ug/L		51	50 - 150
1-Methylnaphthalene	0.29		113	27.2	F1	ug/L		24	50 - 150
2-Methylnaphthalene	ND		113	28.0	F1	ug/L		25	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*57*		*18 - 147*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 400-249385-9 MS
Matrix: Water
Analysis Batch: 657398

Client Sample ID: ROST3MW-ROX-010824
Prep Type: Total/NA
Prep Batch: 657287

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl	50		15 - 128
Nitrobenzene-d5	25		10 - 144

Lab Sample ID: 400-249385-9 MSD
Matrix: Water
Analysis Batch: 657398

Client Sample ID: ROST3MW-ROX-010824
Prep Type: Total/NA
Prep Batch: 657287

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	0.14	J	113	107	F2	ug/L		94	50 - 150	59	40
Acenaphthylene	ND		113	109	F2	ug/L		96	50 - 150	61	40
Anthracene	ND		113	112	F2	ug/L		99	50 - 150	65	40
Benzo[a]anthracene	ND		113	113	F2	ug/L		99	50 - 150	62	40
Benzo[a]pyrene	ND		113	115	F2	ug/L		102	50 - 150	62	40
Benzo[b]fluoranthene	ND		113	134	F2	ug/L		119	50 - 150	69	40
Benzo[g,h,i]perylene	ND		113	101	F2	ug/L		89	50 - 150	60	40
Benzo[k]fluoranthene	ND		113	116	F2	ug/L		102	50 - 150	54	40
Chrysene	ND		113	107	F2	ug/L		94	50 - 150	59	40
Dibenz(a,h)anthracene	ND		113	112	F2	ug/L		99	50 - 150	61	40
Fluoranthene	ND		113	114	F2	ug/L		101	50 - 150	66	40
Fluorene	0.16	J	113	110	F2	ug/L		97	50 - 150	59	40
Indeno[1,2,3-cd]pyrene	ND		113	114	F2	ug/L		101	50 - 150	60	40
Phenanthrene	ND		113	114	F2	ug/L		100	50 - 150	64	40
Pyrene	ND		113	104	F2	ug/L		92	50 - 150	57	40
1-Methylnaphthalene	0.29		113	67.9	F2	ug/L		60	50 - 150	86	40
2-Methylnaphthalene	ND		113	70.1	F2	ug/L		62	50 - 150	86	40

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Terphenyl-d14	82		18 - 147
2-Fluorobiphenyl	90		15 - 128
Nitrobenzene-d5	65		10 - 144

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-657281/1-A
Matrix: Water
Analysis Batch: 657319

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657281

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		01/10/24 14:08	01/10/24 17:10	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/10/24 14:08	01/10/24 17:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	74	p	51 - 149	01/10/24 14:08	01/10/24 17:10	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCS 400-657281/2-A
Matrix: Water
Analysis Batch: 657319

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657281

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.102		ug/L		102	60 - 140		
1,2-Dibromoethane			0.100	0.106		ug/L		106	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*89*	*p*	*51 - 149*

Lab Sample ID: LCSD 400-657281/3-A
Matrix: Water
Analysis Batch: 657319

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657281

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0921		ug/L		92	60 - 140	11	30
1,2-Dibromoethane			0.100	0.0930		ug/L		93	60 - 140	13	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*71*	*p*	*51 - 149*

Lab Sample ID: 400-249385-9 MS
Matrix: Water
Analysis Batch: 657319

Client Sample ID: ROST3MW-ROX-010824
Prep Type: Total/NA
Prep Batch: 657281

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane	ND		0.105	0.101		ug/L		97	10 - 150		
1,2-Dibromoethane	ND		0.104	0.115		ug/L		110	39 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*84*		*51 149*

Lab Sample ID: 400-249385-9 MSD
Matrix: Water
Analysis Batch: 657319

Client Sample ID: ROST3MW-ROX-010824
Prep Type: Total/NA
Prep Batch: 657281

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		0.100	0.107		ug/L		107	10 - 150	5	20
1,2-Dibromoethane	ND		0.0997	0.120		ug/L		120	39 - 150	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

400-249385 COC

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 P[illegible]	☐ CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 1/8/2024
PO #	**GSAP Project ID**	PAGE: 1 of 2
60721927 – 3.1.2	USPC/00114/R/02	

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS: Street and City	State	AECOM Project / Task Number:
AECOM		900 South Central Ave; ROXANA	IL	Roxana Quarterly GW 60721927 – 3.1.2

ADDRESS:	EDF DELIVERABLE TO (Name, Company, Office Location):	PHONE NO :	E-MAIL:	AECOM Other ID:
100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA	Melissa Remiger - please see special instructions	314-802-1207	melissa.remiger@aecom.com	

PROJECT CONTACT (Hardcopy or PDF Report to):
Melissa Remiger, Mary Massa, Brett Howell

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@aecom.com

SAMPLER NAME(S) (Print):
J . MAYER , E. CHALFANT

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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

Please include "J" values on Reports.
Please provide sample receipt upon login.
Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.1.2

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 8270 SIMS
	TB-ROX-010824-8260-B	1/8/2024	0000	H2O	2					2	X			
	TB-ROX-010824-8011-B	1/8/2024	0000	H2O	2					2		X		
	ROST4PZG-ROX-010824	1/8/2024	0930	H2O	6			2		8	X	X	X	X
	ROST4PZC-ROX-010824	1/8/2024	1030	H2O	6			2		8	X	X	X	X
	MW16-ROX-010824	1/8/2024	1200	H2O	6			2		8	X	X	X	X

COC 1/8/24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
E. CHALFANT	FEDEX: 6336 6595 3307 ; 6639 6595 3292	1/8/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	J. Barnett 0.0°C + 1.9°C IRB	1.9.24	1102
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS - 1599811 ; 1599810 ; 1599813 ; 1599812

1/23/2024

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
Melissa Remiger	25278	DATE: 1/8/2024
PO #	**GSAP Project ID**	PAGE: 2 of 2
60721927 3.1.2	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): Melissa Remiger, Mary Massa, Brett Howell		
TELEPHONE: 314-429-0100	FAX: 314-429-0462	Bill To Contact E-MAIL: melissa.remiger@aecom.com

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA	State: IL	AECOM Project / Task Number: Roxana Quarterly GW 60721927 3.1.2
EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions	PHONE NO.: 314-802-1207	E-MAIL: melissa.remiger@aecom.com / AECOM Other ID:
SAMPLER NAME(S) (Print): C. McDavid, T. Jenkins, M. Massa		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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

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- **Please include "J" values on Reports.**
- **Please provide sample receipt upon login.**
- **Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com**

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 3.1.2

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 8270 SIMS
	TB-ROX-010824-8260-A	1/8/2024	0000	Water	2					2	X			
	TB-ROX-010824-8011-A	1/8/2024	0000	Water	2					2		X		
	MW27-ROX-010824	1/8/2024	0925	Water	6			2		8	X	X	X	X
	ROST3MW-ROX-010824	1/8/2024	1045	Water	6			2		8	X	X	X	X
	ROST3MW-ROX-010824-MS	1/8/2024	1045	Water	6			2		8	X	X	X	X
	ROST3MW-ROX-010824-MSD	1/8/2024	1045	Water	6			2		8	X	X	X	X
	P54-ROX-010824	1/8/2024	1235	Water	6			2		8	X	X	X	X

CMcDavid 01-08-24

Relinquished by: (Signature) COURTNEY MCDAVID	Received by: (Signature) FEDEX: See page 1	Date: 1/8/2024	Time: 1600
Relinquished by: (Signature)	Received by: (Signature) J. Earnest 0.0°C + 1.9°C IR8	Date: 1-9-24	Time: 1102
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: See page 1

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1/23/2024

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-249385-1

Login Number: 249385
List Number: 1
Creator: Earnest, Tamantha

List Source: Eurofins 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	0.0°C & 1.9°C IR8
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").	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. Job ID: 400-249385-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Roxana Groundwater Quarterly – 1st Quarter 2024 Data Review

Laboratory SDG: 400-249496-1-Rev.2

Data Reviewer: Adelina Gita

Peer Reviewer: Cheyana Cokley

Date Reviewed: 2/27/2024

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

Sample Identification	Sample Identification
TB-ROX-010924-8260-A	TB-ROX-010924-8011-A
MW24-ROX-010924	MW5-ROX-010924
MW3-ROX-010924	MW3-ROX-010924-DUP
TB-ROX-010924-8260-B	TB-ROX-010924-8011-B
MW6D-ROX-010924-EB	MW6D-ROX-010924
MW6C-ROX-010924	MW6A-ROX-010924
MW6B-ROX-010924	-

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 that several SVOC LCS/LCSD RPDs were outside evaluation criteria. The surrogate recovery for terphenyl-d_{14} was outside criteria in a PAH method blank. 2-Chloroethyl vinyl ether MS/MSD recoveries were outside evaluation criteria in sample MW6D-ROX-010924. The internal standard area recovery for perylene-d_{12} was outside criteria in a PAH method blank. The initial calibration verification (ICV) for 3,3'-dichlorobenzidine was outside evaluation criteria, biased low. The continuing calibration verifications (CCV) for several analytes were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review. The laboratory report was revised on March 11, 2024, to remove B-flag laboratory qualifications inappropriately applied to the PAH method blank. The L4 laboratory report was revised on March 25, 2024, to include a missing ICV for method 8270E.

Three of 70 (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/LCSD 400-657287/2-A/3-A	SVOCs	Aniline	26/41	**45**	10-127/40
LCS/LCSD 400-657287/2-A/3-A	SVOCs	Pyridine	10/19	**58**	10-82/40

Analytical data associated with LCS/LCSD 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 (%)
MB 400-657287/1-A	PAHs	Terphenyl-d_{14}	**155**	18-147

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, although not requested, sample MW6D-ROX-010924 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
MW6D-ROX-010924 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**5/0**	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 2-chloroethyl vinyl ether due to acceptable LCS recoveries and to the acid reactive nature of 2-chloroethyl vinyl ether.

Sample ID	Parameter	Analyte	Qualification
MW6D-ROX-010924	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
MB 400-657287/1-A	PAHs	Perylene-d_{12}	**7164**	15667	7834-31334

Method blanks 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
MW3-ROX-010924	MW3-ROX-010924-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; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the initial calibration verification (ICV) for 3,3'-dichlorobenzidine was outside evaluation criteria, biased low. The continuing calibration verification (CCV) for hexachlorocyclopentadiene, 4,6-dinitro-ortho-cresol, pyridine, aniline, and bis(2-chloroethoxy) methane was outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW6B-ROX-010924	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW6B-ROX-010924	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW24-ROX-010924	SVOCs	Aniline	**UJ**
MW5-ROX-010924	SVOCs	Aniline	**UJ**
MW3-ROX-010924	SVOCs	Aniline	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW3-ROX-010924-DUP	SVOCs	Aniline	UJ
MW6D-ROX-010924	SVOCs	Aniline	UJ
MW6C-ROX-010924	SVOCs	Aniline	UJ
MW6A-ROX-010924	SVOCs	Aniline	UJ
MW24-ROX-010924	SVOCs	Pyridine	UJ
MW5-ROX-010924	SVOCs	Pyridine	UJ
MW3-ROX-010924	SVOCs	Pyridine	UJ
MW3-ROX-010924-DUP	SVOCs	Pyridine	UJ
MW6D-ROX-010924	SVOCs	Pyridine	UJ
MW6C-ROX-010924	SVOCs	Pyridine	UJ
MW6A-ROX-010924	SVOCs	Pyridine	UJ
MW24-ROX-010924	SVOCs	bis(2-Chloroethoxy) methane	UJ
MW5-ROX-010924	SVOCs	bis(2-Chloroethoxy) methane	UJ
MW3-ROX-010924	SVOCs	bis(2-Chloroethoxy) methane	UJ
MW3-ROX-010924-DUP	SVOCs	bis(2-Chloroethoxy) methane	UJ
MW6D-ROX-010924	SVOCs	bis(2-Chloroethoxy) methane	UJ
MW6C-ROX-010924	SVOCs	bis(2-Chloroethoxy) methane	UJ
MW6A-ROX-010924	SVOCs	bis(2-Chloroethoxy) methane	UJ
MW6B-ROX-010924	SVOCs	3,3'-Dichlorobenzidine	UJ

1.0 VALIDATION OF DBCP AND EDB DATA – SDG 400-249496-1-R2

This section describes the validation for eight investigative groundwater samples, one equipment blank, and two trip blanks that were prepared and analyzed for 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by USEPA SW-846 Method 8011. The samples were analyzed by Eurofins Pensacola Laboratories, in Pensacola, Florida, and submitted as part of the sample delivery group (SDG) 400-249496-1-R2. The samples included as part of this validation are listed below.

Sample Identification	Sample Identification
MW24-ROX-010924	MW5-ROX-010924
MW3-ROX-010924	MW3-ROX-010924-DUP
MW6D-ROX-010924-EB	TB-ROX-010924-8011-B
MW6C-ROX-010924	MW6D-ROX-010924
MW6B-ROX-010924	MW6A-ROX-010924
TB-ROX-010924-8011-A	-

Evaluation of the analytical data followed procedures outlined in the USEPA Contract Laboratory National Functional Guidelines for Superfund Organic Methods Data Review (EPA 2020).

Criteria evaluated included the following method performance criteria:

- Data package completeness
- Laboratory case narrative/cooler receipt form
- Holding times and sample preservation
- Initial calibration (ICAL)
- Calibration verification (CV)
- Blank samples
- Laboratory control spike (LCS) samples
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) samples
- Target compound identification and quantification
- Overall data assessment

1.1 Data Package Completeness

The data package was reviewed to make certain it contained the data contractually required in the deliverable. This included checking the data package for the results against the analyses requested on the chain-of custody, along with requested QC documentation for the respective methods.

1.2 Laboratory Case Narrative/Cooler Receipt Form

The laboratory case narrative did not indicate any analytical or quality issues.

No issues were indicated in the cooler receipt form.

1.3 Holding Times and Sample Preservation

Review of the sample collection and analysis dates involved comparing the sample chain-of-custody, the summary forms, and the raw data forms for accuracy, consistency, and holding time compliance. The samples were received in good condition and were received and maintained at temperatures of ≤ 6ºC. In addition, the samples were analyzed within 14 days of collection. No qualifications to the data were required based on holding times and sample preservation.

1.4 Initial Calibration

An ICAL was established to assess whether the instrument was capable of producing acceptable qualitative and quantitative data for EDB/DBCP analyses. Validated samples included in SDG 400-249496-1-R2 were analyzed using instrument Toto. The ICAL for instrument Toto was established on 09/12/2023. At least five standard concentrations were used to establish the ICAL curve as required by Method 8011.

Review of the ICAL summary forms indicated percent relative standard deviations (%RSDs) were ≤ 20% for target compounds or were determined using linear regression and correlation coefficients (r^2) were greater than 0.990. A recalculation of the weighted linear regression was performed from the raw data and no errors in calculation were noted.

Review of the summary forms indicated that an initial calibration verification (ICV) was performed following the initial calibration. Review of ICV summary forms indicated percent differences (%Ds) were within the evaluation criterion of ≤ 30% for both target compounds. No qualification of data was required.

Summary forms and raw data are provided for the primary column only since all target compounds were reported as non-detect in the samples and did not require confirmation.

1.5 Calibration Verification (CV)

Review of the CV summary forms indicated that all CVs were performed before the start of sample analysis, every ten sample injections, and at the end of sample analysis. %Ds met the evaluation criteria of ≤ 15% for both target compounds.

Recalculations of the %D for one target compound was completed for the CV, and no errors in calculation were noted.

1.6 Blank Samples

The purpose of the method blank samples is to evaluate the existence and magnitude of contamination problems emanating from laboratory activities. Method blank samples were analyzed with each analytical batch as required by USEPA SW-846 Method 8011. Also, trip blanks were analyzed to evaluate the existence and magnitude of contamination problems emanating from sample shipment to the laboratory. Equipment blank samples were used to evaluate the efficiency of the decontamination of sampling equipment. Target compounds were reported as non-detect in all blanks. No qualification of data was required.

1.7 Laboratory Control Spike (LCS) Samples

Laboratory control samples were analyzed with each analytical batch to assess the accuracy of the analytical process. LCS/LCSD recoveries and LCS/LCSD RPDs were within evaluation criteria. No qualification of data was required.

Approximately 10% of spiking compound recoveries for the LCS were recalculated and verified using the LCS summary forms, and no calculation or transcription errors were noted.

1.8 Surrogate Spike Recoveries

Surrogate compounds were used to evaluate the overall laboratory sample preparation efficiency on a per sample basis. Surrogate recoveries were within the method acceptance criteria for the validated samples. No qualification of data was required.

Approximately 10% of the recoveries were recalculated and no calculation or transcription errors were noted.

1.9 Matrix Spike/Matrix Spike Duplicate (MS/MSD) Samples

No MS/MSD samples were analyzed for Method 8011.

1.10 Target Compound Identification and Quantification

For validation of the compound identification, chromatograms were reviewed to verify the major peaks were identified, and the relative retention time was no greater than 0.06 minutes different from the associated CV retention times. Target compounds were not detected in any of the investigative groundwater samples in this data set.

For the validation of compound quantitation, the LCS results were recalculated from the raw data since all target compounds were non-detect, and no calculation errors were noted. Additionally, the reporting limits (RLs) were verified to determine if RLs were adjusted for dilutions when applicable.

1.11 Overall Data Assessment

Based on the criteria outlined, it is recommended that the results reported for these analyses are accepted for their intended use. Acceptable levels of accuracy and precision based on the method performance criteria were achieved for this SDG.

1.0 VALIDATION OF VOC DATA – 400-249496-1-R2

This section describes the validation for eight investigative groundwater samples, one equipment blank, and two trip blanks which were prepared by USEPA SW-846 Method 5030C and analyzed for Volatile Organic Compounds (VOCs) by USEPA SW-846 Method 8260D. The samples were analyzed by Eurofins Pensacola Laboratories in Pensacola, Florida, and submitted as part of the sample delivery group (SDG) 400-249496-1-R2. The samples included as part of this validation are listed below.

Sample Identification	Sample Identification
TB-ROX-010924-8260-A	MW6B-ROX-010924
MW24-ROX-010924	MW5-ROX-010924
MW3-ROX-010924	MW3-ROX-010924-DUP
TB-ROX-010924-8260-B	MW6D-ROX-010924
MW6D-ROX-010924-EB	MW6A-ROX-010924
MW6C-ROX-010924	-

Evaluation of the analytical data followed procedures outlined in the USEPA Contract Laboratory National Functional Guidelines for Superfund Organic Methods Data Review (EPA 2020).

Criteria evaluated included the following method performance criteria:

- Data package completeness
- Laboratory case narrative/cooler receipt form
- Holding times and sample preservation
- GC/MS instrument performance
- Initial calibration (ICAL)
- Calibration verification (CV)
- Blank samples
- Laboratory control spike (LCS) samples
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) samples
- Internal standards
- Target compound identification and quantification
- Overall data assessment

1.1 Data Package Completeness

The data package was reviewed to make certain it contained the data contractually required in the deliverable. This included checking the data package for the results against the analyses requested on the chain-of custody, along with requested QC documentation for the respective methods.

1.2 Laboratory Case Narrative/Cooler Receipt Form

The laboratory case narrative indicated that 2-chloroethyl vinyl ether MS/MSD recoveries were outside evaluation criteria in sample MW6D-ROX-010924.These issues are addressed further in the appropriate sections of this data review.

Additionally, the laboratory case narrative indicated three (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) of 70 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 issues.

1.3 Holding Times and Sample Preservation

Review of the sample collection and analysis dates involved comparing the sample chain-of-custody, the summary forms and the raw data forms for accuracy, consistency, and holding time compliance. The samples were in good condition and were received and maintained at temperatures of ≤ 6ºC and samples were preserved at a pH < 2.0. Additionally, samples were analyzed within the analysis holding time (14 days).

1.4 GC/MS Instrument Performance

GC/MS instrument performance checks were performed to ensure mass resolution, identification, and instrument sensitivity. Criteria for evaluation of instrument performance included possible transcription/calculation errors, adherence to instrument tuning frequency requirements, mass assignments, and ion abundance criteria. Instrument performance check samples were evaluated against criteria established in USEPA SW-846 Method 8260D.

Based on the summary forms, the ion abundance criteria were within evaluation criteria for all masses. No qualifications to the data were required based on instrument performance criteria.

1.5 Initial Calibration (ICAL)

An ICAL was established to assess whether the instrument was capable of producing acceptable qualitative and quantitative data for volatiles analyses. Validated samples included in 400-249496-1-R2 were analyzed using instrument Einstein. The ICAL for instrument Einstein was established on 12/15/2023. At least five standard concentrations were used to establish the ICAL curves as required by Method 8260D.

The ICAL response factors (RFs) were reviewed and were greater than 0.10 for chloromethane, 0.10 for 1,1-dichloroethane, 0.10 for bromoform, 0.30 for chlorobenzene, and 0.30 for 1,1,2,2-tetrachloroethane. No qualification of data was required.

Review of the initial calibration summary forms indicated %RSDs were $\leq$ 30% for calibration check compounds (CCCs) [1,1-dichloroethene, toluene, chloroform, ethylbenzene, 1,2-dichloropropane, and vinyl chloride], and $\leq$ 20% for non-CCCs.

An initial calibration verification (ICV) was analyzed following the initial calibration. Percent difference (%D) values from comparing ICV RF to the average ICAL RFs were within the laboratory quality control criteria.

A recalculation of the %RSDs and RFs for a compound associated with each internal standard was performed from the raw data and no errors in calculation were noted.

1.6 Calibration Verification (CV)

Review of CV summary forms indicated RFs met the evaluation criteria of greater than 0.10 for chloromethane, 0.10 for 1,1-dichloroethane, 0.10 for bromoform, 0.30 for chlorobenzene, and 0.30 for 1,1,2,2-tetrachloroethane. No qualification of data was required.

Percent differences or percent drifts (%D) met the evaluation criteria of ≤ 20% for target analytes.

Recalculations of the RFs and %Ds for select target compounds were completed for each CV, and no errors in calculation were noted.

1.7 Blank Samples

The purpose of the method blank samples is to evaluate the existence and magnitude of contamination problems emanating from laboratory activities. Method blank samples were analyzed with each analytical batch as required by Method 8260D. The purpose of trip blank samples is to evaluate the existence and magnitude of contamination emanating from field and transport activities. The purpose of equipment blank samples is to evaluate the existence and magnitude of contamination emanating from field activities. Target compounds were reported as non-detect in all blanks. No qualification of data was required.

1.8 Laboratory Control Spike (LCS) Samples

Laboratory control samples were analyzed with each analytical batch to assess the accuracy of the analytical process. LCS data were within evaluation

Approximately 10% of spiking compound recoveries for the LCS were recalculated and verified using the LCS summary forms, and no calculation or transcription errors were noted.

1.9 Surrogate Spike Recoveries

Surrogate compounds were used to evaluate the overall laboratory sample preparation efficiency on a per sample basis. All surrogate recoveries were within the method acceptance criteria for the validated samples. Approximately 10% of the samples were recalculated, and no calculation or transcription errors were noted.

1.10 Matrix Spike/Matrix Spike Duplicate (MS/MSD) Samples

MS/MSD samples are analyzed to assess potential matrix effects. Sample MW6D-ROX-010924 was spiked and analyzed for VOCs. MS/MSD data were within evaluation criteria with the exception summarized in the following table.

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW6D-ROX-010924 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**5/0**	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 2-chloroethyl vinyl ether due to acceptable LCS recoveries 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. Analytical data associated with MS/MSD RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW6D-ROX-010924	VOCs	2-Chloroethyl vinyl ether	**UJ**

Approximately 10% of the recoveries were recalculated, and no calculation or transcription errors were noted.

1.11 Internal Standards

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during each analytical run. IS areas must be within -50% to +100%, and the IS retention times must be within 30 seconds of the IS continuing calibration retention time. IS areas and retention times for the validated samples in this SDG were within evaluation criteria.

The summary forms versus the raw data were verified and no transcription errors were noted.

1.12 Target Compound Identification and Quantification

For validation of the compound identification, method specified compound identification criteria were reviewed in approximately 10% of the samples. No anomalies were noted with the identification of the target compounds in the samples.

For the validation of compound quantitation, approximately 10% of the detected target compounds were recalculated from the raw data, and no calculation errors were noted. Additionally, the reporting limits (RLs) were verified to determine if RLs were adjusted for dilutions. No dilutions were required. No qualification of the data was required, and review of the data indicated the correct RLs were reported.

1.13 Overall Data Assessment

Based on the criteria outlined, it is recommended that the results for these analyses are accepted for their intended use. Acceptable levels of accuracy and precision based on the method performance criteria were achieved for this SDG.

1.0 VALIDATION OF SVOC DATA – SDG 400-249496-1-R2

This section describes the validation for eight investigative groundwater samples, and one equipment blank which were prepared by USEPA SW-846 Method 3510C and analyzed for Semi-Volatile Organic Compounds (SVOCs) by USEPA SW-846 Method 8270E and for Polycyclic Aromatic Hydrocarbons (PAHs) by USEPA SW-846 Method 8270E Low Level. Samples were analyzed by Eurofins Pensacola Laboratories in Pensacola, Florida, and submitted as part of sample delivery group (SDG) 400-249496-1-R2. Samples included as part of this validation are listed below:

Sample Identification	Sample Identification
MW24-ROX-010924	MW5-ROX-010924
MW3-ROX-010924	MW3-ROX-010924-DUP
MW6D-ROX-010924-EB	MW6D-ROX-010924
MW6C-ROX-010924	MW6A-ROX-010924
MW6B-ROX-010924	-

Evaluation of the analytical data followed procedures outlined in the USEPA Contract Laboratory National Functional Guidelines for Superfund Organic Methods Data Review (EPA 2020).

Criteria evaluated included the following method performance criteria:

- Data package completeness
- Laboratory case narrative/cooler receipt form
- Holding times and sample preservation
- GC/MS instrument performance
- Initial calibration (ICAL)
- Calibration verification (CV)
- Blank samples
- Laboratory control sample (LCS)
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) samples
- Internal standard areas
- Target compound identification and quantitation
- Overall data assessment

1.1 Data Package Completeness

The data package was reviewed to make certain it contained the data contractually required in the deliverable. This included checking the data package for the results against the analyses requested on the chain-of custody, along with requested QC documentation for the respective methods.

1.2 Laboratory Case Narrative/Cooler Receipt Form

The laboratory case narrative indicated that several SVOC LCS/LCSD RPDs were outside evaluation criteria. The surrogate recovery for terphenyl-d_{14} was outside criteria in a PAH method blank. The internal standard area recovery for perylene-d_{12} was outside criteria in a PAH method blank. The initial calibration verification (ICV) for 3,3'-dichlorobenzidine was outside evaluation criteria, biased low. The continuing calibration verifications (CCV) for several analytes were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data validation. The laboratory report was revised on March 11, 2024, to remove B-flag laboratory qualifications inappropriately applied to the PAH method blank. The L4 laboratory report was revised on March 25, 2024, to include a missing ICV for method 8270E.

No issues were indicated in the cooler receipt form.

1.3 Holding Times and Sample Preservation

Review of the sample collection and analysis dates involved comparing the chain-of-custody, the summary forms and the raw data forms for accuracy, consistency, and holding time compliance. The samples were in good condition and were received and maintained at temperatures of ≤ 6ºC and were extracted within seven days of collection and analyzed within 40 days of extraction.

1.4 GC/MS Instrument Performance

GC/MS instrument performance checks were performed to ensure mass resolution, identification, and instrument sensitivity. Criteria for evaluation of instrument performance included possible transcription/calculation errors, adherence to instrument tuning frequency requirements, mass assignments, and ion abundance criteria. Instrument performance check samples were evaluated against the laboratory tuning criteria established in Method 8270E.

Based on the raw data, the ion abundance criteria were within evaluation criteria for all masses, therefore; no qualification of the data was required. The raw data forms were checked against the summary forms and no calculation or transcription errors were noted.

1.5 Initial Calibration (ICAL)

An ICAL was established to assess whether the instrument was capable of producing acceptable qualitative and quantitative data for semi-volatile analysis. SVOC samples as part of SDG 400-249496-1-R2 were analyzed using instruments Marianne and Pigpen. PAH samples were analyzed using instrument Chuck and was established on 01/10/2024. The ICAL for instrument Marianne was established on 12/19/2023, and Pigpen was established on 12/07/2023. ICALs for instruments Marianne, Pigpen, and Chuck were established prior to sample analysis and using at least five concentration standards to establish the initial calibration curve as required by Method 8270E and 8270E Low Level. An average response factor (RF) was determined for each target compound, and the RFs were reviewed and verified as greater than the minimum RF as specified in Method 8270E.

Review of the initial calibration summary forms for SVOCs and PAHs indicated target compounds had percent relative standard deviations (%RSDs) $\leq$ the maximum RSD of $\leq$ 20% specified in Method 8270E. Linear regression or quadratic equations were applied to data for select target analytes and the resulting correlation coefficients (r) were greater than 0.990.

An initial calibration verification (ICV) was analyzed following the initial calibration. Percent difference (%D) values from comparing ICV RF to the average ICAL RFs were within the Method 8270E quality control criteria with the exceptions summarized in the table below. Recalculations of the RFs and %RSD for one compound per internal standard were performed, and no errors in calculation were noted.

ICV (Date/Time)	Compound	%D
400-654856/20 12/19/2023 18:19	3,3'-Dichlorobenzidine	**-54.8**
Associated samples: MW6B-ROX-010924		

Analytical data that required qualification based on ICV %D data are included in the table below.

Sample ID	Parameter	Compound	Qualification
MW6B-ROX-010924	SVOCs	3,3'-Dichlorobenzidine	UJ

1.6 Calibration Verification (CV)

Review of continuing calibration summary forms for SVOCs and PAHs indicated all RFs met the evaluation criteria of greater than the method specified minimum RF for all target compounds. In addition, %Ds met the evaluation criteria of $\leq$ 20% specified in Method 8270E with the exceptions summarized in the table below.

CV (Date/Time)	Compound	%D
400-657562/3 01/12/2024 13:38	Hexachlorocyclopentadiene	**-21.2**
	4,6-Dinitro-ortho-cresol	**-23.5**
Associated samples: MW6B-ROX-010924		
400-657431/3 01/11/2024 15:09	Aniline	**-35.2**
	Pyridine	**-23.7**
	bis(2-Chloroethoxy) methane	**-24.0**
Associated samples: MW24-ROX-010924; MW5-ROX-010924; MW3-ROX-010924; MW3-ROX-010924-DUP; MW6D-ROX-010924-EB; MW6D-ROX-010924; MW6C-ROX-010924; MW6A-ROX-010924.		

Analytical data that required qualification based on CCV %D data are included in the table below. Equipment blanks are quality control samples and do not require qualification.

Sample ID	Parameter	Compound	Qualification
MW6B-ROX-010924	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW6B-ROX-010924	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW24-ROX-010924	SVOCs	Aniline	**UJ**
MW5-ROX-010924	SVOCs	Aniline	**UJ**
MW3-ROX-010924	SVOCs	Aniline	**UJ**
MW3-ROX-010924-DUP	SVOCs	Aniline	**UJ**
MW6D-ROX-010924	SVOCs	Aniline	**UJ**
MW6C-ROX-010924	SVOCs	Aniline	**UJ**
MW6A-ROX-010924	SVOCs	Aniline	**UJ**
MW24-ROX-010924	SVOCs	Pyridine	**UJ**

Sample ID	Parameter	Compound	Qualification
MW5-ROX-010924	SVOCs	Pyridine	**UJ**
MW3-ROX-010924	SVOCs	Pyridine	**UJ**
MW3-ROX-010924-DUP	SVOCs	Pyridine	**UJ**
MW6D-ROX-010924	SVOCs	Pyridine	**UJ**
MW6C-ROX-010924	SVOCs	Pyridine	**UJ**
MW6A-ROX-010924	SVOCs	Pyridine	**UJ**
MW24-ROX-010924	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
MW5-ROX-010924	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
MW3-ROX-010924	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
MW3-ROX-010924-DUP	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
MW6D-ROX-010924	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
MW6C-ROX-010924	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
MW6A-ROX-010924	SVOCs	bis(2-Chloroethoxy) methane	**UJ**

Recalculations of the RFs and %RSD for one compound per internal standard were performed, and no errors in calculation were noted.

1.7 Blank Samples

The purpose of method blank samples is to evaluate the existence and magnitude of contamination problems emanating from laboratory activities. Method blank samples were prepared with each preparation batch as required by Method 8270E. Target compounds in the method blank were reported as non-detect. Two equipment blank samples were analyzed to evaluate contamination problems emanating from field activities. Target compounds were reported as non-detect.

1.8 Laboratory Control Spike (LCS) Samples

Laboratory control samples (LCS) and laboratory control sample duplicates (LCSD) were analyzed with each analytical batch to assess the accuracy of the analytical process. LCS/LCSD recoveries and LCS/LCSD RPDs were within evaluation criteria with the exceptions summarized in the table below.

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/ RPD Criteria
LCS/LCSD 400-657287/2-A/3-A	SVOCs	Aniline	26/41	**45**	10-127/40
LCS/LCSD 400-657287/2-A/3-A	SVOCs	Pyridine	10/19	**58**	10-82/40

Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification.

Approximately 10% of the laboratory control spike recoveries were recalculated, and the summary forms versus the raw data were verified. No calculation or transcription errors were noted.

1.9 Surrogate Spike Recoveries

Surrogate compounds were used to evaluate the overall laboratory sample preparation efficiency on a per-sample basis. Surrogate recoveries were within the method acceptance criteria for the validated samples with the exceptions summarized in the table below.

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MB 400-657287/1-A	PAHs	Terphenyl-d_{14}	**155**	18-147

Method blanks are quality control samples and do not require qualification.

Approximately 10% of the sample recoveries were recalculated and no calculation or transcription errors were noted.

1.10 Matrix Spike/Matrix Spike Duplicate (MS/MSD) Samples

No MS/MSD samples were analyzed for SVOCs and PAHs.

1.11 Internal Standards

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during each analytical run. Following Method 8270C, the IS areas for the samples and CVs must be within –50% to +100% and retention times must be within 30 seconds of the IS area and retention time of the midpoint of the ICAL or the CCV on days when the ICAL does not precede the samples.

The IS areas for the CVs and the validated samples in this SDG were within evaluation criteria with the exceptions summarized in the table below.

Sample ID	Parameter	Analyte	IS Area Recovery	12/24 Hour Standard	IS Criteria
MB 400-657287/1-A	PAHs	Perylene-d_{12}	**7164**	15667	7834-31334

Method blanks are quality control samples and do not require qualification. No qualification of data was required. The summary forms versus the raw data were verified and no transcription errors were noted.

1.12 Target Compound Identification and Quantification

For validation of the compound identification, method specified compound identification criteria were reviewed in approximately 10% of the samples. No anomalies were noted with the identification of the target compounds in the samples.

For the validation of compound quantitation, 10% of the samples were recalculated from the raw data, and no calculation errors were noted. Additionally, the reporting limits (RLs) were verified to determine if RLs were adjusted for dilutions. No qualification of the data was required, and review of the data indicated the correct RLs were reported.

1.13 Overall Data Assessment

Based on the criteria outlined, it is recommended that the results for these analyses are accepted for their intended use. Acceptable levels of accuracy and precision based on the method performance criteria were achieved for this SDG.

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ANALYTICAL REPORT

PREPARED FOR

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Generated 3/11/2024 8:42:02 AM Revision 1

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-249496-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

my EOL

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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Job Narrative
400-249496-1

REVISION
The report being provided is a revision of the original report sent on 1/24/2024. The report (revision 1) is being revised to correct "B" fflagging.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 1/10/2024 10:02 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 time was 4.5°C.

GC/MS VOA
Method 8260D: 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-010924-8260-A (400-249496-1), MW24-ROX-010924 (400-249496-3) and MW5-ROX-010924 (400-249496-4). 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 8260D: 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: MW3-ROX-010924 (400-249496-5), MW3-ROX-010924-DUP (400-249496-6), TB-ROX-010924-8260-B (400-249496-7), MW6D-ROX-010924-EB (400-249496-9), MW6D-ROX-010924 (400-249496-10), MW6C-ROX-010924 (400-249496-11), MW6A-ROX-010924 (400-249496-12) and MW6B-ROX-010924 (400-249496-13). 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 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-657639 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260D: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-657639 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 8270E: The initial calibration verification (ICV) analyzed in batch 400-653222 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-657287 and analytical batch 400-657431 recovered outside control limits for the following analytes: Aniline and Pyridine.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-657431 recovered above the upper control limit for N-Nitrosodimethylamine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-657431 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.

Job ID: 400-249496-1 (Continued) Eurofins Pensacola

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-657431 recovered outside acceptance criteria, low biased, for Pyridine, Aniline and Bis(2-chloroethoxy)methane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-657562 recovered outside acceptance criteria, low biased, for 4,6-Dinitro-ortho-cresol and Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-658308 recovered above the upper control limit for Pyrene, Benzo[b]fluoranthene and Benzo[k]fluoranthene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E_SIM: 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: (MB 400-657287/1-A). These results have been reported and qualified.

Method 8270E_SIM: Internal standard responses were outside of acceptance limits for the following sample: (MB 400-657287/1-A). The ISTD fails low which would indicate a biased high result for the associated compounds. Since the sample(s) are non-detect for the associated compounds a re-run is unnecessary, 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
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

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

Job ID: 400-249496-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-249496-1	TB-ROX-010924-8260-A	Water	01/09/24 00:00	01/10/24 10:02
400-249496-2	TB-ROX-010924-8011-A	Water	01/09/24 00:00	01/10/24 10:02
400-249496-3	MW24-ROX-010924	Water	01/09/24 09:35	01/10/24 10:02
400-249496-4	MW5-ROX-010924	Water	01/09/24 10:45	01/10/24 10:02
400-249496-5	MW3-ROX-010924	Water	01/09/24 12:45	01/10/24 10:02
400-249496-6	MW3-ROX-010924-DUP	Water	01/09/24 12:45	01/10/24 10:02
400-249496-7	TB-ROX-010924-8260-B	Water	01/09/24 00:00	01/10/24 10:02
400-249496-8	TB-ROX-010924-8011-B	Water	01/09/24 00:00	01/10/24 10:02
400-249496-9	MW6D-ROX-010924-EB	Water	01/09/24 08:30	01/10/24 10:02
400-249496-10	MW6D-ROX-010924	Water	01/09/24 09:55	01/10/24 10:02
400-249496-11	MW6C-ROX-010924	Water	01/09/24 10:50	01/10/24 10:02
400-249496-12	MW6A-ROX-010924	Water	01/09/24 11:55	01/10/24 10:02
400-249496-13	MW6B-ROX-010924	Water	01/09/24 12:55	01/10/24 10:02

Detection Summary

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

Job ID: 400-249496-1

Client Sample ID: TB-ROX-010924-8260-A — Lab Sample ID: 400-249496-1

No Detections.

Client Sample ID: TB-ROX-010924-8011-A — Lab Sample ID: 400-249496-2

No Detections.

Client Sample ID: MW24-ROX-010924 — Lab Sample ID: 400-249496-3

No Detections.

Client Sample ID: MW5-ROX-010924 — Lab Sample ID: 400-249496-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	4.1		1.0	0.22	ug/L	1		8260D	Total/NA
tert-Butylbenzene	1.8		1.0	0.63	ug/L	1		8260D	Total/NA

Client Sample ID: MW3-ROX-010924 — Lab Sample ID: 400-249496-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.76	J	1.0	0.22	ug/L	1		8260D	Total/NA

Client Sample ID: MW3-ROX-010924-DUP — Lab Sample ID: 400-249496-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Isopropylbenzene	0.57	J	1.0	0.53	ug/L	1		8260D	Total/NA
Methyl tert-butyl ether	0.77	J	1.0	0.22	ug/L	1		8260D	Total/NA

Client Sample ID: TB-ROX-010924-8260-B — Lab Sample ID: 400-249496-7

No Detections.

Client Sample ID: TB-ROX-010924-8011-B — Lab Sample ID: 400-249496-8

No Detections.

Client Sample ID: MW6D-ROX-010924-EB — Lab Sample ID: 400-249496-9

No Detections.

Client Sample ID: MW6D-ROX-010924 — Lab Sample ID: 400-249496-10

No Detections.

Client Sample ID: MW6C-ROX-010924 — Lab Sample ID: 400-249496-11

No Detections.

Client Sample ID: MW6A-ROX-010924 — Lab Sample ID: 400-249496-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.035	J	0.21	0.035	ug/L	1		8270E SIM	Total/NA
Benzo[g,h,i]perylene	0.063	J	0.21	0.028	ug/L	1		8270E SIM	Total/NA
Chrysene	0.077	J	0.21	0.034	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.073	J	0.21	0.035	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.043	J	0.21	0.035	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.11	J	0.21	0.093	ug/L	1		8270E SIM	Total/NA
Pyrene	0.091	J	0.21	0.040	ug/L	1		8270E SIM	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: 400-249496-1

Client Sample ID: MW6B-ROX-010924

Lab Sample ID: 400-249496-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.46	J	1.0	0.22	ug/L	1		8260D	Total/NA
Acenaphthene	0.22		0.21	0.10	ug/L	1		8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-249496-1

Client Sample ID: TB-ROX-010924-8260-A
Date Collected: 01/09/24 00:00
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/12/24 17:32	1
Acrolein	ND		20	3.3	ug/L			01/12/24 17:32	1
Acrylonitrile	ND		10	2.8	ug/L			01/12/24 17:32	1
Benzene	ND		1.0	0.50	ug/L			01/12/24 17:32	1
Bromobenzene	ND		1.0	0.54	ug/L			01/12/24 17:32	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/12/24 17:32	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/12/24 17:32	1
Bromoform	ND		5.0	0.25	ug/L			01/12/24 17:32	1
Bromomethane	ND		1.0	0.98	ug/L			01/12/24 17:32	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/12/24 17:32	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/12/24 17:32	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/12/24 17:32	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/12/24 17:32	1
Chloroethane	ND		1.0	0.76	ug/L			01/12/24 17:32	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/12/24 17:32	1
Chloroform	ND		1.0	0.90	ug/L			01/12/24 17:32	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/12/24 17:32	1
Chloromethane	ND		1.0	0.90	ug/L			01/12/24 17:32	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/12/24 17:32	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/12/24 17:32	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/12/24 17:32	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/12/24 17:32	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/12/24 17:32	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/12/24 17:32	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/12/24 17:32	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/12/24 17:32	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/12/24 17:32	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 17:32	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 17:32	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 17:32	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 17:32	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/12/24 17:32	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/12/24 17:32	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/12/24 17:32	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/12/24 17:32	1
2-Hexanone	ND		25	1.4	ug/L			01/12/24 17:32	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/12/24 17:32	1
Methylene bromide	ND		5.0	0.22	ug/L			01/12/24 17:32	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/12/24 17:32	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/12/24 17:32	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/12/24 17:32	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/12/24 17:32	1
Naphthalene	ND		5.0	3.0	ug/L			01/12/24 17:32	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/12/24 17:32	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/12/24 17:32	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/12/24 17:32	1
o-Xylene	ND		5.0	0.60	ug/L			01/12/24 17:32	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/12/24 17:32	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/12/24 17:32	1

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

Job ID: 400-249496-1

Client Sample ID: TB-ROX-010924-8260-A
Date Collected: 01/09/24 00:00
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/12/24 17:32	1
Styrene	ND		1.0	1.0	ug/L			01/12/24 17:32	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/12/24 17:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/12/24 17:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/12/24 17:32	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/12/24 17:32	1
Toluene	ND		1.0	0.90	ug/L			01/12/24 17:32	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 17:32	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/12/24 17:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/12/24 17:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/12/24 17:32	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/12/24 17:32	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/12/24 17:32	1
Trichloroethene	ND		1.0	0.15	ug/L			01/12/24 17:32	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/12/24 17:32	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/12/24 17:32	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/12/24 17:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/12/24 17:32	1
Vinyl acetate	ND		25	0.93	ug/L			01/12/24 17:32	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/12/24 17:32	1
Xylenes, Total	ND		10	1.6	ug/L			01/12/24 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*72 - 130*		*01/12/24 17:32*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*01/12/24 17:32*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*01/12/24 17:32*	*1*

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

Job ID: 400-249496-1

Client Sample ID: TB-ROX-010924-8011-A
Date Collected: 01/09/24 00:00
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-2
Matrix: Water

Method: EPA 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		01/12/24 13:32	01/12/24 17:43	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		01/12/24 13:32	01/12/24 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*144*		*51 - 149*	*01/12/24 13:32*	*01/12/24 17:43*	*1*

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

Job ID: 400-249496-1

Client Sample ID: MW24-ROX-010924
Date Collected: 01/09/24 09:35
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/12/24 17:57	1
Acrolein	ND		20	3.3	ug/L			01/12/24 17:57	1
Acrylonitrile	ND		10	2.8	ug/L			01/12/24 17:57	1
Benzene	ND		1.0	0.50	ug/L			01/12/24 17:57	1
Bromobenzene	ND		1.0	0.54	ug/L			01/12/24 17:57	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/12/24 17:57	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/12/24 17:57	1
Bromoform	ND		5.0	0.25	ug/L			01/12/24 17:57	1
Bromomethane	ND		1.0	0.98	ug/L			01/12/24 17:57	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/12/24 17:57	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/12/24 17:57	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/12/24 17:57	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/12/24 17:57	1
Chloroethane	ND		1.0	0.76	ug/L			01/12/24 17:57	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/12/24 17:57	1
Chloroform	ND		1.0	0.90	ug/L			01/12/24 17:57	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/12/24 17:57	1
Chloromethane	ND		1.0	0.90	ug/L			01/12/24 17:57	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/12/24 17:57	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/12/24 17:57	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/12/24 17:57	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/12/24 17:57	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/12/24 17:57	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/12/24 17:57	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/12/24 17:57	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/12/24 17:57	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/12/24 17:57	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 17:57	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 17:57	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 17:57	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 17:57	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/12/24 17:57	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/12/24 17:57	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/12/24 17:57	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/12/24 17:57	1
2-Hexanone	ND		25	1.4	ug/L			01/12/24 17:57	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/12/24 17:57	1
Methylene bromide	ND		5.0	0.22	ug/L			01/12/24 17:57	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/12/24 17:57	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/12/24 17:57	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/12/24 17:57	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/12/24 17:57	1
Naphthalene	ND		5.0	3.0	ug/L			01/12/24 17:57	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/12/24 17:57	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/12/24 17:57	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/12/24 17:57	1
o-Xylene	ND		5.0	0.60	ug/L			01/12/24 17:57	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/12/24 17:57	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/12/24 17:57	1

Client Sample ID: MW24-ROX-010924
Date Collected: 01/09/24 09:35
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/12/24 17:57	1
Styrene	ND		1.0	1.0	ug/L			01/12/24 17:57	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/12/24 17:57	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/12/24 17:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/12/24 17:57	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/12/24 17:57	1
Toluene	ND		1.0	0.90	ug/L			01/12/24 17:57	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 17:57	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/12/24 17:57	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/12/24 17:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/12/24 17:57	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/12/24 17:57	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/12/24 17:57	1
Trichloroethene	ND		1.0	0.15	ug/L			01/12/24 17:57	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/12/24 17:57	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/12/24 17:57	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/12/24 17:57	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/12/24 17:57	1
Vinyl acetate	ND		25	0.93	ug/L			01/12/24 17:57	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/12/24 17:57	1
Xylenes, Total	ND		10	1.6	ug/L			01/12/24 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 130*		*01/12/24 17:57*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*01/12/24 17:57*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*01/12/24 17:57*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.096	ug/L		01/11/24 09:49	01/11/24 18:59	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/11/24 09:49	01/11/24 18:59	1
Anthracene	ND		0.19	0.046	ug/L		01/11/24 09:49	01/11/24 18:59	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		01/11/24 09:49	01/11/24 18:59	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		01/11/24 09:49	01/11/24 18:59	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		01/11/24 09:49	01/11/24 18:59	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		01/11/24 09:49	01/11/24 18:59	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		01/11/24 09:49	01/11/24 18:59	1
Chrysene	ND		0.19	0.032	ug/L		01/11/24 09:49	01/11/24 18:59	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		01/11/24 09:49	01/11/24 18:59	1
Fluoranthene	ND		0.19	0.033	ug/L		01/11/24 09:49	01/11/24 18:59	1
Fluorene	ND		0.19	0.087	ug/L		01/11/24 09:49	01/11/24 18:59	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		01/11/24 09:49	01/11/24 18:59	1
Phenanthrene	ND		0.19	0.087	ug/L		01/11/24 09:49	01/11/24 18:59	1
Pyrene	ND		0.19	0.038	ug/L		01/11/24 09:49	01/11/24 18:59	1
1-Methylnaphthalene	ND		0.19	0.078	ug/L		01/11/24 09:49	01/11/24 18:59	1
2-Methylnaphthalene	ND		0.19	0.064	ug/L		01/11/24 09:49	01/11/24 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*90*		*18 - 147*	*01/11/24 09:49*	*01/11/24 18:59*	*1*
2-Fluorobiphenyl	*76*		*15 - 128*	*01/11/24 09:49*	*01/11/24 18:59*	*1*

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

Job ID: 400-249496-1

Client Sample ID: MW24-ROX-010924

Date Collected: 01/09/24 09:35
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-3

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*78*		*10 - 144*	*01/11/24 09:49*	*01/11/24 18:59*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.7	8.5	ug/L		01/11/24 09:49	01/11/24 23:11	1
Benzenethiol	ND		9.7	9.6	ug/L		01/11/24 09:49	01/11/24 23:11	1
Benzoic acid	ND		29	23	ug/L		01/11/24 09:49	01/11/24 23:11	1
Benzyl alcohol	ND		9.7	7.1	ug/L		01/11/24 09:49	01/11/24 23:11	1
Bis(2-chloroethoxy)methane	ND		9.7	4.5	ug/L		01/11/24 09:49	01/11/24 23:11	1
Bis(2-chloroethyl)ether	ND		9.7	3.8	ug/L		01/11/24 09:49	01/11/24 23:11	1
bis (2-chloroisopropyl) ether	ND		9.7	1.7	ug/L		01/11/24 09:49	01/11/24 23:11	1
Bis(2-ethylhexyl) phthalate	ND		9.7	8.7	ug/L		01/11/24 09:49	01/11/24 23:11	1
4-Bromophenyl phenyl ether	ND		9.7	8.4	ug/L		01/11/24 09:49	01/11/24 23:11	1
Butyl benzyl phthalate	ND		9.7	5.6	ug/L		01/11/24 09:49	01/11/24 23:11	1
4-Chloroaniline	ND		9.7	4.6	ug/L		01/11/24 09:49	01/11/24 23:11	1
4-Chloro-3-methylphenol	ND		9.7	5.2	ug/L		01/11/24 09:49	01/11/24 23:11	1
2-Chloronaphthalene	ND		9.7	3.7	ug/L		01/11/24 09:49	01/11/24 23:11	1
2-Chlorophenol	ND		9.7	4.0	ug/L		01/11/24 09:49	01/11/24 23:11	1
4-Chlorophenyl phenyl ether	ND		9.7	3.6	ug/L		01/11/24 09:49	01/11/24 23:11	1
Dibenz[a,h]acridine	ND		9.7	2.7	ug/L		01/11/24 09:49	01/11/24 23:11	1
Dibenzofuran	ND		9.7	3.9	ug/L		01/11/24 09:49	01/11/24 23:11	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/11/24 09:49	01/11/24 23:11	1
2,4-Dichlorophenol	ND		9.7	4.2	ug/L		01/11/24 09:49	01/11/24 23:11	1
Diethyl phthalate	ND		9.7	4.3	ug/L		01/11/24 09:49	01/11/24 23:11	1
2,4-Dimethylphenol	ND		9.7	5.1	ug/L		01/11/24 09:49	01/11/24 23:11	1
Dimethyl phthalate	ND		9.7	4.1	ug/L		01/11/24 09:49	01/11/24 23:11	1
Di-n-butyl phthalate	ND		9.7	4.5	ug/L		01/11/24 09:49	01/11/24 23:11	1
4,6-Dinitro-ortho-cresol	ND		9.7	9.7	ug/L		01/11/24 09:49	01/11/24 23:11	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		01/11/24 09:49	01/11/24 23:11	1
2,4-Dinitrotoluene	ND		9.7	5.0	ug/L		01/11/24 09:49	01/11/24 23:11	1
2,6-Dinitrotoluene	ND		9.7	3.8	ug/L		01/11/24 09:49	01/11/24 23:11	1
Di-n-octyl phthalate	ND		9.7	5.8	ug/L		01/11/24 09:49	01/11/24 23:11	1
1,4-Dioxane	ND		9.7	4.2	ug/L		01/11/24 09:49	01/11/24 23:11	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	3.2	ug/L		01/11/24 09:49	01/11/24 23:11	1
Hexachlorobenzene	ND		9.7	9.4	ug/L		01/11/24 09:49	01/11/24 23:11	1
Hexachlorocyclopentadiene	ND		19	4.4	ug/L		01/11/24 09:49	01/11/24 23:11	1
Hexachloroethane	ND		9.7	5.1	ug/L		01/11/24 09:49	01/11/24 23:11	1
Indene	ND		9.7	3.5	ug/L		01/11/24 09:49	01/11/24 23:11	1
Isophorone	ND		9.7	5.1	ug/L		01/11/24 09:49	01/11/24 23:11	1
2-Methylphenol	ND		9.7	3.1	ug/L		01/11/24 09:49	01/11/24 23:11	1
3 & 4 Methylphenol	ND		19	4.5	ug/L		01/11/24 09:49	01/11/24 23:11	1
2-Nitroaniline	ND		9.7	4.9	ug/L		01/11/24 09:49	01/11/24 23:11	1
3-Nitroaniline	ND		9.7	4.6	ug/L		01/11/24 09:49	01/11/24 23:11	1
4-Nitroaniline	ND		9.7	4.0	ug/L		01/11/24 09:49	01/11/24 23:11	1
Nitrobenzene	ND		9.7	4.6	ug/L		01/11/24 09:49	01/11/24 23:11	1
2-Nitrophenol	ND		9.7	4.5	ug/L		01/11/24 09:49	01/11/24 23:11	1
4-Nitrophenol	ND		9.7	3.2	ug/L		01/11/24 09:49	01/11/24 23:11	1
N-Nitrosodimethylamine	ND		9.7	2.1	ug/L		01/11/24 09:49	01/11/24 23:11	1

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

Job ID: 400-249496-1

Client Sample ID: MW24-ROX-010924
Date Collected: 01/09/24 09:35
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-3
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.7	2.4	ug/L		01/11/24 09:49	01/11/24 23:11	1
N-Nitrosodiphenylamine	ND		9.7	3.6	ug/L		01/11/24 09:49	01/11/24 23:11	1
Pentachlorophenol	ND		19	12	ug/L		01/11/24 09:49	01/11/24 23:11	1
Phenol	ND		9.7	4.1	ug/L		01/11/24 09:49	01/11/24 23:11	1
Pyridine	ND	*1	9.7	9.7	ug/L		01/11/24 09:49	01/11/24 23:11	1
Quinoline	ND		9.7	2.3	ug/L		01/11/24 09:49	01/11/24 23:11	1
2,4,5-Trichlorophenol	ND		9.7	3.9	ug/L		01/11/24 09:49	01/11/24 23:11	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		01/11/24 09:49	01/11/24 23:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*21 - 114*	*01/11/24 09:49*	*01/11/24 23:11*	*1*
2-Fluorophenol	*43*		*10 - 105*	*01/11/24 09:49*	*01/11/24 23:11*	*1*
Nitrobenzene-d5	*63*		*16 - 127*	*01/11/24 09:49*	*01/11/24 23:11*	*1*
Phenol-d5	*32*		*10 - 129*	*01/11/24 09:49*	*01/11/24 23:11*	*1*
Terphenyl-d14	*85*		*13 - 150*	*01/11/24 09:49*	*01/11/24 23:11*	*1*
2,4,6-Tribromophenol	*70*		*10 - 150*	*01/11/24 09:49*	*01/11/24 23:11*	*1*

Method: EPA 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		01/12/24 13:32	01/12/24 18:04	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/12/24 13:32	01/12/24 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*130*		*51 - 149*	*01/12/24 13:32*	*01/12/24 18:04*	*1*

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

Job ID: 400-249496-1

Client Sample ID: MW5-ROX-010924
Date Collected: 01/09/24 10:45
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/12/24 18:22	1
Acrolein	ND		20	3.3	ug/L			01/12/24 18:22	1
Acrylonitrile	ND		10	2.8	ug/L			01/12/24 18:22	1
Benzene	ND		1.0	0.50	ug/L			01/12/24 18:22	1
Bromobenzene	ND		1.0	0.54	ug/L			01/12/24 18:22	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/12/24 18:22	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/12/24 18:22	1
Bromoform	ND		5.0	0.25	ug/L			01/12/24 18:22	1
Bromomethane	ND		1.0	0.98	ug/L			01/12/24 18:22	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/12/24 18:22	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/12/24 18:22	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/12/24 18:22	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/12/24 18:22	1
Chloroethane	ND		1.0	0.76	ug/L			01/12/24 18:22	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/12/24 18:22	1
Chloroform	ND		1.0	0.90	ug/L			01/12/24 18:22	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/12/24 18:22	1
Chloromethane	ND		1.0	0.90	ug/L			01/12/24 18:22	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/12/24 18:22	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/12/24 18:22	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/12/24 18:22	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/12/24 18:22	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/12/24 18:22	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/12/24 18:22	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/12/24 18:22	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/12/24 18:22	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/12/24 18:22	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 18:22	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 18:22	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 18:22	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 18:22	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/12/24 18:22	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/12/24 18:22	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/12/24 18:22	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/12/24 18:22	1
2-Hexanone	ND		25	1.4	ug/L			01/12/24 18:22	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/12/24 18:22	1
Methylene bromide	ND		5.0	0.22	ug/L			01/12/24 18:22	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/12/24 18:22	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/12/24 18:22	1
Methyl tert-butyl ether	**4.1**		1.0	0.22	ug/L			01/12/24 18:22	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/12/24 18:22	1
Naphthalene	ND		5.0	3.0	ug/L			01/12/24 18:22	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/12/24 18:22	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/12/24 18:22	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/12/24 18:22	1
o-Xylene	ND		5.0	0.60	ug/L			01/12/24 18:22	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/12/24 18:22	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/12/24 18:22	1

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

Job ID: 400-249496-1

Client Sample ID: MW5-ROX-010924
Date Collected: 01/09/24 10:45
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/12/24 18:22	1
Styrene	ND		1.0	1.0	ug/L			01/12/24 18:22	1
tert-Butylbenzene	**1.8**		1.0	0.63	ug/L			01/12/24 18:22	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/12/24 18:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/12/24 18:22	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/12/24 18:22	1
Toluene	ND		1.0	0.90	ug/L			01/12/24 18:22	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 18:22	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/12/24 18:22	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/12/24 18:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/12/24 18:22	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/12/24 18:22	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/12/24 18:22	1
Trichloroethene	ND		1.0	0.15	ug/L			01/12/24 18:22	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/12/24 18:22	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/12/24 18:22	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/12/24 18:22	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/12/24 18:22	1
Vinyl acetate	ND		25	0.93	ug/L			01/12/24 18:22	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/12/24 18:22	1
Xylenes, Total	ND		10	1.6	ug/L			01/12/24 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*01/12/24 18:22*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*01/12/24 18:22*	*1*
Toluene-d8 (Surr)	*89*		*64 - 132*		*01/12/24 18:22*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.097	ug/L		01/11/24 09:49	01/11/24 19:19	1
Acenaphthylene	ND		0.20	0.043	ug/L		01/11/24 09:49	01/11/24 19:19	1
Anthracene	ND		0.20	0.046	ug/L		01/11/24 09:49	01/11/24 19:19	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		01/11/24 09:49	01/11/24 19:19	1
Benzo[a]pyrene	ND		0.20	0.062	ug/L		01/11/24 09:49	01/11/24 19:19	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		01/11/24 09:49	01/11/24 19:19	1
Benzo[g,h,i]perylene	ND		0.20	0.026	ug/L		01/11/24 09:49	01/11/24 19:19	1
Benzo[k]fluoranthene	ND		0.20	0.060	ug/L		01/11/24 09:49	01/11/24 19:19	1
Chrysene	ND		0.20	0.032	ug/L		01/11/24 09:49	01/11/24 19:19	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		01/11/24 09:49	01/11/24 19:19	1
Fluoranthene	ND		0.20	0.033	ug/L		01/11/24 09:49	01/11/24 19:19	1
Fluorene	ND		0.20	0.087	ug/L		01/11/24 09:49	01/11/24 19:19	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		01/11/24 09:49	01/11/24 19:19	1
Phenanthrene	ND		0.20	0.088	ug/L		01/11/24 09:49	01/11/24 19:19	1
Pyrene	ND		0.20	0.038	ug/L		01/11/24 09:49	01/11/24 19:19	1
1-Methylnaphthalene	ND		0.20	0.078	ug/L		01/11/24 09:49	01/11/24 19:19	1
2-Methylnaphthalene	ND		0.20	0.064	ug/L		01/11/24 09:49	01/11/24 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*75*		*18 - 147*	*01/11/24 09:49*	*01/11/24 19:19*	*1*
2-Fluorobiphenyl	*66*		*15 - 128*	*01/11/24 09:49*	*01/11/24 19:19*	*1*

Client Sample ID: MW5-ROX-010924
Date Collected: 01/09/24 10:45
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-4
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*73*		*10 - 144*	*01/11/24 09:49*	*01/11/24 19:19*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.8	8.5	ug/L		01/11/24 09:49	01/11/24 23:38	1
Benzenethiol	ND		9.8	9.7	ug/L		01/11/24 09:49	01/11/24 23:38	1
Benzoic acid	ND		29	23	ug/L		01/11/24 09:49	01/11/24 23:38	1
Benzyl alcohol	ND		9.8	7.1	ug/L		01/11/24 09:49	01/11/24 23:38	1
Bis(2-chloroethoxy)methane	ND		9.8	4.5	ug/L		01/11/24 09:49	01/11/24 23:38	1
Bis(2-chloroethyl)ether	ND		9.8	3.8	ug/L		01/11/24 09:49	01/11/24 23:38	1
bis (2-chloroisopropyl) ether	ND		9.8	1.8	ug/L		01/11/24 09:49	01/11/24 23:38	1
Bis(2-ethylhexyl) phthalate	ND		9.8	8.7	ug/L		01/11/24 09:49	01/11/24 23:38	1
4-Bromophenyl phenyl ether	ND		9.8	8.4	ug/L		01/11/24 09:49	01/11/24 23:38	1
Butyl benzyl phthalate	ND		9.8	5.7	ug/L		01/11/24 09:49	01/11/24 23:38	1
4-Chloroaniline	ND		9.8	4.6	ug/L		01/11/24 09:49	01/11/24 23:38	1
4-Chloro-3-methylphenol	ND		9.8	5.2	ug/L		01/11/24 09:49	01/11/24 23:38	1
2-Chloronaphthalene	ND		9.8	3.7	ug/L		01/11/24 09:49	01/11/24 23:38	1
2-Chlorophenol	ND		9.8	4.0	ug/L		01/11/24 09:49	01/11/24 23:38	1
4-Chlorophenyl phenyl ether	ND		9.8	3.6	ug/L		01/11/24 09:49	01/11/24 23:38	1
Dibenz[a,h]acridine	ND		9.8	2.7	ug/L		01/11/24 09:49	01/11/24 23:38	1
Dibenzofuran	ND		9.8	3.9	ug/L		01/11/24 09:49	01/11/24 23:38	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/11/24 09:49	01/11/24 23:38	1
2,4-Dichlorophenol	ND		9.8	4.2	ug/L		01/11/24 09:49	01/11/24 23:38	1
Diethyl phthalate	ND		9.8	4.3	ug/L		01/11/24 09:49	01/11/24 23:38	1
2,4-Dimethylphenol	ND		9.8	5.1	ug/L		01/11/24 09:49	01/11/24 23:38	1
Dimethyl phthalate	ND		9.8	4.1	ug/L		01/11/24 09:49	01/11/24 23:38	1
Di-n-butyl phthalate	ND		9.8	4.5	ug/L		01/11/24 09:49	01/11/24 23:38	1
4,6-Dinitro-ortho-cresol	ND		9.8	9.8	ug/L		01/11/24 09:49	01/11/24 23:38	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		01/11/24 09:49	01/11/24 23:38	1
2,4-Dinitrotoluene	ND		9.8	5.0	ug/L		01/11/24 09:49	01/11/24 23:38	1
2,6-Dinitrotoluene	ND		9.8	3.8	ug/L		01/11/24 09:49	01/11/24 23:38	1
Di-n-octyl phthalate	ND		9.8	5.9	ug/L		01/11/24 09:49	01/11/24 23:38	1
1,4-Dioxane	ND		9.8	4.2	ug/L		01/11/24 09:49	01/11/24 23:38	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	3.2	ug/L		01/11/24 09:49	01/11/24 23:38	1
Hexachlorobenzene	ND		9.8	9.5	ug/L		01/11/24 09:49	01/11/24 23:38	1
Hexachlorocyclopentadiene	ND		20	4.4	ug/L		01/11/24 09:49	01/11/24 23:38	1
Hexachloroethane	ND		9.8	5.1	ug/L		01/11/24 09:49	01/11/24 23:38	1
Indene	ND		9.8	3.5	ug/L		01/11/24 09:49	01/11/24 23:38	1
Isophorone	ND		9.8	5.1	ug/L		01/11/24 09:49	01/11/24 23:38	1
2-Methylphenol	ND		9.8	3.1	ug/L		01/11/24 09:49	01/11/24 23:38	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		01/11/24 09:49	01/11/24 23:38	1
2-Nitroaniline	ND		9.8	4.9	ug/L		01/11/24 09:49	01/11/24 23:38	1
3-Nitroaniline	ND		9.8	4.6	ug/L		01/11/24 09:49	01/11/24 23:38	1
4-Nitroaniline	ND		9.8	4.0	ug/L		01/11/24 09:49	01/11/24 23:38	1
Nitrobenzene	ND		9.8	4.6	ug/L		01/11/24 09:49	01/11/24 23:38	1
2-Nitrophenol	ND		9.8	4.5	ug/L		01/11/24 09:49	01/11/24 23:38	1
4-Nitrophenol	ND		9.8	3.2	ug/L		01/11/24 09:49	01/11/24 23:38	1
N-Nitrosodimethylamine	ND		9.8	2.1	ug/L		01/11/24 09:49	01/11/24 23:38	1

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

Job ID: 400-249496-1

Client Sample ID: MW5-ROX-010924
Date Collected: 01/09/24 10:45
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-4
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	2.4	ug/L		01/11/24 09:49	01/11/24 23:38	1
N-Nitrosodiphenylamine	ND		9.8	3.6	ug/L		01/11/24 09:49	01/11/24 23:38	1
Pentachlorophenol	ND		20	12	ug/L		01/11/24 09:49	01/11/24 23:38	1
Phenol	ND		9.8	4.1	ug/L		01/11/24 09:49	01/11/24 23:38	1
Pyridine	ND	*1	9.8	9.8	ug/L		01/11/24 09:49	01/11/24 23:38	1
Quinoline	ND		9.8	2.3	ug/L		01/11/24 09:49	01/11/24 23:38	1
2,4,5-Trichlorophenol	ND		9.8	3.9	ug/L		01/11/24 09:49	01/11/24 23:38	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		01/11/24 09:49	01/11/24 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*21 - 114*	*01/11/24 09:49*	*01/11/24 23:38*	*1*
2-Fluorophenol	*38*		*10 - 105*	*01/11/24 09:49*	*01/11/24 23:38*	*1*
Nitrobenzene-d5	*58*		*16 - 127*	*01/11/24 09:49*	*01/11/24 23:38*	*1*
Phenol-d5	*26*		*10 - 129*	*01/11/24 09:49*	*01/11/24 23:38*	*1*
Terphenyl-d14	*74*		*13 - 150*	*01/11/24 09:49*	*01/11/24 23:38*	*1*
2,4,6-Tribromophenol	*77*		*10 - 150*	*01/11/24 09:49*	*01/11/24 23:38*	*1*

Method: EPA 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		01/12/24 13:32	01/12/24 18:25	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/12/24 13:32	01/12/24 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*51 - 149*	*01/12/24 13:32*	*01/12/24 18:25*	*1*

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

Job ID: 400-249496-1

Client Sample ID: MW3-ROX-010924
Date Collected: 01/09/24 12:45
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/15/24 09:43	1
Acrolein	ND		20	3.3	ug/L			01/15/24 09:43	1
Acrylonitrile	ND		10	2.8	ug/L			01/15/24 09:43	1
Benzene	ND		1.0	0.50	ug/L			01/15/24 09:43	1
Bromobenzene	ND		1.0	0.54	ug/L			01/15/24 09:43	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/15/24 09:43	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/15/24 09:43	1
Bromoform	ND		5.0	0.25	ug/L			01/15/24 09:43	1
Bromomethane	ND		1.0	0.98	ug/L			01/15/24 09:43	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/15/24 09:43	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/15/24 09:43	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/15/24 09:43	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/15/24 09:43	1
Chloroethane	ND		1.0	0.76	ug/L			01/15/24 09:43	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/15/24 09:43	1
Chloroform	ND		1.0	0.90	ug/L			01/15/24 09:43	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/15/24 09:43	1
Chloromethane	ND		1.0	0.90	ug/L			01/15/24 09:43	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/15/24 09:43	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/15/24 09:43	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/15/24 09:43	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/15/24 09:43	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/15/24 09:43	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/15/24 09:43	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/15/24 09:43	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/15/24 09:43	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/15/24 09:43	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/15/24 09:43	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 09:43	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 09:43	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 09:43	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/15/24 09:43	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/15/24 09:43	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/15/24 09:43	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/15/24 09:43	1
2-Hexanone	ND		25	1.4	ug/L			01/15/24 09:43	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/15/24 09:43	1
Methylene bromide	ND		5.0	0.22	ug/L			01/15/24 09:43	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/15/24 09:43	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/15/24 09:43	1
Methyl tert-butyl ether	**0.76**	**J**	1.0	0.22	ug/L			01/15/24 09:43	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/15/24 09:43	1
Naphthalene	ND		5.0	3.0	ug/L			01/15/24 09:43	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/15/24 09:43	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/15/24 09:43	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/15/24 09:43	1
o-Xylene	ND		5.0	0.60	ug/L			01/15/24 09:43	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/15/24 09:43	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/15/24 09:43	1

Client Sample ID: MW3-ROX-010924
Date Collected: 01/09/24 12:45
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/15/24 09:43	1
Styrene	ND		1.0	1.0	ug/L			01/15/24 09:43	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/15/24 09:43	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/15/24 09:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/15/24 09:43	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/15/24 09:43	1
Toluene	ND		1.0	0.90	ug/L			01/15/24 09:43	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/15/24 09:43	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/15/24 09:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/15/24 09:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/15/24 09:43	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/15/24 09:43	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/15/24 09:43	1
Trichloroethene	ND		1.0	0.15	ug/L			01/15/24 09:43	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/15/24 09:43	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/15/24 09:43	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/15/24 09:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/15/24 09:43	1
Vinyl acetate	ND		25	0.93	ug/L			01/15/24 09:43	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/15/24 09:43	1
Xylenes, Total	ND		10	1.6	ug/L			01/15/24 09:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 130*		*01/15/24 09:43*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*01/15/24 09:43*	*1*
Toluene-d8 (Surr)	*88*		*64 - 132*		*01/15/24 09:43*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.098	ug/L		01/11/24 09:49	01/11/24 19:40	1
Acenaphthylene	ND		0.20	0.044	ug/L		01/11/24 09:49	01/11/24 19:40	1
Anthracene	ND		0.20	0.047	ug/L		01/11/24 09:49	01/11/24 19:40	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		01/11/24 09:49	01/11/24 19:40	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		01/11/24 09:49	01/11/24 19:40	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		01/11/24 09:49	01/11/24 19:40	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/11/24 09:49	01/11/24 19:40	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		01/11/24 09:49	01/11/24 19:40	1
Chrysene	ND		0.20	0.033	ug/L		01/11/24 09:49	01/11/24 19:40	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		01/11/24 09:49	01/11/24 19:40	1
Fluoranthene	ND		0.20	0.034	ug/L		01/11/24 09:49	01/11/24 19:40	1
Fluorene	ND		0.20	0.088	ug/L		01/11/24 09:49	01/11/24 19:40	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		01/11/24 09:49	01/11/24 19:40	1
Phenanthrene	ND		0.20	0.089	ug/L		01/11/24 09:49	01/11/24 19:40	1
Pyrene	ND		0.20	0.039	ug/L		01/11/24 09:49	01/11/24 19:40	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		01/11/24 09:49	01/11/24 19:40	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		01/11/24 09:49	01/11/24 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*88*		*18 - 147*	*01/11/24 09:49*	*01/11/24 19:40*	*1*
2-Fluorobiphenyl	*77*		*15 - 128*	*01/11/24 09:49*	*01/11/24 19:40*	*1*

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

Job ID: 400-249496-1

Client Sample ID: MW3-ROX-010924
Date Collected: 01/09/24 12:45
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-5
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*82*		*10 - 144*	*01/11/24 09:49*	*01/11/24 19:40*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.9	8.6	ug/L		01/11/24 09:49	01/12/24 00:04	1
Benzenethiol	ND		9.9	9.8	ug/L		01/11/24 09:49	01/12/24 00:04	1
Benzoic acid	ND		30	24	ug/L		01/11/24 09:49	01/12/24 00:04	1
Benzyl alcohol	ND		9.9	7.2	ug/L		01/11/24 09:49	01/12/24 00:04	1
Bis(2-chloroethoxy)methane	ND		9.9	4.6	ug/L		01/11/24 09:49	01/12/24 00:04	1
Bis(2-chloroethyl)ether	ND		9.9	3.9	ug/L		01/11/24 09:49	01/12/24 00:04	1
bis (2-chloroisopropyl) ether	ND		9.9	1.8	ug/L		01/11/24 09:49	01/12/24 00:04	1
Bis(2-ethylhexyl) phthalate	ND		9.9	8.8	ug/L		01/11/24 09:49	01/12/24 00:04	1
4-Bromophenyl phenyl ether	ND		9.9	8.5	ug/L		01/11/24 09:49	01/12/24 00:04	1
Butyl benzyl phthalate	ND		9.9	5.8	ug/L		01/11/24 09:49	01/12/24 00:04	1
4-Chloroaniline	ND		9.9	4.7	ug/L		01/11/24 09:49	01/12/24 00:04	1
4-Chloro-3-methylphenol	ND		9.9	5.3	ug/L		01/11/24 09:49	01/12/24 00:04	1
2-Chloronaphthalene	ND		9.9	3.8	ug/L		01/11/24 09:49	01/12/24 00:04	1
2-Chlorophenol	ND		9.9	4.1	ug/L		01/11/24 09:49	01/12/24 00:04	1
4-Chlorophenyl phenyl ether	ND		9.9	3.7	ug/L		01/11/24 09:49	01/12/24 00:04	1
Dibenz[a,h]acridine	ND		9.9	2.8	ug/L		01/11/24 09:49	01/12/24 00:04	1
Dibenzofuran	ND		9.9	4.0	ug/L		01/11/24 09:49	01/12/24 00:04	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/11/24 09:49	01/12/24 00:04	1
2,4-Dichlorophenol	ND		9.9	4.3	ug/L		01/11/24 09:49	01/12/24 00:04	1
Diethyl phthalate	ND		9.9	4.4	ug/L		01/11/24 09:49	01/12/24 00:04	1
2,4-Dimethylphenol	ND		9.9	5.2	ug/L		01/11/24 09:49	01/12/24 00:04	1
Dimethyl phthalate	ND		9.9	4.2	ug/L		01/11/24 09:49	01/12/24 00:04	1
Di-n-butyl phthalate	ND		9.9	4.6	ug/L		01/11/24 09:49	01/12/24 00:04	1
4,6-Dinitro-ortho-cresol	ND		9.9	9.9	ug/L		01/11/24 09:49	01/12/24 00:04	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		01/11/24 09:49	01/12/24 00:04	1
2,4-Dinitrotoluene	ND		9.9	5.1	ug/L		01/11/24 09:49	01/12/24 00:04	1
2,6-Dinitrotoluene	ND		9.9	3.9	ug/L		01/11/24 09:49	01/12/24 00:04	1
Di-n-octyl phthalate	ND		9.9	6.0	ug/L		01/11/24 09:49	01/12/24 00:04	1
1,4-Dioxane	ND		9.9	4.3	ug/L		01/11/24 09:49	01/12/24 00:04	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	3.3	ug/L		01/11/24 09:49	01/12/24 00:04	1
Hexachlorobenzene	ND		9.9	9.6	ug/L		01/11/24 09:49	01/12/24 00:04	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		01/11/24 09:49	01/12/24 00:04	1
Hexachloroethane	ND		9.9	5.2	ug/L		01/11/24 09:49	01/12/24 00:04	1
Indene	ND		9.9	3.6	ug/L		01/11/24 09:49	01/12/24 00:04	1
Isophorone	ND		9.9	5.2	ug/L		01/11/24 09:49	01/12/24 00:04	1
2-Methylphenol	ND		9.9	3.2	ug/L		01/11/24 09:49	01/12/24 00:04	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		01/11/24 09:49	01/12/24 00:04	1
2-Nitroaniline	ND		9.9	5.0	ug/L		01/11/24 09:49	01/12/24 00:04	1
3-Nitroaniline	ND		9.9	4.7	ug/L		01/11/24 09:49	01/12/24 00:04	1
4-Nitroaniline	ND		9.9	4.1	ug/L		01/11/24 09:49	01/12/24 00:04	1
Nitrobenzene	ND		9.9	4.7	ug/L		01/11/24 09:49	01/12/24 00:04	1
2-Nitrophenol	ND		9.9	4.6	ug/L		01/11/24 09:49	01/12/24 00:04	1
4-Nitrophenol	ND		9.9	3.3	ug/L		01/11/24 09:49	01/12/24 00:04	1
N-Nitrosodimethylamine	ND		9.9	2.2	ug/L		01/11/24 09:49	01/12/24 00:04	1

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

Job ID: 400-249496-1

Client Sample ID: MW3-ROX-010924
Date Collected: 01/09/24 12:45
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-5
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.9	2.5	ug/L		01/11/24 09:49	01/12/24 00:04	1
N-Nitrosodiphenylamine	ND		9.9	3.7	ug/L		01/11/24 09:49	01/12/24 00:04	1
Pentachlorophenol	ND		20	12	ug/L		01/11/24 09:49	01/12/24 00:04	1
Phenol	ND		9.9	4.2	ug/L		01/11/24 09:49	01/12/24 00:04	1
Pyridine	ND	*1	9.9	9.9	ug/L		01/11/24 09:49	01/12/24 00:04	1
Quinoline	ND		9.9	2.4	ug/L		01/11/24 09:49	01/12/24 00:04	1
2,4,5-Trichlorophenol	ND		9.9	4.0	ug/L		01/11/24 09:49	01/12/24 00:04	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		01/11/24 09:49	01/12/24 00:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*21 - 114*	*01/11/24 09:49*	*01/12/24 00:04*	*1*
2-Fluorophenol	*46*		*10 - 105*	*01/11/24 09:49*	*01/12/24 00:04*	*1*
Nitrobenzene-d5	*67*		*16 - 127*	*01/11/24 09:49*	*01/12/24 00:04*	*1*
Phenol-d5	*32*		*10 - 129*	*01/11/24 09:49*	*01/12/24 00:04*	*1*
Terphenyl-d14	*82*		*13 - 150*	*01/11/24 09:49*	*01/12/24 00:04*	*1*
2,4,6-Tribromophenol	*84*		*10 - 150*	*01/11/24 09:49*	*01/12/24 00:04*	*1*

Method: EPA 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		01/12/24 13:32	01/12/24 18:46	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/12/24 13:32	01/12/24 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*51 - 149*	*01/12/24 13:32*	*01/12/24 18:46*	*1*

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

Job ID: 400-249496-1

Client Sample ID: MW3-ROX-010924-DUP
Date Collected: 01/09/24 12:45
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/15/24 10:07	1
Acrolein	ND		20	3.3	ug/L			01/15/24 10:07	1
Acrylonitrile	ND		10	2.8	ug/L			01/15/24 10:07	1
Benzene	ND		1.0	0.50	ug/L			01/15/24 10:07	1
Bromobenzene	ND		1.0	0.54	ug/L			01/15/24 10:07	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/15/24 10:07	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/15/24 10:07	1
Bromoform	ND		5.0	0.25	ug/L			01/15/24 10:07	1
Bromomethane	ND		1.0	0.98	ug/L			01/15/24 10:07	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/15/24 10:07	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/15/24 10:07	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/15/24 10:07	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/15/24 10:07	1
Chloroethane	ND		1.0	0.76	ug/L			01/15/24 10:07	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/15/24 10:07	1
Chloroform	ND		1.0	0.90	ug/L			01/15/24 10:07	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/15/24 10:07	1
Chloromethane	ND		1.0	0.90	ug/L			01/15/24 10:07	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/15/24 10:07	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/15/24 10:07	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/15/24 10:07	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/15/24 10:07	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/15/24 10:07	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/15/24 10:07	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/15/24 10:07	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/15/24 10:07	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/15/24 10:07	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/15/24 10:07	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 10:07	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 10:07	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 10:07	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/15/24 10:07	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/15/24 10:07	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/15/24 10:07	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/15/24 10:07	1
2-Hexanone	ND		25	1.4	ug/L			01/15/24 10:07	1
Isopropylbenzene	**0.57**	**J**	1.0	0.53	ug/L			01/15/24 10:07	1
Methylene bromide	ND		5.0	0.22	ug/L			01/15/24 10:07	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/15/24 10:07	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/15/24 10:07	1
Methyl tert-butyl ether	**0.77**	**J**	1.0	0.22	ug/L			01/15/24 10:07	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/15/24 10:07	1
Naphthalene	ND		5.0	3.0	ug/L			01/15/24 10:07	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/15/24 10:07	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/15/24 10:07	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/15/24 10:07	1
o-Xylene	ND		5.0	0.60	ug/L			01/15/24 10:07	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/15/24 10:07	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/15/24 10:07	1

Client Sample ID: MW3-ROX-010924-DUP
Date Collected: 01/09/24 12:45
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/15/24 10:07	1
Styrene	ND		1.0	1.0	ug/L			01/15/24 10:07	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/15/24 10:07	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/15/24 10:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/15/24 10:07	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/15/24 10:07	1
Toluene	ND		1.0	0.90	ug/L			01/15/24 10:07	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/15/24 10:07	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/15/24 10:07	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/15/24 10:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/15/24 10:07	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/15/24 10:07	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/15/24 10:07	1
Trichloroethene	ND		1.0	0.15	ug/L			01/15/24 10:07	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/15/24 10:07	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/15/24 10:07	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/15/24 10:07	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/15/24 10:07	1
Vinyl acetate	ND		25	0.93	ug/L			01/15/24 10:07	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/15/24 10:07	1
Xylenes, Total	ND		10	1.6	ug/L			01/15/24 10:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*01/15/24 10:07*	*1*
Dibromofluoromethane	*110*		*75 - 126*		*01/15/24 10:07*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*01/15/24 10:07*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		01/11/24 09:49	01/11/24 20:01	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/11/24 09:49	01/11/24 20:01	1
Anthracene	ND		0.20	0.048	ug/L		01/11/24 09:49	01/11/24 20:01	1
Benzo[a]anthracene	ND		0.20	0.035	ug/L		01/11/24 09:49	01/11/24 20:01	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		01/11/24 09:49	01/11/24 20:01	1
Benzo[b]fluoranthene	ND		0.20	0.038	ug/L		01/11/24 09:49	01/11/24 20:01	1
Benzo[g,h,i]perylene	ND		0.20	0.028	ug/L		01/11/24 09:49	01/11/24 20:01	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		01/11/24 09:49	01/11/24 20:01	1
Chrysene	ND		0.20	0.034	ug/L		01/11/24 09:49	01/11/24 20:01	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		01/11/24 09:49	01/11/24 20:01	1
Fluoranthene	ND		0.20	0.035	ug/L		01/11/24 09:49	01/11/24 20:01	1
Fluorene	ND		0.20	0.091	ug/L		01/11/24 09:49	01/11/24 20:01	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.035	ug/L		01/11/24 09:49	01/11/24 20:01	1
Phenanthrene	ND		0.20	0.092	ug/L		01/11/24 09:49	01/11/24 20:01	1
Pyrene	ND		0.20	0.040	ug/L		01/11/24 09:49	01/11/24 20:01	1
1-Methylnaphthalene	ND		0.20	0.082	ug/L		01/11/24 09:49	01/11/24 20:01	1
2-Methylnaphthalene	ND		0.20	0.067	ug/L		01/11/24 09:49	01/11/24 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*67*		*18 - 147*	*01/11/24 09:49*	*01/11/24 20:01*	*1*
2-Fluorobiphenyl	*59*		*15 - 128*	*01/11/24 09:49*	*01/11/24 20:01*	*1*

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

Job ID: 400-249496-1

Client Sample ID: MW3-ROX-010924-DUP
Date Collected: 01/09/24 12:45
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-6
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*59*		*10 - 144*	*01/11/24 09:49*	*01/11/24 20:01*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	10	8.9	ug/L		01/11/24 09:49	01/12/24 00:31	1
Benzenethiol	ND		10	10	ug/L		01/11/24 09:49	01/12/24 00:31	1
Benzoic acid	ND		31	24	ug/L		01/11/24 09:49	01/12/24 00:31	1
Benzyl alcohol	ND		10	7.4	ug/L		01/11/24 09:49	01/12/24 00:31	1
Bis(2-chloroethoxy)methane	ND		10	4.7	ug/L		01/11/24 09:49	01/12/24 00:31	1
Bis(2-chloroethyl)ether	ND		10	4.0	ug/L		01/11/24 09:49	01/12/24 00:31	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		01/11/24 09:49	01/12/24 00:31	1
Bis(2-ethylhexyl) phthalate	ND		10	9.1	ug/L		01/11/24 09:49	01/12/24 00:31	1
4-Bromophenyl phenyl ether	ND		10	8.8	ug/L		01/11/24 09:49	01/12/24 00:31	1
Butyl benzyl phthalate	ND		10	5.9	ug/L		01/11/24 09:49	01/12/24 00:31	1
4-Chloroaniline	ND		10	4.8	ug/L		01/11/24 09:49	01/12/24 00:31	1
4-Chloro-3-methylphenol	ND		10	5.4	ug/L		01/11/24 09:49	01/12/24 00:31	1
2-Chloronaphthalene	ND		10	3.9	ug/L		01/11/24 09:49	01/12/24 00:31	1
2-Chlorophenol	ND		10	4.2	ug/L		01/11/24 09:49	01/12/24 00:31	1
4-Chlorophenyl phenyl ether	ND		10	3.8	ug/L		01/11/24 09:49	01/12/24 00:31	1
Dibenz[a,h]acridine	ND		10	2.9	ug/L		01/11/24 09:49	01/12/24 00:31	1
Dibenzofuran	ND		10	4.1	ug/L		01/11/24 09:49	01/12/24 00:31	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/11/24 09:49	01/12/24 00:31	1
2,4-Dichlorophenol	ND		10	4.4	ug/L		01/11/24 09:49	01/12/24 00:31	1
Diethyl phthalate	ND		10	4.5	ug/L		01/11/24 09:49	01/12/24 00:31	1
2,4-Dimethylphenol	ND		10	5.3	ug/L		01/11/24 09:49	01/12/24 00:31	1
Dimethyl phthalate	ND		10	4.3	ug/L		01/11/24 09:49	01/12/24 00:31	1
Di-n-butyl phthalate	ND		10	4.7	ug/L		01/11/24 09:49	01/12/24 00:31	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/11/24 09:49	01/12/24 00:31	1
2,4-Dinitrophenol	ND		31	4.7	ug/L		01/11/24 09:49	01/12/24 00:31	1
2,4-Dinitrotoluene	ND		10	5.2	ug/L		01/11/24 09:49	01/12/24 00:31	1
2,6-Dinitrotoluene	ND		10	4.0	ug/L		01/11/24 09:49	01/12/24 00:31	1
Di-n-octyl phthalate	ND		10	6.1	ug/L		01/11/24 09:49	01/12/24 00:31	1
1,4-Dioxane	ND		10	4.4	ug/L		01/11/24 09:49	01/12/24 00:31	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.4	ug/L		01/11/24 09:49	01/12/24 00:31	1
Hexachlorobenzene	ND		10	9.9	ug/L		01/11/24 09:49	01/12/24 00:31	1
Hexachlorocyclopentadiene	ND		20	4.6	ug/L		01/11/24 09:49	01/12/24 00:31	1
Hexachloroethane	ND		10	5.3	ug/L		01/11/24 09:49	01/12/24 00:31	1
Indene	ND		10	3.7	ug/L		01/11/24 09:49	01/12/24 00:31	1
Isophorone	ND		10	5.3	ug/L		01/11/24 09:49	01/12/24 00:31	1
2-Methylphenol	ND		10	3.3	ug/L		01/11/24 09:49	01/12/24 00:31	1
3 & 4 Methylphenol	ND		20	4.7	ug/L		01/11/24 09:49	01/12/24 00:31	1
2-Nitroaniline	ND		10	5.1	ug/L		01/11/24 09:49	01/12/24 00:31	1
3-Nitroaniline	ND		10	4.8	ug/L		01/11/24 09:49	01/12/24 00:31	1
4-Nitroaniline	ND		10	4.2	ug/L		01/11/24 09:49	01/12/24 00:31	1
Nitrobenzene	ND		10	4.8	ug/L		01/11/24 09:49	01/12/24 00:31	1
2-Nitrophenol	ND		10	4.7	ug/L		01/11/24 09:49	01/12/24 00:31	1
4-Nitrophenol	ND		10	3.4	ug/L		01/11/24 09:49	01/12/24 00:31	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		01/11/24 09:49	01/12/24 00:31	1

Client Sample ID: MW3-ROX-010924-DUP
Date Collected: 01/09/24 12:45
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-6
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.6	ug/L		01/11/24 09:49	01/12/24 00:31	1
N-Nitrosodiphenylamine	ND		10	3.8	ug/L		01/11/24 09:49	01/12/24 00:31	1
Pentachlorophenol	ND		20	12	ug/L		01/11/24 09:49	01/12/24 00:31	1
Phenol	ND		10	4.3	ug/L		01/11/24 09:49	01/12/24 00:31	1
Pyridine	ND	*1	10	10	ug/L		01/11/24 09:49	01/12/24 00:31	1
Quinoline	ND		10	2.4	ug/L		01/11/24 09:49	01/12/24 00:31	1
2,4,5-Trichlorophenol	ND		10	4.1	ug/L		01/11/24 09:49	01/12/24 00:31	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		01/11/24 09:49	01/12/24 00:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*53*		*21 - 114*	*01/11/24 09:49*	*01/12/24 00:31*	*1*
2-Fluorophenol	*37*		*10 - 105*	*01/11/24 09:49*	*01/12/24 00:31*	*1*
Nitrobenzene-d5	*47*		*16 - 127*	*01/11/24 09:49*	*01/12/24 00:31*	*1*
Phenol-d5	*28*		*10 - 129*	*01/11/24 09:49*	*01/12/24 00:31*	*1*
Terphenyl-d14	*68*		*13 - 150*	*01/11/24 09:49*	*01/12/24 00:31*	*1*
2,4,6-Tribromophenol	*63*		*10 - 150*	*01/11/24 09:49*	*01/12/24 00:31*	*1*

Method: EPA 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		01/12/24 13:32	01/12/24 19:07	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/12/24 13:32	01/12/24 19:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*51 - 149*	*01/12/24 13:32*	*01/12/24 19:07*	*1*

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

Job ID: 400-249496-1

Client Sample ID: TB-ROX-010924-8260-B
Date Collected: 01/09/24 00:00
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-7
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/15/24 09:18	1
Acrolein	ND		20	3.3	ug/L			01/15/24 09:18	1
Acrylonitrile	ND		10	2.8	ug/L			01/15/24 09:18	1
Benzene	ND		1.0	0.50	ug/L			01/15/24 09:18	1
Bromobenzene	ND		1.0	0.54	ug/L			01/15/24 09:18	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/15/24 09:18	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/15/24 09:18	1
Bromoform	ND		5.0	0.25	ug/L			01/15/24 09:18	1
Bromomethane	ND		1.0	0.98	ug/L			01/15/24 09:18	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/15/24 09:18	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/15/24 09:18	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/15/24 09:18	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/15/24 09:18	1
Chloroethane	ND		1.0	0.76	ug/L			01/15/24 09:18	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/15/24 09:18	1
Chloroform	ND		1.0	0.90	ug/L			01/15/24 09:18	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/15/24 09:18	1
Chloromethane	ND		1.0	0.90	ug/L			01/15/24 09:18	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/15/24 09:18	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/15/24 09:18	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/15/24 09:18	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/15/24 09:18	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/15/24 09:18	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/15/24 09:18	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/15/24 09:18	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/15/24 09:18	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/15/24 09:18	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/15/24 09:18	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 09:18	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 09:18	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 09:18	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/15/24 09:18	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/15/24 09:18	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/15/24 09:18	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/15/24 09:18	1
2-Hexanone	ND		25	1.4	ug/L			01/15/24 09:18	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/15/24 09:18	1
Methylene bromide	ND		5.0	0.22	ug/L			01/15/24 09:18	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/15/24 09:18	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/15/24 09:18	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/15/24 09:18	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/15/24 09:18	1
Naphthalene	ND		5.0	3.0	ug/L			01/15/24 09:18	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/15/24 09:18	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/15/24 09:18	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/15/24 09:18	1
o-Xylene	ND		5.0	0.60	ug/L			01/15/24 09:18	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/15/24 09:18	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/15/24 09:18	1

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

Job ID: 400-249496-1

Client Sample ID: TB-ROX-010924-8260-B
Date Collected: 01/09/24 00:00
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-7
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/15/24 09:18	1
Styrene	ND		1.0	1.0	ug/L			01/15/24 09:18	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/15/24 09:18	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/15/24 09:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/15/24 09:18	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/15/24 09:18	1
Toluene	ND		1.0	0.90	ug/L			01/15/24 09:18	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/15/24 09:18	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/15/24 09:18	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/15/24 09:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/15/24 09:18	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/15/24 09:18	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/15/24 09:18	1
Trichloroethene	ND		1.0	0.15	ug/L			01/15/24 09:18	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/15/24 09:18	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/15/24 09:18	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/15/24 09:18	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/15/24 09:18	1
Vinyl acetate	ND		25	0.93	ug/L			01/15/24 09:18	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/15/24 09:18	1
Xylenes, Total	ND		10	1.6	ug/L			01/15/24 09:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*01/15/24 09:18*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/15/24 09:18*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*01/15/24 09:18*	*1*

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

Job ID: 400-249496-1

Client Sample ID: TB-ROX-010924-8011-B
Date Collected: 01/09/24 00:00
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-8
Matrix: Water

Method: EPA 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		01/12/24 13:32	01/12/24 19:29	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		01/12/24 13:32	01/12/24 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*131*		*51 - 149*	*01/12/24 13:32*	*01/12/24 19:29*	*1*

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

Job ID: 400-249496-1

Client Sample ID: MW6D-ROX-010924-EB
Date Collected: 01/09/24 08:30
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-9
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/15/24 08:54	1
Acrolein	ND		20	3.3	ug/L			01/15/24 08:54	1
Acrylonitrile	ND		10	2.8	ug/L			01/15/24 08:54	1
Benzene	ND		1.0	0.50	ug/L			01/15/24 08:54	1
Bromobenzene	ND		1.0	0.54	ug/L			01/15/24 08:54	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/15/24 08:54	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/15/24 08:54	1
Bromoform	ND		5.0	0.25	ug/L			01/15/24 08:54	1
Bromomethane	ND		1.0	0.98	ug/L			01/15/24 08:54	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/15/24 08:54	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/15/24 08:54	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/15/24 08:54	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/15/24 08:54	1
Chloroethane	ND		1.0	0.76	ug/L			01/15/24 08:54	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/15/24 08:54	1
Chloroform	ND		1.0	0.90	ug/L			01/15/24 08:54	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/15/24 08:54	1
Chloromethane	ND		1.0	0.90	ug/L			01/15/24 08:54	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/15/24 08:54	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/15/24 08:54	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/15/24 08:54	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/15/24 08:54	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/15/24 08:54	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/15/24 08:54	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/15/24 08:54	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/15/24 08:54	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/15/24 08:54	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/15/24 08:54	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 08:54	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 08:54	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 08:54	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/15/24 08:54	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/15/24 08:54	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/15/24 08:54	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/15/24 08:54	1
2-Hexanone	ND		25	1.4	ug/L			01/15/24 08:54	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/15/24 08:54	1
Methylene bromide	ND		5.0	0.22	ug/L			01/15/24 08:54	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/15/24 08:54	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/15/24 08:54	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/15/24 08:54	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/15/24 08:54	1
Naphthalene	ND		5.0	3.0	ug/L			01/15/24 08:54	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/15/24 08:54	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/15/24 08:54	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/15/24 08:54	1
o-Xylene	ND		5.0	0.60	ug/L			01/15/24 08:54	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/15/24 08:54	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/15/24 08:54	1

Client Sample ID: MW6D-ROX-010924-EB
Date Collected: 01/09/24 08:30
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-9
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/15/24 08:54	1
Styrene	ND		1.0	1.0	ug/L			01/15/24 08:54	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/15/24 08:54	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/15/24 08:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/15/24 08:54	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/15/24 08:54	1
Toluene	ND		1.0	0.90	ug/L			01/15/24 08:54	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/15/24 08:54	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/15/24 08:54	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/15/24 08:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/15/24 08:54	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/15/24 08:54	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/15/24 08:54	1
Trichloroethene	ND		1.0	0.15	ug/L			01/15/24 08:54	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/15/24 08:54	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/15/24 08:54	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/15/24 08:54	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/15/24 08:54	1
Vinyl acetate	ND		25	0.93	ug/L			01/15/24 08:54	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/15/24 08:54	1
Xylenes, Total	ND		10	1.6	ug/L			01/15/24 08:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 130*		*01/15/24 08:54*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/15/24 08:54*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*01/15/24 08:54*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		01/11/24 09:49	01/11/24 20:21	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/11/24 09:49	01/11/24 20:21	1
Anthracene	ND		0.20	0.048	ug/L		01/11/24 09:49	01/11/24 20:21	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		01/11/24 09:49	01/11/24 20:21	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		01/11/24 09:49	01/11/24 20:21	1
Benzo[b]fluoranthene	ND		0.20	0.038	ug/L		01/11/24 09:49	01/11/24 20:21	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/11/24 09:49	01/11/24 20:21	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		01/11/24 09:49	01/11/24 20:21	1
Chrysene	ND		0.20	0.033	ug/L		01/11/24 09:49	01/11/24 20:21	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		01/11/24 09:49	01/11/24 20:21	1
Fluoranthene	ND		0.20	0.034	ug/L		01/11/24 09:49	01/11/24 20:21	1
Fluorene	ND		0.20	0.090	ug/L		01/11/24 09:49	01/11/24 20:21	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		01/11/24 09:49	01/11/24 20:21	1
Phenanthrene	ND		0.20	0.091	ug/L		01/11/24 09:49	01/11/24 20:21	1
Pyrene	ND		0.20	0.040	ug/L		01/11/24 09:49	01/11/24 20:21	1
1-Methylnaphthalene	ND		0.20	0.081	ug/L		01/11/24 09:49	01/11/24 20:21	1
2-Methylnaphthalene	ND		0.20	0.067	ug/L		01/11/24 09:49	01/11/24 20:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*90*		*18 - 147*	*01/11/24 09:49*	*01/11/24 20:21*	*1*
2-Fluorobiphenyl	*75*		*15 - 128*	*01/11/24 09:49*	*01/11/24 20:21*	*1*

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

Job ID: 400-249496-1

Client Sample ID: MW6D-ROX-010924-EB
Date Collected: 01/09/24 08:30
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-9
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*76*		*10 - 144*	*01/11/24 09:49*	*01/11/24 20:21*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.8	ug/L		01/11/24 09:49	01/12/24 00:57	1
Benzenethiol	ND		10	10	ug/L		01/11/24 09:49	01/12/24 00:57	1
Benzoic acid	ND		30	24	ug/L		01/11/24 09:49	01/12/24 00:57	1
Benzyl alcohol	ND		10	7.4	ug/L		01/11/24 09:49	01/12/24 00:57	1
Bis(2-chloroethoxy)methane	ND		10	4.7	ug/L		01/11/24 09:49	01/12/24 00:57	1
Bis(2-chloroethyl)ether	ND		10	4.0	ug/L		01/11/24 09:49	01/12/24 00:57	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		01/11/24 09:49	01/12/24 00:57	1
Bis(2-ethylhexyl) phthalate	ND		10	9.0	ug/L		01/11/24 09:49	01/12/24 00:57	1
4-Bromophenyl phenyl ether	ND		10	8.7	ug/L		01/11/24 09:49	01/12/24 00:57	1
Butyl benzyl phthalate	ND		10	5.9	ug/L		01/11/24 09:49	01/12/24 00:57	1
4-Chloroaniline	ND		10	4.8	ug/L		01/11/24 09:49	01/12/24 00:57	1
4-Chloro-3-methylphenol	ND		10	5.4	ug/L		01/11/24 09:49	01/12/24 00:57	1
2-Chloronaphthalene	ND		10	3.9	ug/L		01/11/24 09:49	01/12/24 00:57	1
2-Chlorophenol	ND		10	4.2	ug/L		01/11/24 09:49	01/12/24 00:57	1
4-Chlorophenyl phenyl ether	ND		10	3.8	ug/L		01/11/24 09:49	01/12/24 00:57	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		01/11/24 09:49	01/12/24 00:57	1
Dibenzofuran	ND		10	4.1	ug/L		01/11/24 09:49	01/12/24 00:57	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/11/24 09:49	01/12/24 00:57	1
2,4-Dichlorophenol	ND		10	4.4	ug/L		01/11/24 09:49	01/12/24 00:57	1
Diethyl phthalate	ND		10	4.5	ug/L		01/11/24 09:49	01/12/24 00:57	1
2,4-Dimethylphenol	ND		10	5.3	ug/L		01/11/24 09:49	01/12/24 00:57	1
Dimethyl phthalate	ND		10	4.3	ug/L		01/11/24 09:49	01/12/24 00:57	1
Di-n-butyl phthalate	ND		10	4.7	ug/L		01/11/24 09:49	01/12/24 00:57	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/11/24 09:49	01/12/24 00:57	1
2,4-Dinitrophenol	ND		30	4.7	ug/L		01/11/24 09:49	01/12/24 00:57	1
2,4-Dinitrotoluene	ND		10	5.2	ug/L		01/11/24 09:49	01/12/24 00:57	1
2,6-Dinitrotoluene	ND		10	4.0	ug/L		01/11/24 09:49	01/12/24 00:57	1
Di-n-octyl phthalate	ND		10	6.1	ug/L		01/11/24 09:49	01/12/24 00:57	1
1,4-Dioxane	ND		10	4.4	ug/L		01/11/24 09:49	01/12/24 00:57	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		01/11/24 09:49	01/12/24 00:57	1
Hexachlorobenzene	ND		10	9.8	ug/L		01/11/24 09:49	01/12/24 00:57	1
Hexachlorocyclopentadiene	ND		20	4.6	ug/L		01/11/24 09:49	01/12/24 00:57	1
Hexachloroethane	ND		10	5.3	ug/L		01/11/24 09:49	01/12/24 00:57	1
Indene	ND		10	3.6	ug/L		01/11/24 09:49	01/12/24 00:57	1
Isophorone	ND		10	5.3	ug/L		01/11/24 09:49	01/12/24 00:57	1
2-Methylphenol	ND		10	3.2	ug/L		01/11/24 09:49	01/12/24 00:57	1
3 & 4 Methylphenol	ND		20	4.7	ug/L		01/11/24 09:49	01/12/24 00:57	1
2-Nitroaniline	ND		10	5.1	ug/L		01/11/24 09:49	01/12/24 00:57	1
3-Nitroaniline	ND		10	4.8	ug/L		01/11/24 09:49	01/12/24 00:57	1
4-Nitroaniline	ND		10	4.2	ug/L		01/11/24 09:49	01/12/24 00:57	1
Nitrobenzene	ND		10	4.8	ug/L		01/11/24 09:49	01/12/24 00:57	1
2-Nitrophenol	ND		10	4.7	ug/L		01/11/24 09:49	01/12/24 00:57	1
4-Nitrophenol	ND		10	3.3	ug/L		01/11/24 09:49	01/12/24 00:57	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		01/11/24 09:49	01/12/24 00:57	1

Client Sample ID: MW6D-ROX-010924-EB
Date Collected: 01/09/24 08:30
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-9
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		01/11/24 09:49	01/12/24 00:57	1
N-Nitrosodiphenylamine	ND		10	3.8	ug/L		01/11/24 09:49	01/12/24 00:57	1
Pentachlorophenol	ND		20	12	ug/L		01/11/24 09:49	01/12/24 00:57	1
Phenol	ND		10	4.3	ug/L		01/11/24 09:49	01/12/24 00:57	1
Pyridine	ND		10	10	ug/L		01/11/24 09:49	01/12/24 00:57	1
Quinoline	ND		10	2.4	ug/L		01/11/24 09:49	01/12/24 00:57	1
2,4,5-Trichlorophenol	ND		10	4.1	ug/L		01/11/24 09:49	01/12/24 00:57	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/11/24 09:49	01/12/24 00:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*21 - 114*	*01/11/24 09:49*	*01/12/24 00:57*	*1*
2-Fluorophenol	*44*		*10 - 105*	*01/11/24 09:49*	*01/12/24 00:57*	*1*
Nitrobenzene-d5	*64*		*16 - 127*	*01/11/24 09:49*	*01/12/24 00:57*	*1*
Phenol-d5	*31*		*10 - 129*	*01/11/24 09:49*	*01/12/24 00:57*	*1*
Terphenyl-d14	*85*		*13 - 150*	*01/11/24 09:49*	*01/12/24 00:57*	*1*
2,4,6-Tribromophenol	*72*		*10 - 150*	*01/11/24 09:49*	*01/12/24 00:57*	*1*

Method: EPA 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		01/12/24 13:32	01/12/24 19:50	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/12/24 13:32	01/12/24 19:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*117*		*51 - 149*	*01/12/24 13:32*	*01/12/24 19:50*	*1*

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

Job ID: 400-249496-1

Client Sample ID: MW6D-ROX-010924
Date Collected: 01/09/24 09:55
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-10
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/15/24 10:32	1
Acrolein	ND		20	3.3	ug/L			01/15/24 10:32	1
Acrylonitrile	ND		10	2.8	ug/L			01/15/24 10:32	1
Benzene	ND		1.0	0.50	ug/L			01/15/24 10:32	1
Bromobenzene	ND		1.0	0.54	ug/L			01/15/24 10:32	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/15/24 10:32	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/15/24 10:32	1
Bromoform	ND		5.0	0.25	ug/L			01/15/24 10:32	1
Bromomethane	ND		1.0	0.98	ug/L			01/15/24 10:32	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/15/24 10:32	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/15/24 10:32	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/15/24 10:32	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/15/24 10:32	1
Chloroethane	ND		1.0	0.76	ug/L			01/15/24 10:32	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			01/15/24 10:32	1
Chloroform	ND		1.0	0.90	ug/L			01/15/24 10:32	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/15/24 10:32	1
Chloromethane	ND		1.0	0.90	ug/L			01/15/24 10:32	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/15/24 10:32	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/15/24 10:32	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/15/24 10:32	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/15/24 10:32	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/15/24 10:32	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/15/24 10:32	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/15/24 10:32	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/15/24 10:32	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/15/24 10:32	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/15/24 10:32	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 10:32	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 10:32	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 10:32	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/15/24 10:32	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/15/24 10:32	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/15/24 10:32	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/15/24 10:32	1
2-Hexanone	ND		25	1.4	ug/L			01/15/24 10:32	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/15/24 10:32	1
Methylene bromide	ND		5.0	0.22	ug/L			01/15/24 10:32	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/15/24 10:32	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/15/24 10:32	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/15/24 10:32	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/15/24 10:32	1
Naphthalene	ND		5.0	3.0	ug/L			01/15/24 10:32	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/15/24 10:32	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/15/24 10:32	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/15/24 10:32	1
o-Xylene	ND		5.0	0.60	ug/L			01/15/24 10:32	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/15/24 10:32	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/15/24 10:32	1

Client Sample ID: MW6D-ROX-010924
Date Collected: 01/09/24 09:55
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-10
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/15/24 10:32	1
Styrene	ND		1.0	1.0	ug/L			01/15/24 10:32	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/15/24 10:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/15/24 10:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/15/24 10:32	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/15/24 10:32	1
Toluene	ND		1.0	0.90	ug/L			01/15/24 10:32	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/15/24 10:32	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/15/24 10:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/15/24 10:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/15/24 10:32	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/15/24 10:32	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/15/24 10:32	1
Trichloroethene	ND		1.0	0.15	ug/L			01/15/24 10:32	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/15/24 10:32	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/15/24 10:32	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/15/24 10:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/15/24 10:32	1
Vinyl acetate	ND		25	0.93	ug/L			01/15/24 10:32	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/15/24 10:32	1
Xylenes, Total	ND		10	1.6	ug/L			01/15/24 10:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 130*		*01/15/24 10:32*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/15/24 10:32*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*01/15/24 10:32*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		01/11/24 09:49	01/11/24 20:42	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/11/24 09:49	01/11/24 20:42	1
Anthracene	ND		0.20	0.048	ug/L		01/11/24 09:49	01/11/24 20:42	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		01/11/24 09:49	01/11/24 20:42	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		01/11/24 09:49	01/11/24 20:42	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		01/11/24 09:49	01/11/24 20:42	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/11/24 09:49	01/11/24 20:42	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		01/11/24 09:49	01/11/24 20:42	1
Chrysene	ND		0.20	0.033	ug/L		01/11/24 09:49	01/11/24 20:42	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		01/11/24 09:49	01/11/24 20:42	1
Fluoranthene	ND		0.20	0.034	ug/L		01/11/24 09:49	01/11/24 20:42	1
Fluorene	ND		0.20	0.090	ug/L		01/11/24 09:49	01/11/24 20:42	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		01/11/24 09:49	01/11/24 20:42	1
Phenanthrene	ND		0.20	0.091	ug/L		01/11/24 09:49	01/11/24 20:42	1
Pyrene	ND		0.20	0.039	ug/L		01/11/24 09:49	01/11/24 20:42	1
1-Methylnaphthalene	ND		0.20	0.081	ug/L		01/11/24 09:49	01/11/24 20:42	1
2-Methylnaphthalene	ND		0.20	0.067	ug/L		01/11/24 09:49	01/11/24 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*85*		*18 - 147*	*01/11/24 09:49*	*01/11/24 20:42*	*1*
2-Fluorobiphenyl	*74*		*15 - 128*	*01/11/24 09:49*	*01/11/24 20:42*	*1*

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

Job ID: 400-249496-1

Client Sample ID: MW6D-ROX-010924
Date Collected: 01/09/24 09:55
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-10
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*79*		*10 - 144*	*01/11/24 09:49*	*01/11/24 20:42*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.8	ug/L		01/11/24 09:49	01/12/24 01:24	1
Benzenethiol	ND		10	10	ug/L		01/11/24 09:49	01/12/24 01:24	1
Benzoic acid	ND		30	24	ug/L		01/11/24 09:49	01/12/24 01:24	1
Benzyl alcohol	ND		10	7.4	ug/L		01/11/24 09:49	01/12/24 01:24	1
Bis(2-chloroethoxy)methane	ND		10	4.7	ug/L		01/11/24 09:49	01/12/24 01:24	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		01/11/24 09:49	01/12/24 01:24	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		01/11/24 09:49	01/12/24 01:24	1
Bis(2-ethylhexyl) phthalate	ND		10	9.0	ug/L		01/11/24 09:49	01/12/24 01:24	1
4-Bromophenyl phenyl ether	ND		10	8.7	ug/L		01/11/24 09:49	01/12/24 01:24	1
Butyl benzyl phthalate	ND		10	5.9	ug/L		01/11/24 09:49	01/12/24 01:24	1
4-Chloroaniline	ND		10	4.8	ug/L		01/11/24 09:49	01/12/24 01:24	1
4-Chloro-3-methylphenol	ND		10	5.4	ug/L		01/11/24 09:49	01/12/24 01:24	1
2-Chloronaphthalene	ND		10	3.8	ug/L		01/11/24 09:49	01/12/24 01:24	1
2-Chlorophenol	ND		10	4.1	ug/L		01/11/24 09:49	01/12/24 01:24	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		01/11/24 09:49	01/12/24 01:24	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		01/11/24 09:49	01/12/24 01:24	1
Dibenzofuran	ND		10	4.0	ug/L		01/11/24 09:49	01/12/24 01:24	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/11/24 09:49	01/12/24 01:24	1
2,4-Dichlorophenol	ND		10	4.4	ug/L		01/11/24 09:49	01/12/24 01:24	1
Diethyl phthalate	ND		10	4.5	ug/L		01/11/24 09:49	01/12/24 01:24	1
2,4-Dimethylphenol	ND		10	5.3	ug/L		01/11/24 09:49	01/12/24 01:24	1
Dimethyl phthalate	ND		10	4.3	ug/L		01/11/24 09:49	01/12/24 01:24	1
Di-n-butyl phthalate	ND		10	4.7	ug/L		01/11/24 09:49	01/12/24 01:24	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/11/24 09:49	01/12/24 01:24	1
2,4-Dinitrophenol	ND		30	4.7	ug/L		01/11/24 09:49	01/12/24 01:24	1
2,4-Dinitrotoluene	ND		10	5.2	ug/L		01/11/24 09:49	01/12/24 01:24	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		01/11/24 09:49	01/12/24 01:24	1
Di-n-octyl phthalate	ND		10	6.1	ug/L		01/11/24 09:49	01/12/24 01:24	1
1,4-Dioxane	ND		10	4.4	ug/L		01/11/24 09:49	01/12/24 01:24	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		01/11/24 09:49	01/12/24 01:24	1
Hexachlorobenzene	ND		10	9.8	ug/L		01/11/24 09:49	01/12/24 01:24	1
Hexachlorocyclopentadiene	ND		20	4.6	ug/L		01/11/24 09:49	01/12/24 01:24	1
Hexachloroethane	ND		10	5.3	ug/L		01/11/24 09:49	01/12/24 01:24	1
Indene	ND		10	3.6	ug/L		01/11/24 09:49	01/12/24 01:24	1
Isophorone	ND		10	5.3	ug/L		01/11/24 09:49	01/12/24 01:24	1
2-Methylphenol	ND		10	3.2	ug/L		01/11/24 09:49	01/12/24 01:24	1
3 & 4 Methylphenol	ND		20	4.7	ug/L		01/11/24 09:49	01/12/24 01:24	1
2-Nitroaniline	ND		10	5.1	ug/L		01/11/24 09:49	01/12/24 01:24	1
3-Nitroaniline	ND		10	4.8	ug/L		01/11/24 09:49	01/12/24 01:24	1
4-Nitroaniline	ND		10	4.1	ug/L		01/11/24 09:49	01/12/24 01:24	1
Nitrobenzene	ND		10	4.8	ug/L		01/11/24 09:49	01/12/24 01:24	1
2-Nitrophenol	ND		10	4.7	ug/L		01/11/24 09:49	01/12/24 01:24	1
4-Nitrophenol	ND		10	3.3	ug/L		01/11/24 09:49	01/12/24 01:24	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		01/11/24 09:49	01/12/24 01:24	1

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

Job ID: 400-249496-1

Client Sample ID: MW6D-ROX-010924
Date Collected: 01/09/24 09:55
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-10
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		01/11/24 09:49	01/12/24 01:24	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		01/11/24 09:49	01/12/24 01:24	1
Pentachlorophenol	ND		20	12	ug/L		01/11/24 09:49	01/12/24 01:24	1
Phenol	ND		10	4.3	ug/L		01/11/24 09:49	01/12/24 01:24	1
Pyridine	ND		10	10	ug/L		01/11/24 09:49	01/12/24 01:24	1
Quinoline	ND		10	2.4	ug/L		01/11/24 09:49	01/12/24 01:24	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		01/11/24 09:49	01/12/24 01:24	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/11/24 09:49	01/12/24 01:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*21 - 114*	*01/11/24 09:49*	*01/12/24 01:24*	*1*
2-Fluorophenol	*41*		*10 - 105*	*01/11/24 09:49*	*01/12/24 01:24*	*1*
Nitrobenzene-d5	*67*		*16 - 127*	*01/11/24 09:49*	*01/12/24 01:24*	*1*
Phenol-d5	*32*		*10 - 129*	*01/11/24 09:49*	*01/12/24 01:24*	*1*
Terphenyl-d14	*88*		*13 - 150*	*01/11/24 09:49*	*01/12/24 01:24*	*1*
2,4,6-Tribromophenol	*80*		*10 - 150*	*01/11/24 09:49*	*01/12/24 01:24*	*1*

Method: EPA 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		01/12/24 13:32	01/12/24 20:32	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/12/24 13:32	01/12/24 20:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*51 - 149*	*01/12/24 13:32*	*01/12/24 20:32*	*1*

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

Job ID: 400-249496-1

Client Sample ID: MW6C-ROX-010924
Date Collected: 01/09/24 10:50
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-11
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/15/24 10:57	1
Acrolein	ND		20	3.3	ug/L			01/15/24 10:57	1
Acrylonitrile	ND		10	2.8	ug/L			01/15/24 10:57	1
Benzene	ND		1.0	0.50	ug/L			01/15/24 10:57	1
Bromobenzene	ND		1.0	0.54	ug/L			01/15/24 10:57	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/15/24 10:57	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/15/24 10:57	1
Bromoform	ND		5.0	0.25	ug/L			01/15/24 10:57	1
Bromomethane	ND		1.0	0.98	ug/L			01/15/24 10:57	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/15/24 10:57	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/15/24 10:57	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/15/24 10:57	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/15/24 10:57	1
Chloroethane	ND		1.0	0.76	ug/L			01/15/24 10:57	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/15/24 10:57	1
Chloroform	ND		1.0	0.90	ug/L			01/15/24 10:57	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/15/24 10:57	1
Chloromethane	ND		1.0	0.90	ug/L			01/15/24 10:57	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/15/24 10:57	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/15/24 10:57	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/15/24 10:57	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/15/24 10:57	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/15/24 10:57	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/15/24 10:57	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/15/24 10:57	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/15/24 10:57	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/15/24 10:57	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/15/24 10:57	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 10:57	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 10:57	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 10:57	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/15/24 10:57	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/15/24 10:57	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/15/24 10:57	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/15/24 10:57	1
2-Hexanone	ND		25	1.4	ug/L			01/15/24 10:57	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/15/24 10:57	1
Methylene bromide	ND		5.0	0.22	ug/L			01/15/24 10:57	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/15/24 10:57	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/15/24 10:57	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/15/24 10:57	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/15/24 10:57	1
Naphthalene	ND		5.0	3.0	ug/L			01/15/24 10:57	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/15/24 10:57	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/15/24 10:57	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/15/24 10:57	1
o-Xylene	ND		5.0	0.60	ug/L			01/15/24 10:57	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/15/24 10:57	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/15/24 10:57	1

Client Sample ID: MW6C-ROX-010924
Date Collected: 01/09/24 10:50
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-11
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/15/24 10:57	1
Styrene	ND		1.0	1.0	ug/L			01/15/24 10:57	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/15/24 10:57	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/15/24 10:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/15/24 10:57	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/15/24 10:57	1
Toluene	ND		1.0	0.90	ug/L			01/15/24 10:57	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/15/24 10:57	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/15/24 10:57	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/15/24 10:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/15/24 10:57	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/15/24 10:57	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/15/24 10:57	1
Trichloroethene	ND		1.0	0.15	ug/L			01/15/24 10:57	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/15/24 10:57	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/15/24 10:57	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/15/24 10:57	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/15/24 10:57	1
Vinyl acetate	ND		25	0.93	ug/L			01/15/24 10:57	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/15/24 10:57	1
Xylenes, Total	ND		10	1.6	ug/L			01/15/24 10:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*01/15/24 10:57*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*01/15/24 10:57*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*01/15/24 10:57*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.10	ug/L		01/11/24 09:49	01/11/24 21:03	1
Acenaphthylene	ND		0.21	0.045	ug/L		01/11/24 09:49	01/11/24 21:03	1
Anthracene	ND		0.21	0.048	ug/L		01/11/24 09:49	01/11/24 21:03	1
Benzo[a]anthracene	ND		0.21	0.035	ug/L		01/11/24 09:49	01/11/24 21:03	1
Benzo[a]pyrene	ND		0.21	0.066	ug/L		01/11/24 09:49	01/11/24 21:03	1
Benzo[b]fluoranthene	ND		0.21	0.038	ug/L		01/11/24 09:49	01/11/24 21:03	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		01/11/24 09:49	01/11/24 21:03	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		01/11/24 09:49	01/11/24 21:03	1
Chrysene	ND		0.21	0.034	ug/L		01/11/24 09:49	01/11/24 21:03	1
Dibenz(a,h)anthracene	ND		0.21	0.049	ug/L		01/11/24 09:49	01/11/24 21:03	1
Fluoranthene	ND		0.21	0.035	ug/L		01/11/24 09:49	01/11/24 21:03	1
Fluorene	ND		0.21	0.091	ug/L		01/11/24 09:49	01/11/24 21:03	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.035	ug/L		01/11/24 09:49	01/11/24 21:03	1
Phenanthrene	ND		0.21	0.093	ug/L		01/11/24 09:49	01/11/24 21:03	1
Pyrene	ND		0.21	0.040	ug/L		01/11/24 09:49	01/11/24 21:03	1
1-Methylnaphthalene	ND		0.21	0.082	ug/L		01/11/24 09:49	01/11/24 21:03	1
2-Methylnaphthalene	ND		0.21	0.068	ug/L		01/11/24 09:49	01/11/24 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*95*		*18 - 147*	*01/11/24 09:49*	*01/11/24 21:03*	*1*
2-Fluorobiphenyl	*79*		*15 - 128*	*01/11/24 09:49*	*01/11/24 21:03*	*1*

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

Job ID: 400-249496-1

Client Sample ID: MW6C-ROX-010924
Date Collected: 01/09/24 10:50
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-11
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*81*		*10 - 144*	*01/11/24 09:49*	*01/11/24 21:03*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.9	ug/L		01/11/24 09:49	01/12/24 01:50	1
Benzenethiol	ND		10	10	ug/L		01/11/24 09:49	01/12/24 01:50	1
Benzoic acid	ND		31	25	ug/L		01/11/24 09:49	01/12/24 01:50	1
Benzyl alcohol	ND		10	7.5	ug/L		01/11/24 09:49	01/12/24 01:50	1
Bis(2-chloroethoxy)methane	ND		10	4.7	ug/L		01/11/24 09:49	01/12/24 01:50	1
Bis(2-chloroethyl)ether	ND		10	4.0	ug/L		01/11/24 09:49	01/12/24 01:50	1
bis (2-chloroisopropyl) ether	ND		10	1.9	ug/L		01/11/24 09:49	01/12/24 01:50	1
Bis(2-ethylhexyl) phthalate	ND		10	9.1	ug/L		01/11/24 09:49	01/12/24 01:50	1
4-Bromophenyl phenyl ether	ND		10	8.8	ug/L		01/11/24 09:49	01/12/24 01:50	1
Butyl benzyl phthalate	ND		10	6.0	ug/L		01/11/24 09:49	01/12/24 01:50	1
4-Chloroaniline	ND		10	4.8	ug/L		01/11/24 09:49	01/12/24 01:50	1
4-Chloro-3-methylphenol	ND		10	5.4	ug/L		01/11/24 09:49	01/12/24 01:50	1
2-Chloronaphthalene	ND		10	3.9	ug/L		01/11/24 09:49	01/12/24 01:50	1
2-Chlorophenol	ND		10	4.2	ug/L		01/11/24 09:49	01/12/24 01:50	1
4-Chlorophenyl phenyl ether	ND		10	3.8	ug/L		01/11/24 09:49	01/12/24 01:50	1
Dibenz[a,h]acridine	ND		10	2.9	ug/L		01/11/24 09:49	01/12/24 01:50	1
Dibenzofuran	ND		10	4.1	ug/L		01/11/24 09:49	01/12/24 01:50	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/11/24 09:49	01/12/24 01:50	1
2,4-Dichlorophenol	ND		10	4.4	ug/L		01/11/24 09:49	01/12/24 01:50	1
Diethyl phthalate	ND		10	4.5	ug/L		01/11/24 09:49	01/12/24 01:50	1
2,4-Dimethylphenol	ND		10	5.3	ug/L		01/11/24 09:49	01/12/24 01:50	1
Dimethyl phthalate	ND		10	4.3	ug/L		01/11/24 09:49	01/12/24 01:50	1
Di-n-butyl phthalate	ND		10	4.7	ug/L		01/11/24 09:49	01/12/24 01:50	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/11/24 09:49	01/12/24 01:50	1
2,4-Dinitrophenol	ND		31	4.7	ug/L		01/11/24 09:49	01/12/24 01:50	1
2,4-Dinitrotoluene	ND		10	5.2	ug/L		01/11/24 09:49	01/12/24 01:50	1
2,6-Dinitrotoluene	ND		10	4.0	ug/L		01/11/24 09:49	01/12/24 01:50	1
Di-n-octyl phthalate	ND		10	6.2	ug/L		01/11/24 09:49	01/12/24 01:50	1
1,4-Dioxane	ND		10	4.4	ug/L		01/11/24 09:49	01/12/24 01:50	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.4	ug/L		01/11/24 09:49	01/12/24 01:50	1
Hexachlorobenzene	ND		10	10	ug/L		01/11/24 09:49	01/12/24 01:50	1
Hexachlorocyclopentadiene	ND		21	4.6	ug/L		01/11/24 09:49	01/12/24 01:50	1
Hexachloroethane	ND		10	5.3	ug/L		01/11/24 09:49	01/12/24 01:50	1
Indene	ND		10	3.7	ug/L		01/11/24 09:49	01/12/24 01:50	1
Isophorone	ND		10	5.3	ug/L		01/11/24 09:49	01/12/24 01:50	1
2-Methylphenol	ND		10	3.3	ug/L		01/11/24 09:49	01/12/24 01:50	1
3 & 4 Methylphenol	ND		21	4.7	ug/L		01/11/24 09:49	01/12/24 01:50	1
2-Nitroaniline	ND		10	5.1	ug/L		01/11/24 09:49	01/12/24 01:50	1
3-Nitroaniline	ND		10	4.8	ug/L		01/11/24 09:49	01/12/24 01:50	1
4-Nitroaniline	ND		10	4.2	ug/L		01/11/24 09:49	01/12/24 01:50	1
Nitrobenzene	ND		10	4.8	ug/L		01/11/24 09:49	01/12/24 01:50	1
2-Nitrophenol	ND		10	4.7	ug/L		01/11/24 09:49	01/12/24 01:50	1
4-Nitrophenol	ND		10	3.4	ug/L		01/11/24 09:49	01/12/24 01:50	1
N-Nitrosodimethylamine	ND		10	2.3	ug/L		01/11/24 09:49	01/12/24 01:50	1

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

Job ID: 400-249496-1

Client Sample ID: MW6C-ROX-010924
Date Collected: 01/09/24 10:50
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-11
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.6	ug/L		01/11/24 09:49	01/12/24 01:50	1
N-Nitrosodiphenylamine	ND		10	3.8	ug/L		01/11/24 09:49	01/12/24 01:50	1
Pentachlorophenol	ND		21	12	ug/L		01/11/24 09:49	01/12/24 01:50	1
Phenol	ND		10	4.3	ug/L		01/11/24 09:49	01/12/24 01:50	1
Pyridine	ND		10	10	ug/L		01/11/24 09:49	01/12/24 01:50	1
Quinoline	ND		10	2.5	ug/L		01/11/24 09:49	01/12/24 01:50	1
2,4,5-Trichlorophenol	ND		10	4.1	ug/L		01/11/24 09:49	01/12/24 01:50	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		01/11/24 09:49	01/12/24 01:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*21 - 114*	*01/11/24 09:49*	*01/12/24 01:50*	*1*
2-Fluorophenol	*42*		*10 - 105*	*01/11/24 09:49*	*01/12/24 01:50*	*1*
Nitrobenzene-d5	*62*		*16 - 127*	*01/11/24 09:49*	*01/12/24 01:50*	*1*
Phenol-d5	*33*		*10 - 129*	*01/11/24 09:49*	*01/12/24 01:50*	*1*
Terphenyl-d14	*79*		*13 - 150*	*01/11/24 09:49*	*01/12/24 01:50*	*1*
2,4,6-Tribromophenol	*82*		*10 - 150*	*01/11/24 09:49*	*01/12/24 01:50*	*1*

Method: EPA 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		01/12/24 13:32	01/12/24 20:53	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/12/24 13:32	01/12/24 20:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*51 - 149*	*01/12/24 13:32*	*01/12/24 20:53*	*1*

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

Job ID: 400-249496-1

Client Sample ID: MW6A-ROX-010924
Date Collected: 01/09/24 11:55
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-12
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/15/24 13:48	1
Acrolein	ND		20	3.3	ug/L			01/15/24 13:48	1
Acrylonitrile	ND		10	2.8	ug/L			01/15/24 13:48	1
Benzene	ND		1.0	0.50	ug/L			01/15/24 13:48	1
Bromobenzene	ND		1.0	0.54	ug/L			01/15/24 13:48	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/15/24 13:48	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/15/24 13:48	1
Bromoform	ND		5.0	0.25	ug/L			01/15/24 13:48	1
Bromomethane	ND		1.0	0.98	ug/L			01/15/24 13:48	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/15/24 13:48	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/15/24 13:48	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/15/24 13:48	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/15/24 13:48	1
Chloroethane	ND		1.0	0.76	ug/L			01/15/24 13:48	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/15/24 13:48	1
Chloroform	ND		1.0	0.90	ug/L			01/15/24 13:48	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/15/24 13:48	1
Chloromethane	ND		1.0	0.90	ug/L			01/15/24 13:48	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/15/24 13:48	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/15/24 13:48	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/15/24 13:48	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/15/24 13:48	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/15/24 13:48	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/15/24 13:48	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/15/24 13:48	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/15/24 13:48	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/15/24 13:48	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/15/24 13:48	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 13:48	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 13:48	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 13:48	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/15/24 13:48	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/15/24 13:48	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/15/24 13:48	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/15/24 13:48	1
2-Hexanone	ND		25	1.4	ug/L			01/15/24 13:48	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/15/24 13:48	1
Methylene bromide	ND		5.0	0.22	ug/L			01/15/24 13:48	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/15/24 13:48	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/15/24 13:48	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/15/24 13:48	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/15/24 13:48	1
Naphthalene	ND		5.0	3.0	ug/L			01/15/24 13:48	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/15/24 13:48	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/15/24 13:48	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/15/24 13:48	1
o-Xylene	ND		5.0	0.60	ug/L			01/15/24 13:48	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/15/24 13:48	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/15/24 13:48	1

Client Sample ID: MW6A-ROX-010924
Date Collected: 01/09/24 11:55
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-12
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/15/24 13:48	1
Styrene	ND		1.0	1.0	ug/L			01/15/24 13:48	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/15/24 13:48	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/15/24 13:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/15/24 13:48	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/15/24 13:48	1
Toluene	ND		1.0	0.90	ug/L			01/15/24 13:48	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/15/24 13:48	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/15/24 13:48	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/15/24 13:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/15/24 13:48	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/15/24 13:48	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/15/24 13:48	1
Trichloroethene	ND		1.0	0.15	ug/L			01/15/24 13:48	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/15/24 13:48	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/15/24 13:48	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/15/24 13:48	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/15/24 13:48	1
Vinyl acetate	ND		25	0.93	ug/L			01/15/24 13:48	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/15/24 13:48	1
Xylenes, Total	ND		10	1.6	ug/L			01/15/24 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*01/15/24 13:48*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*01/15/24 13:48*	*1*
Toluene-d8 (Surr)	*89*		*64 - 132*		*01/15/24 13:48*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.10	ug/L		01/11/24 09:49	01/11/24 21:24	1
Acenaphthylene	ND		0.21	0.046	ug/L		01/11/24 09:49	01/11/24 21:24	1
Anthracene	ND		0.21	0.049	ug/L		01/11/24 09:49	01/11/24 21:24	1
Benzo[a]anthracene	**0.035**	**J**	0.21	0.035	ug/L		01/11/24 09:49	01/11/24 21:24	1
Benzo[a]pyrene	ND		0.21	0.066	ug/L		01/11/24 09:49	01/11/24 21:24	1
Benzo[b]fluoranthene	ND		0.21	0.038	ug/L		01/11/24 09:49	01/11/24 21:24	1
Benzo[g,h,i]perylene	**0.063**	**J**	0.21	0.028	ug/L		01/11/24 09:49	01/11/24 21:24	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		01/11/24 09:49	01/11/24 21:24	1
Chrysene	**0.077**	**J**	0.21	0.034	ug/L		01/11/24 09:49	01/11/24 21:24	1
Dibenz(a,h)anthracene	ND		0.21	0.050	ug/L		01/11/24 09:49	01/11/24 21:24	1
Fluoranthene	**0.073**	**J**	0.21	0.035	ug/L		01/11/24 09:49	01/11/24 21:24	1
Fluorene	ND		0.21	0.092	ug/L		01/11/24 09:49	01/11/24 21:24	1
Indeno[1,2,3-cd]pyrene	**0.043**	**J**	0.21	0.035	ug/L		01/11/24 09:49	01/11/24 21:24	1
Phenanthrene	**0.11**	**J**	0.21	0.093	ug/L		01/11/24 09:49	01/11/24 21:24	1
Pyrene	**0.091**	**J**	0.21	0.040	ug/L		01/11/24 09:49	01/11/24 21:24	1
1-Methylnaphthalene	ND		0.21	0.083	ug/L		01/11/24 09:49	01/11/24 21:24	1
2-Methylnaphthalene	ND		0.21	0.068	ug/L		01/11/24 09:49	01/11/24 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*84*		*18 - 147*	*01/11/24 09:49*	*01/11/24 21:24*	*1*
2-Fluorobiphenyl	*78*		*15 - 128*	*01/11/24 09:49*	*01/11/24 21:24*	*1*

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

Job ID: 400-249496-1

Client Sample ID: MW6A-ROX-010924
Date Collected: 01/09/24 11:55
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-12
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*79*		*10 - 144*	*01/11/24 09:49*	*01/11/24 21:24*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	9.0	ug/L		01/11/24 09:49	01/12/24 02:17	1
Benzenethiol	ND		10	10	ug/L		01/11/24 09:49	01/12/24 02:17	1
Benzoic acid	ND		31	25	ug/L		01/11/24 09:49	01/12/24 02:17	1
Benzyl alcohol	ND		10	7.6	ug/L		01/11/24 09:49	01/12/24 02:17	1
Bis(2-chloroethoxy)methane	ND		10	4.8	ug/L		01/11/24 09:49	01/12/24 02:17	1
Bis(2-chloroethyl)ether	ND		10	4.0	ug/L		01/11/24 09:49	01/12/24 02:17	1
bis (2-chloroisopropyl) ether	ND		10	1.9	ug/L		01/11/24 09:49	01/12/24 02:17	1
Bis(2-ethylhexyl) phthalate	ND		10	9.2	ug/L		01/11/24 09:49	01/12/24 02:17	1
4-Bromophenyl phenyl ether	ND		10	8.9	ug/L		01/11/24 09:49	01/12/24 02:17	1
Butyl benzyl phthalate	ND		10	6.0	ug/L		01/11/24 09:49	01/12/24 02:17	1
4-Chloroaniline	ND		10	4.9	ug/L		01/11/24 09:49	01/12/24 02:17	1
4-Chloro-3-methylphenol	ND		10	5.5	ug/L		01/11/24 09:49	01/12/24 02:17	1
2-Chloronaphthalene	ND		10	3.9	ug/L		01/11/24 09:49	01/12/24 02:17	1
2-Chlorophenol	ND		10	4.2	ug/L		01/11/24 09:49	01/12/24 02:17	1
4-Chlorophenyl phenyl ether	ND		10	3.8	ug/L		01/11/24 09:49	01/12/24 02:17	1
Dibenz[a,h]acridine	ND		10	2.9	ug/L		01/11/24 09:49	01/12/24 02:17	1
Dibenzofuran	ND		10	4.1	ug/L		01/11/24 09:49	01/12/24 02:17	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/11/24 09:49	01/12/24 02:17	1
2,4-Dichlorophenol	ND		10	4.4	ug/L		01/11/24 09:49	01/12/24 02:17	1
Diethyl phthalate	ND		10	4.6	ug/L		01/11/24 09:49	01/12/24 02:17	1
2,4-Dimethylphenol	ND		10	5.4	ug/L		01/11/24 09:49	01/12/24 02:17	1
Dimethyl phthalate	ND		10	4.3	ug/L		01/11/24 09:49	01/12/24 02:17	1
Di-n-butyl phthalate	ND		10	4.8	ug/L		01/11/24 09:49	01/12/24 02:17	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/11/24 09:49	01/12/24 02:17	1
2,4-Dinitrophenol	ND		31	4.8	ug/L		01/11/24 09:49	01/12/24 02:17	1
2,4-Dinitrotoluene	ND		10	5.3	ug/L		01/11/24 09:49	01/12/24 02:17	1
2,6-Dinitrotoluene	ND		10	4.0	ug/L		01/11/24 09:49	01/12/24 02:17	1
Di-n-octyl phthalate	ND		10	6.2	ug/L		01/11/24 09:49	01/12/24 02:17	1
1,4-Dioxane	ND		10	4.4	ug/L		01/11/24 09:49	01/12/24 02:17	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.4	ug/L		01/11/24 09:49	01/12/24 02:17	1
Hexachlorobenzene	ND		10	10	ug/L		01/11/24 09:49	01/12/24 02:17	1
Hexachlorocyclopentadiene	ND		21	4.7	ug/L		01/11/24 09:49	01/12/24 02:17	1
Hexachloroethane	ND		10	5.4	ug/L		01/11/24 09:49	01/12/24 02:17	1
Indene	ND		10	3.7	ug/L		01/11/24 09:49	01/12/24 02:17	1
Isophorone	ND		10	5.4	ug/L		01/11/24 09:49	01/12/24 02:17	1
2-Methylphenol	ND		10	3.3	ug/L		01/11/24 09:49	01/12/24 02:17	1
3 & 4 Methylphenol	ND		21	4.8	ug/L		01/11/24 09:49	01/12/24 02:17	1
2-Nitroaniline	ND		10	5.2	ug/L		01/11/24 09:49	01/12/24 02:17	1
3-Nitroaniline	ND		10	4.9	ug/L		01/11/24 09:49	01/12/24 02:17	1
4-Nitroaniline	ND		10	4.2	ug/L		01/11/24 09:49	01/12/24 02:17	1
Nitrobenzene	ND		10	4.9	ug/L		01/11/24 09:49	01/12/24 02:17	1
2-Nitrophenol	ND		10	4.8	ug/L		01/11/24 09:49	01/12/24 02:17	1
4-Nitrophenol	ND		10	3.4	ug/L		01/11/24 09:49	01/12/24 02:17	1
N-Nitrosodimethylamine	ND		10	2.3	ug/L		01/11/24 09:49	01/12/24 02:17	1

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

Job ID: 400-249496-1

Client Sample ID: MW6A-ROX-010924
Date Collected: 01/09/24 11:55
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-12
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.6	ug/L		01/11/24 09:49	01/12/24 02:17	1
N-Nitrosodiphenylamine	ND		10	3.8	ug/L		01/11/24 09:49	01/12/24 02:17	1
Pentachlorophenol	ND		21	12	ug/L		01/11/24 09:49	01/12/24 02:17	1
Phenol	ND		10	4.3	ug/L		01/11/24 09:49	01/12/24 02:17	1
Pyridine	ND		10	10	ug/L		01/11/24 09:49	01/12/24 02:17	1
Quinoline	ND		10	2.5	ug/L		01/11/24 09:49	01/12/24 02:17	1
2,4,5-Trichlorophenol	ND		10	4.1	ug/L		01/11/24 09:49	01/12/24 02:17	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		01/11/24 09:49	01/12/24 02:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*21 - 114*	*01/11/24 09:49*	*01/12/24 02:17*	*1*
2-Fluorophenol	*41*		*10 - 105*	*01/11/24 09:49*	*01/12/24 02:17*	*1*
Nitrobenzene-d5	*61*		*16 - 127*	*01/11/24 09:49*	*01/12/24 02:17*	*1*
Phenol-d5	*31*		*10 - 129*	*01/11/24 09:49*	*01/12/24 02:17*	*1*
Terphenyl-d14	*81*		*13 - 150*	*01/11/24 09:49*	*01/12/24 02:17*	*1*
2,4,6-Tribromophenol	*74*		*10 - 150*	*01/11/24 09:49*	*01/12/24 02:17*	*1*

Method: EPA 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		01/12/24 13:32	01/12/24 21:14	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		01/12/24 13:32	01/12/24 21:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*51 - 149*	*01/12/24 13:32*	*01/12/24 21:14*	*1*

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

Job ID: 400-249496-1

Client Sample ID: MW6B-ROX-010924
Date Collected: 01/09/24 12:55
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-13
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/15/24 14:12	1
Acrolein	ND		20	3.3	ug/L			01/15/24 14:12	1
Acrylonitrile	ND		10	2.8	ug/L			01/15/24 14:12	1
Benzene	ND		1.0	0.50	ug/L			01/15/24 14:12	1
Bromobenzene	ND		1.0	0.54	ug/L			01/15/24 14:12	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/15/24 14:12	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/15/24 14:12	1
Bromoform	ND		5.0	0.25	ug/L			01/15/24 14:12	1
Bromomethane	ND		1.0	0.98	ug/L			01/15/24 14:12	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/15/24 14:12	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/15/24 14:12	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/15/24 14:12	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/15/24 14:12	1
Chloroethane	ND		1.0	0.76	ug/L			01/15/24 14:12	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/15/24 14:12	1
Chloroform	ND		1.0	0.90	ug/L			01/15/24 14:12	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/15/24 14:12	1
Chloromethane	ND		1.0	0.90	ug/L			01/15/24 14:12	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/15/24 14:12	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/15/24 14:12	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/15/24 14:12	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/15/24 14:12	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/15/24 14:12	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/15/24 14:12	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/15/24 14:12	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/15/24 14:12	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/15/24 14:12	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/15/24 14:12	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 14:12	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 14:12	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 14:12	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/15/24 14:12	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/15/24 14:12	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/15/24 14:12	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/15/24 14:12	1
2-Hexanone	ND		25	1.4	ug/L			01/15/24 14:12	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/15/24 14:12	1
Methylene bromide	ND		5.0	0.22	ug/L			01/15/24 14:12	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/15/24 14:12	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/15/24 14:12	1
Methyl tert-butyl ether	**0.46**	**J**	1.0	0.22	ug/L			01/15/24 14:12	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/15/24 14:12	1
Naphthalene	ND		5.0	3.0	ug/L			01/15/24 14:12	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/15/24 14:12	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/15/24 14:12	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/15/24 14:12	1
o-Xylene	ND		5.0	0.60	ug/L			01/15/24 14:12	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/15/24 14:12	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/15/24 14:12	1

Client Sample ID: MW6B-ROX-010924
Date Collected: 01/09/24 12:55
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-13
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/15/24 14:12	1
Styrene	ND		1.0	1.0	ug/L			01/15/24 14:12	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/15/24 14:12	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/15/24 14:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/15/24 14:12	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/15/24 14:12	1
Toluene	ND		1.0	0.90	ug/L			01/15/24 14:12	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/15/24 14:12	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/15/24 14:12	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/15/24 14:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/15/24 14:12	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/15/24 14:12	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/15/24 14:12	1
Trichloroethene	ND		1.0	0.15	ug/L			01/15/24 14:12	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/15/24 14:12	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/15/24 14:12	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/15/24 14:12	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/15/24 14:12	1
Vinyl acetate	ND		25	0.93	ug/L			01/15/24 14:12	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/15/24 14:12	1
Xylenes, Total	ND		10	1.6	ug/L			01/15/24 14:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 130*		*01/15/24 14:12*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/15/24 14:12*	*1*
Toluene-d8 (Surr)	*89*		*64 - 132*		*01/15/24 14:12*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.22**		0.21	0.10	ug/L		01/11/24 09:49	01/11/24 21:44	1
Acenaphthylene	ND		0.21	0.046	ug/L		01/11/24 09:49	01/11/24 21:44	1
Anthracene	ND		0.21	0.049	ug/L		01/11/24 09:49	01/11/24 21:44	1
Benzo[a]anthracene	ND		0.21	0.036	ug/L		01/11/24 09:49	01/11/24 21:44	1
Benzo[a]pyrene	ND		0.21	0.067	ug/L		01/11/24 09:49	01/11/24 21:44	1
Benzo[b]fluoranthene	ND		0.21	0.039	ug/L		01/11/24 09:49	01/11/24 21:44	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		01/11/24 09:49	01/11/24 21:44	1
Benzo[k]fluoranthene	ND		0.21	0.065	ug/L		01/11/24 09:49	01/11/24 21:44	1
Chrysene	ND		0.21	0.035	ug/L		01/11/24 09:49	01/11/24 21:44	1
Dibenz(a,h)anthracene	ND		0.21	0.051	ug/L		01/11/24 09:49	01/11/24 21:44	1
Fluoranthene	ND		0.21	0.036	ug/L		01/11/24 09:49	01/11/24 21:44	1
Fluorene	ND		0.21	0.094	ug/L		01/11/24 09:49	01/11/24 21:44	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.036	ug/L		01/11/24 09:49	01/11/24 21:44	1
Phenanthrene	ND		0.21	0.095	ug/L		01/11/24 09:49	01/11/24 21:44	1
Pyrene	ND		0.21	0.041	ug/L		01/11/24 09:49	01/11/24 21:44	1
1-Methylnaphthalene	ND		0.21	0.084	ug/L		01/11/24 09:49	01/11/24 21:44	1
2-Methylnaphthalene	ND		0.21	0.069	ug/L		01/11/24 09:49	01/11/24 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*82*		*18 - 147*	*01/11/24 09:49*	*01/11/24 21:44*	*1*
2-Fluorobiphenyl	*75*		*15 - 128*	*01/11/24 09:49*	*01/11/24 21:44*	*1*

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

Job ID: 400-249496-1

Client Sample ID: MW6B-ROX-010924
Date Collected: 01/09/24 12:55
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-13
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*78*		*10 - 144*	*01/11/24 09:49*	*01/11/24 21:44*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	9.2	ug/L		01/11/24 09:49	01/12/24 15:53	1
Benzenethiol	ND		11	10	ug/L		01/11/24 09:49	01/12/24 15:53	1
Benzoic acid	ND		32	25	ug/L		01/11/24 09:49	01/12/24 15:53	1
Benzyl alcohol	ND		11	7.7	ug/L		01/11/24 09:49	01/12/24 15:53	1
Bis(2-chloroethoxy)methane	ND		11	4.8	ug/L		01/11/24 09:49	01/12/24 15:53	1
Bis(2-chloroethyl)ether	ND		11	4.1	ug/L		01/11/24 09:49	01/12/24 15:53	1
bis (2-chloroisopropyl) ether	ND		11	1.9	ug/L		01/11/24 09:49	01/12/24 15:53	1
Bis(2-ethylhexyl) phthalate	ND		11	9.4	ug/L		01/11/24 09:49	01/12/24 15:53	1
4-Bromophenyl phenyl ether	ND		11	9.0	ug/L		01/11/24 09:49	01/12/24 15:53	1
Butyl benzyl phthalate	ND		11	6.1	ug/L		01/11/24 09:49	01/12/24 15:53	1
4-Chloroaniline	ND		11	4.9	ug/L		01/11/24 09:49	01/12/24 15:53	1
4-Chloro-3-methylphenol	ND		11	5.6	ug/L		01/11/24 09:49	01/12/24 15:53	1
2-Chloronaphthalene	ND		11	4.0	ug/L		01/11/24 09:49	01/12/24 15:53	1
2-Chlorophenol	ND		11	4.3	ug/L		01/11/24 09:49	01/12/24 15:53	1
4-Chlorophenyl phenyl ether	ND		11	3.9	ug/L		01/11/24 09:49	01/12/24 15:53	1
Dibenz[a,h]acridine	ND		11	2.9	ug/L		01/11/24 09:49	01/12/24 15:53	1
Dibenzofuran	ND		11	4.2	ug/L		01/11/24 09:49	01/12/24 15:53	1
3,3'-Dichlorobenzidine	ND		12	12	ug/L		01/11/24 09:49	01/12/24 15:53	1
2,4-Dichlorophenol	ND		11	4.5	ug/L		01/11/24 09:49	01/12/24 15:53	1
Diethyl phthalate	ND		11	4.6	ug/L		01/11/24 09:49	01/12/24 15:53	1
2,4-Dimethylphenol	ND		11	5.5	ug/L		01/11/24 09:49	01/12/24 15:53	1
Dimethyl phthalate	ND		11	4.4	ug/L		01/11/24 09:49	01/12/24 15:53	1
Di-n-butyl phthalate	ND		11	4.8	ug/L		01/11/24 09:49	01/12/24 15:53	1
4,6-Dinitro-ortho-cresol	ND		11	11	ug/L		01/11/24 09:49	01/12/24 15:53	1
2,4-Dinitrophenol	ND		32	4.8	ug/L		01/11/24 09:49	01/12/24 15:53	1
2,4-Dinitrotoluene	ND		11	5.4	ug/L		01/11/24 09:49	01/12/24 15:53	1
2,6-Dinitrotoluene	ND		11	4.1	ug/L		01/11/24 09:49	01/12/24 15:53	1
Di-n-octyl phthalate	ND		11	6.3	ug/L		01/11/24 09:49	01/12/24 15:53	1
1,4-Dioxane	ND		11	4.5	ug/L		01/11/24 09:49	01/12/24 15:53	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	3.5	ug/L		01/11/24 09:49	01/12/24 15:53	1
Hexachlorobenzene	ND		11	10	ug/L		01/11/24 09:49	01/12/24 15:53	1
Hexachlorocyclopentadiene	ND		21	4.7	ug/L		01/11/24 09:49	01/12/24 15:53	1
Hexachloroethane	ND		11	5.5	ug/L		01/11/24 09:49	01/12/24 15:53	1
Indene	ND		11	3.8	ug/L		01/11/24 09:49	01/12/24 15:53	1
Isophorone	ND		11	5.5	ug/L		01/11/24 09:49	01/12/24 15:53	1
2-Methylphenol	ND		11	3.4	ug/L		01/11/24 09:49	01/12/24 15:53	1
3 & 4 Methylphenol	ND		21	4.8	ug/L		01/11/24 09:49	01/12/24 15:53	1
2-Nitroaniline	ND		11	5.3	ug/L		01/11/24 09:49	01/12/24 15:53	1
3-Nitroaniline	ND		11	4.9	ug/L		01/11/24 09:49	01/12/24 15:53	1
4-Nitroaniline	ND		11	4.3	ug/L		01/11/24 09:49	01/12/24 15:53	1
Nitrobenzene	ND		11	4.9	ug/L		01/11/24 09:49	01/12/24 15:53	1
2-Nitrophenol	ND		11	4.8	ug/L		01/11/24 09:49	01/12/24 15:53	1
4-Nitrophenol	ND		11	3.5	ug/L		01/11/24 09:49	01/12/24 15:53	1
N-Nitrosodimethylamine	ND		11	2.3	ug/L		01/11/24 09:49	01/12/24 15:53	1

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

Job ID: 400-249496-1

Client Sample ID: MW6B-ROX-010924
Date Collected: 01/09/24 12:55
Date Received: 01/10/24 10:02

Lab Sample ID: 400-249496-13
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		11	2.6	ug/L		01/11/24 09:49	01/12/24 15:53	1
N-Nitrosodiphenylamine	ND		11	3.9	ug/L		01/11/24 09:49	01/12/24 15:53	1
Pentachlorophenol	ND		21	13	ug/L		01/11/24 09:49	01/12/24 15:53	1
Phenol	ND		11	4.4	ug/L		01/11/24 09:49	01/12/24 15:53	1
Pyridine	ND		11	11	ug/L		01/11/24 09:49	01/12/24 15:53	1
Quinoline	ND		11	2.5	ug/L		01/11/24 09:49	01/12/24 15:53	1
2,4,5-Trichlorophenol	ND		11	4.2	ug/L		01/11/24 09:49	01/12/24 15:53	1
2,4,6-Trichlorophenol	ND		11	3.7	ug/L		01/11/24 09:49	01/12/24 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*21 - 114*	*01/11/24 09:49*	*01/12/24 15:53*	*1*
2-Fluorophenol	*54*		*10 - 105*	*01/11/24 09:49*	*01/12/24 15:53*	*1*
Nitrobenzene-d5	*70*		*16 - 127*	*01/11/24 09:49*	*01/12/24 15:53*	*1*
Phenol-d5	*42*		*10 - 129*	*01/11/24 09:49*	*01/12/24 15:53*	*1*
Terphenyl-d14	*88*		*13 - 150*	*01/11/24 09:49*	*01/12/24 15:53*	*1*
2,4,6-Tribromophenol	*65*		*10 - 150*	*01/11/24 09:49*	*01/12/24 15:53*	*1*

Method: EPA 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		01/12/24 13:32	01/12/24 21:35	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/12/24 13:32	01/12/24 21:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*71*		*51 - 149*	*01/12/24 13:32*	*01/12/24 21:35*	*1*

Qualifiers

GC/MS 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/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
*3	ISTD response or retention time outside acceptable 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: 400-249496-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-130)	(75-126)	(64-132)
400-249496-1	TB-ROX-010924-8260-A	89	106	92
400-249496-3	MW24-ROX-010924	92	106	92
400-249496-4	MW5-ROX-010924	90	106	89
400-249496-5	MW3-ROX-010924	92	107	88
400-249496-6	MW3-ROX-010924-DUP	90	110	90
400-249496-7	TB-ROX-010924-8260-B	90	105	90
400-249496-9	MW6D-ROX-010924-EB	92	105	91
400-249496-10	MW6D-ROX-010924	93	105	90
400-249496-10 MS	MW6D-ROX-010924	97	102	95
400-249496-10 MSD	MW6D-ROX-010924	97	103	94
400-249496-11	MW6C-ROX-010924	90	106	91
400-249496-12	MW6A-ROX-010924	90	107	89
400-249496-13	MW6B-ROX-010924	91	105	89
LCS 400-657479/1002	Lab Control Sample	94	99	98
LCS 400-657639/1002	Lab Control Sample	96	102	99
MB 400-657479/5	Method Blank	92	106	91
MB 400-657639/4	Method Blank	89	108	90

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - 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	(21-114)	(10-105)	(16-127)	(10-129)	(13-150)	(10-150)
400-249496-3	MW24-ROX-010924	74	43	63	32	85	70
400-249496-4	MW5-ROX-010924	66	38	58	26	74	77
400-249496-5	MW3-ROX-010924	79	46	67	32	82	84
400-249496-6	MW3-ROX-010924-DUP	53	37	47	28	68	63
400-249496-9	MW6D-ROX-010924-EB	78	44	64	31	85	72
400-249496-10	MW6D-ROX-010924	78	41	67	32	88	80
400-249496-11	MW6C-ROX-010924	76	42	62	33	79	82
400-249496-12	MW6A-ROX-010924	73	41	61	31	81	74
400-249496-13	MW6B-ROX-010924	74	54	70	42	88	65
LCS 400-657287/2-A	Lab Control Sample	75	54	87	39	89	78
LCS 400-657287/4-A	Lab Control Sample	75	46	67	37	86	76
LCSD 400-657287/3-A	Lab Control Sample Dup	54	42	57	37	66	58
LCSD 400-657287/5-A	Lab Control Sample Dup	80	46	72	38	90	75
MB 400-657287/1-A	Method Blank	81	47	69	35	87	76

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: 400-249496-1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-249496-3	MW24-ROX-010924	90	76	78
400-249496-4	MW5-ROX-010924	75	66	73
400-249496-5	MW3-ROX-010924	88	77	82
400-249496-6	MW3-ROX-010924-DUP	67	59	59
400-249496-9	MW6D-ROX-010924-EB	90	75	76
400-249496-10	MW6D-ROX-010924	85	74	79
400-249496-11	MW6C-ROX-010924	95	79	81
400-249496-12	MW6A-ROX-010924	84	78	79
400-249496-13	MW6B-ROX-010924	82	75	78
LCS 400-657287/2-A	Lab Control Sample	80	86	64
MB 400-657287/1-A	Method Blank	155 S1+	81	86

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-249496-2	TB-ROX-010924-8011-A	144
400-249496-3	MW24-ROX-010924	130
400-249496-4	MW5-ROX-010924	88
400-249496-5	MW3-ROX-010924	104
400-249496-6	MW3-ROX-010924-DUP	104
400-249496-8	TB-ROX-010924-8011-B	131
400-249496-9	MW6D-ROX-010924-EB	117
400-249496-10	MW6D-ROX-010924	82
400-249496-11	MW6C-ROX-010924	82
400-249496-12	MW6A-ROX-010924	92
400-249496-13	MW6B-ROX-010924	71
LCS 400-657564/2-A	Lab Control Sample	67 p
LCSD 400-657564/3-A	Lab Control Sample Dup	96 p
MB 400-657564/1-A	Method Blank	89 p

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-249496-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins 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: 400-249496-1

Client Sample ID: TB-ROX-010924-8260-A
Lab Sample ID: 400-249496-1
Date Collected: 01/09/24 00:00
Matrix: Water
Date Received: 01/10/24 10:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657479	01/12/24 17:32	WPD	EET PEN

Client Sample ID: TB-ROX-010924-8011-A
Lab Sample ID: 400-249496-2
Date Collected: 01/09/24 00:00
Matrix: Water
Date Received: 01/10/24 10:02

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	657564	01/12/24 13:32	PG	EET PEN
Total/NA	Analysis	8011		1			657579	01/12/24 17:43	DS	EET PEN

Client Sample ID: MW24-ROX-010924
Lab Sample ID: 400-249496-3
Date Collected: 01/09/24 09:35
Matrix: Water
Date Received: 01/10/24 10:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657479	01/12/24 17:57	WPD	EET PEN
Total/NA	Prep	3510C			257.2 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/11/24 23:11	S1B	EET PEN
Total/NA	Prep	3510C			257.2 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657398	01/11/24 18:59	TH	EET PEN
Total/NA	Prep	8011			35.6 mL	35 mL	657564	01/12/24 13:32	PG	EET PEN
Total/NA	Analysis	8011		1			657579	01/12/24 18:04	DS	EET PEN

Client Sample ID: MW5-ROX-010924
Lab Sample ID: 400-249496-4
Date Collected: 01/09/24 10:45
Matrix: Water
Date Received: 01/10/24 10:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657479	01/12/24 18:22	WPD	EET PEN
Total/NA	Prep	3510C			256.4 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/11/24 23:38	S1B	EET PEN
Total/NA	Prep	3510C			256.4 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657398	01/11/24 19:19	TH	EET PEN
Total/NA	Prep	8011			35 mL	35 mL	657564	01/12/24 13:32	PG	EET PEN
Total/NA	Analysis	8011		1			657579	01/12/24 18:25	DS	EET PEN

Client Sample ID: MW3-ROX-010924
Lab Sample ID: 400-249496-5
Date Collected: 01/09/24 12:45
Matrix: Water
Date Received: 01/10/24 10:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657639	01/15/24 09:43	WPD	EET PEN
Total/NA	Prep	3510C			251.8 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/12/24 00:04	S1B	EET PEN

Client Sample ID: MW3-ROX-010924

Lab Sample ID: 400-249496-5

Date Collected: 01/09/24 12:45

Matrix: Water

Date Received: 01/10/24 10:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			251.8 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657398	01/11/24 19:40	TH	EET PEN
Total/NA	Prep	8011			35.2 mL	35 mL	657564	01/12/24 13:32	PG	EET PEN
Total/NA	Analysis	8011		1			657579	01/12/24 18:46	DS	EET PEN

Client Sample ID: MW3-ROX-010924-DUP

Lab Sample ID: 400-249496-6

Date Collected: 01/09/24 12:45

Matrix: Water

Date Received: 01/10/24 10:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657639	01/15/24 10:07	WPD	EET PEN
Total/NA	Prep	3510C			245 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/12/24 00:31	S1B	EET PEN
Total/NA	Prep	3510C			245 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657398	01/11/24 20:01	TH	EET PEN
Total/NA	Prep	8011			35.7 mL	35 mL	657564	01/12/24 13:32	PG	EET PEN
Total/NA	Analysis	8011		1			657579	01/12/24 19:07	DS	EET PEN

Client Sample ID: TB-ROX-010924-8260-B

Lab Sample ID: 400-249496-7

Date Collected: 01/09/24 00:00

Matrix: Water

Date Received: 01/10/24 10:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657639	01/15/24 09:18	WPD	EET PEN

Client Sample ID: TB-ROX-010924-8011-B

Lab Sample ID: 400-249496-8

Date Collected: 01/09/24 00:00

Matrix: Water

Date Received: 01/10/24 10:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			33.1 mL	35 mL	657564	01/12/24 13:32	PG	EET PEN
Total/NA	Analysis	8011		1			657579	01/12/24 19:29	DS	EET PEN

Client Sample ID: MW6D-ROX-010924-EB

Lab Sample ID: 400-249496-9

Date Collected: 01/09/24 08:30

Matrix: Water

Date Received: 01/10/24 10:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657639	01/15/24 08:54	WPD	EET PEN
Total/NA	Prep	3510C			246.6 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/12/24 00:57	S1B	EET PEN
Total/NA	Prep	3510C			246.6 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657398	01/11/24 20:21	TH	EET PEN
Total/NA	Prep	8011			34.8 mL	35 mL	657564	01/12/24 13:32	PG	EET PEN
Total/NA	Analysis	8011		1			657579	01/12/24 19:50	DS	EET PEN

Client Sample ID: MW6D-ROX-010924

Lab Sample ID: 400-249496-10

Date Collected: 01/09/24 09:55

Matrix: Water

Date Received: 01/10/24 10:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657639	01/15/24 10:32	WPD	EET PEN
Total/NA	Prep	3510C			247 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/12/24 01:24	S1B	EET PEN
Total/NA	Prep	3510C			247 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657398	01/11/24 20:42	TH	EET PEN
Total/NA	Prep	8011			35 mL	35 mL	657564	01/12/24 13:32	PG	EET PEN
Total/NA	Analysis	8011		1			657579	01/12/24 20:32	DS	EET PEN

Client Sample ID: MW6C-ROX-010924

Lab Sample ID: 400-249496-11

Date Collected: 01/09/24 10:50

Matrix: Water

Date Received: 01/10/24 10:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657639	01/15/24 10:57	WPD	EET PEN
Total/NA	Prep	3510C			243.2 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/12/24 01:50	S1B	EET PEN
Total/NA	Prep	3510C			243.2 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657398	01/11/24 21:03	TH	EET PEN
Total/NA	Prep	8011			35.4 mL	35 mL	657564	01/12/24 13:32	PG	EET PEN
Total/NA	Analysis	8011		1			657579	01/12/24 20:53	DS	EET PEN

Client Sample ID: MW6A-ROX-010924

Lab Sample ID: 400-249496-12

Date Collected: 01/09/24 11:55

Matrix: Water

Date Received: 01/10/24 10:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657639	01/15/24 13:48	WPD	EET PEN
Total/NA	Prep	3510C			241.6 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/12/24 02:17	S1B	EET PEN
Total/NA	Prep	3510C			241.6 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657398	01/11/24 21:24	TH	EET PEN
Total/NA	Prep	8011			35.9 mL	35 mL	657564	01/12/24 13:32	PG	EET PEN
Total/NA	Analysis	8011		1			657579	01/12/24 21:14	DS	EET PEN

Client Sample ID: MW6B-ROX-010924

Lab Sample ID: 400-249496-13

Date Collected: 01/09/24 12:55

Matrix: Water

Date Received: 01/10/24 10:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657639	01/15/24 14:12	WPD	EET PEN
Total/NA	Prep	3510C			237.6 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657562	01/12/24 15:53	VC1	EET PEN
Total/NA	Prep	3510C			237.6 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657398	01/11/24 21:44	TH	EET PEN

Client Sample ID: MW6B-ROX-010924

Lab Sample ID: 400-249496-13

Date Collected: 01/09/24 12:55

Matrix: Water

Date Received: 01/10/24 10:02

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	657564	01/12/24 13:32	PG	EET PEN
Total/NA	Analysis	8011		1			657579	01/12/24 21:35	DS	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-657287/1-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	3510C			250 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/11/24 17:24	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	658308	01/22/24 14:30	S1B	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-657479/5

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	8260D		1	5 mL	5 mL	657479	01/12/24 08:36	WPD	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-657564/1-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	657564	01/12/24 13:32	PG	EET PEN
Total/NA	Analysis	8011		1			657579	01/12/24 16:39	DS	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-657639/4

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	8260D		1	5 mL	5 mL	657639	01/15/24 08:29	WPD	EET PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-657287/2-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	3510C			250 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/11/24 17:51	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	657398	01/11/24 15:31	TH	EET PEN

Lab Chronicle

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

Job ID: 400-249496-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657287/4-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	3510C			250 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/11/24 18:45	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657479/1002
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	8260D		1	5 mL	5 mL	657479	01/12/24 07:22	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657564/2-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	657564	01/12/24 13:32	PG	EET PEN
Total/NA	Analysis	8011		1			657579	01/12/24 17:00	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657639/1002
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	8260D		1	5 mL	5 mL	657639	01/15/24 07:42	WPD	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657287/3-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	3510C			250 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/11/24 18:18	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657287/5-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	3510C			250 mL	1 mL	657287	01/11/24 09:49	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657431	01/11/24 19:12	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-249496-1

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657564/3-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	657564	01/12/24 13:32	PG	EET PEN
Total/NA	Analysis	8011		1			657579	01/12/24 17:22	DS	EET PEN

Client Sample ID: MW6D-ROX-010924
Lab Sample ID: 400-249496-10 MS

Date Collected: 01/09/24 09:55
Matrix: Water
Date Received: 01/10/24 10:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657639	01/15/24 11:46	WPD	EET PEN

Client Sample ID: MW6D-ROX-010924
Lab Sample ID: 400-249496-10 MSD

Date Collected: 01/09/24 09:55
Matrix: Water
Date Received: 01/10/24 10:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657639	01/15/24 12:10	WPD	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 657479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249496-1	TB-ROX-010924-8260-A	Total/NA	Water	8260D	
400-249496-3	MW24-ROX-010924	Total/NA	Water	8260D	
400-249496-4	MW5-ROX-010924	Total/NA	Water	8260D	
MB 400-657479/5	Method Blank	Total/NA	Water	8260D	
LCS 400-657479/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 657639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249496-5	MW3-ROX-010924	Total/NA	Water	8260D	
400-249496-6	MW3-ROX-010924-DUP	Total/NA	Water	8260D	
400-249496-7	TB-ROX-010924-8260-B	Total/NA	Water	8260D	
400-249496-9	MW6D-ROX-010924-EB	Total/NA	Water	8260D	
400-249496-10	MW6D-ROX-010924	Total/NA	Water	8260D	
400-249496-11	MW6C-ROX-010924	Total/NA	Water	8260D	
400-249496-12	MW6A-ROX-010924	Total/NA	Water	8260D	
400-249496-13	MW6B-ROX-010924	Total/NA	Water	8260D	
MB 400-657639/4	Method Blank	Total/NA	Water	8260D	
LCS 400-657639/1002	Lab Control Sample	Total/NA	Water	8260D	
400-249496-10 MS	MW6D-ROX-010924	Total/NA	Water	8260D	
400-249496-10 MSD	MW6D-ROX-010924	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 657287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249496-3	MW24-ROX-010924	Total/NA	Water	3510C	
400-249496-4	MW5-ROX-010924	Total/NA	Water	3510C	
400-249496-5	MW3-ROX-010924	Total/NA	Water	3510C	
400-249496-6	MW3-ROX-010924-DUP	Total/NA	Water	3510C	
400-249496-9	MW6D-ROX-010924-EB	Total/NA	Water	3510C	
400-249496-10	MW6D-ROX-010924	Total/NA	Water	3510C	
400-249496-11	MW6C-ROX-010924	Total/NA	Water	3510C	
400-249496-12	MW6A-ROX-010924	Total/NA	Water	3510C	
400-249496-13	MW6B-ROX-010924	Total/NA	Water	3510C	
MB 400-657287/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-657287/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-657287/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-657287/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-657287/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 657398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249496-3	MW24-ROX-010924	Total/NA	Water	8270E SIM	657287
400-249496-4	MW5-ROX-010924	Total/NA	Water	8270E SIM	657287
400-249496-5	MW3-ROX-010924	Total/NA	Water	8270E SIM	657287
400-249496-6	MW3-ROX-010924-DUP	Total/NA	Water	8270E SIM	657287
400-249496-9	MW6D-ROX-010924-EB	Total/NA	Water	8270E SIM	657287
400-249496-10	MW6D-ROX-010924	Total/NA	Water	8270E SIM	657287
400-249496-11	MW6C-ROX-010924	Total/NA	Water	8270E SIM	657287
400-249496-12	MW6A-ROX-010924	Total/NA	Water	8270E SIM	657287
400-249496-13	MW6B-ROX-010924	Total/NA	Water	8270E SIM	657287

GC/MS Semi VOA (Continued)

Analysis Batch: 657398 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-657287/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	657287

Analysis Batch: 657431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249496-3	MW24-ROX-010924	Total/NA	Water	8270E	657287
400-249496-4	MW5-ROX-010924	Total/NA	Water	8270E	657287
400-249496-5	MW3-ROX-010924	Total/NA	Water	8270E	657287
400-249496-6	MW3-ROX-010924-DUP	Total/NA	Water	8270E	657287
400-249496-9	MW6D-ROX-010924-EB	Total/NA	Water	8270E	657287
400-249496-10	MW6D-ROX-010924	Total/NA	Water	8270E	657287
400-249496-11	MW6C-ROX-010924	Total/NA	Water	8270E	657287
400-249496-12	MW6A-ROX-010924	Total/NA	Water	8270E	657287
MB 400-657287/1-A	Method Blank	Total/NA	Water	8270E	657287
LCS 400-657287/2-A	Lab Control Sample	Total/NA	Water	8270E	657287
LCS 400-657287/4-A	Lab Control Sample	Total/NA	Water	8270E	657287
LCSD 400-657287/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	657287
LCSD 400-657287/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	657287

Analysis Batch: 657562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249496-13	MW6B-ROX-010924	Total/NA	Water	8270E	657287

Analysis Batch: 658308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-657287/1-A	Method Blank	Total/NA	Water	8270E SIM	657287

GC Semi VOA

Prep Batch: 657564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249496-2	TB-ROX-010924-8011-A	Total/NA	Water	8011	
400-249496-3	MW24-ROX-010924	Total/NA	Water	8011	
400-249496-4	MW5-ROX-010924	Total/NA	Water	8011	
400-249496-5	MW3-ROX-010924	Total/NA	Water	8011	
400-249496-6	MW3-ROX-010924-DUP	Total/NA	Water	8011	
400-249496-8	TB-ROX-010924-8011-B	Total/NA	Water	8011	
400-249496-9	MW6D-ROX-010924-EB	Total/NA	Water	8011	
400-249496-10	MW6D-ROX-010924	Total/NA	Water	8011	
400-249496-11	MW6C-ROX-010924	Total/NA	Water	8011	
400-249496-12	MW6A-ROX-010924	Total/NA	Water	8011	
400-249496-13	MW6B-ROX-010924	Total/NA	Water	8011	
MB 400-657564/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-657564/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-657564/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 657579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249496-2	TB-ROX-010924-8011-A	Total/NA	Water	8011	657564
400-249496-3	MW24-ROX-010924	Total/NA	Water	8011	657564
400-249496-4	MW5-ROX-010924	Total/NA	Water	8011	657564
400-249496-5	MW3-ROX-010924	Total/NA	Water	8011	657564

GC Semi VOA (Continued)

Analysis Batch: 657579 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249496-6	MW3-ROX-010924-DUP	Total/NA	Water	8011	657564
400-249496-8	TB-ROX-010924-8011-B	Total/NA	Water	8011	657564
400-249496-9	MW6D-ROX-010924-EB	Total/NA	Water	8011	657564
400-249496-10	MW6D-ROX-010924	Total/NA	Water	8011	657564
400-249496-11	MW6C-ROX-010924	Total/NA	Water	8011	657564
400-249496-12	MW6A-ROX-010924	Total/NA	Water	8011	657564
400-249496-13	MW6B-ROX-010924	Total/NA	Water	8011	657564
MB 400-657564/1-A	Method Blank	Total/NA	Water	8011	657564
LCS 400-657564/2-A	Lab Control Sample	Total/NA	Water	8011	657564
LCSD 400-657564/3-A	Lab Control Sample Dup	Total/NA	Water	8011	657564

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-657479/5
Matrix: Water
Analysis Batch: 657479

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			01/12/24 08:36	1
Acrolein	ND		20	3.3	ug/L			01/12/24 08:36	1
Acrylonitrile	ND		10	2.8	ug/L			01/12/24 08:36	1
Benzene	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Bromobenzene	ND		1.0	0.54	ug/L			01/12/24 08:36	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/12/24 08:36	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Bromoform	ND		5.0	0.25	ug/L			01/12/24 08:36	1
Bromomethane	ND		1.0	0.98	ug/L			01/12/24 08:36	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/12/24 08:36	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/12/24 08:36	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/12/24 08:36	1
Chloroethane	ND		1.0	0.76	ug/L			01/12/24 08:36	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/12/24 08:36	1
Chloroform	ND		1.0	0.90	ug/L			01/12/24 08:36	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/12/24 08:36	1
Chloromethane	ND		1.0	0.90	ug/L			01/12/24 08:36	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/12/24 08:36	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/12/24 08:36	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/12/24 08:36	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/12/24 08:36	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/12/24 08:36	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/12/24 08:36	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/12/24 08:36	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/12/24 08:36	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/12/24 08:36	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 08:36	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 08:36	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 08:36	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/24 08:36	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/12/24 08:36	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/12/24 08:36	1
2-Hexanone	ND		25	1.4	ug/L			01/12/24 08:36	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/12/24 08:36	1
Methylene bromide	ND		5.0	0.22	ug/L			01/12/24 08:36	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/12/24 08:36	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/12/24 08:36	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/12/24 08:36	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/12/24 08:36	1
Naphthalene	ND		5.0	3.0	ug/L			01/12/24 08:36	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/12/24 08:36	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/12/24 08:36	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/12/24 08:36	1
o-Xylene	ND		5.0	0.60	ug/L			01/12/24 08:36	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/12/24 08:36	1

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

Lab Sample ID: MB 400-657479/5
Matrix: Water
Analysis Batch: 657479

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			01/12/24 08:36	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/12/24 08:36	1
Styrene	ND		1.0	1.0	ug/L			01/12/24 08:36	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/12/24 08:36	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/12/24 08:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/12/24 08:36	1
Toluene	ND		1.0	0.90	ug/L			01/12/24 08:36	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/12/24 08:36	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/12/24 08:36	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/12/24 08:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/12/24 08:36	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/12/24 08:36	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/12/24 08:36	1
Trichloroethene	ND		1.0	0.15	ug/L			01/12/24 08:36	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/12/24 08:36	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/12/24 08:36	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/12/24 08:36	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/12/24 08:36	1
Vinyl acetate	ND		25	0.93	ug/L			01/12/24 08:36	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/12/24 08:36	1
Xylenes, Total	ND		10	1.6	ug/L			01/12/24 08:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 130*		*01/12/24 08:36*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*01/12/24 08:36*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*01/12/24 08:36*	*1*

Lab Sample ID: LCS 400-657479/1002
Matrix: Water
Analysis Batch: 657479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	183		ug/L		92	43 - 160
Acrolein	500	491		ug/L		98	38 - 160
Acrylonitrile	500	433		ug/L		87	64 - 142
Benzene	50.0	46.0		ug/L		92	70 - 130
Bromobenzene	50.0	45.8		ug/L		92	70 - 132
Bromochloromethane	50.0	47.8		ug/L		96	70 - 130
Bromodichloromethane	50.0	50.1		ug/L		100	67 - 133
Bromoform	50.0	52.3		ug/L		105	57 - 140
Bromomethane	50.0	49.7		ug/L		99	10 - 160
2-Butanone (MEK)	200	190		ug/L		95	61 - 145
Carbon disulfide	50.0	35.4		ug/L		71	61 - 137
Carbon tetrachloride	50.0	49.7		ug/L		99	61 - 137
Chlorobenzene	50.0	47.7		ug/L		95	70 - 130
Chloroethane	50.0	45.7		ug/L		91	55 - 141
2-Chloroethyl vinyl ether	50.0	42.4		ug/L		85	10 - 160

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

Lab Sample ID: LCS 400-657479/1002
Matrix: Water
Analysis Batch: 657479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	45.4		ug/L		91	69 - 130
1-Chlorohexane	50.0	42.7		ug/L		85	69 - 130
Chloromethane	50.0	41.4		ug/L		83	58 - 137
cis-1,2-Dichloroethene	50.0	47.5		ug/L		95	68 - 130
cis-1,3-Dichloropropene	50.0	49.5		ug/L		99	69 - 132
Dibromochloromethane	50.0	51.1		ug/L		102	67 - 135
1,2-Dichlorobenzene	50.0	47.3		ug/L		95	67 - 130
1,3-Dichlorobenzene	50.0	47.6		ug/L		95	70 - 130
1,4-Dichlorobenzene	50.0	48.4		ug/L		97	70 - 130
Dichlorodifluoromethane	50.0	40.9		ug/L		82	41 - 146
1,1-Dichloroethane	50.0	45.9		ug/L		92	70 - 130
1,2-Dichloroethane	50.0	47.2		ug/L		94	69 - 130
1,1-Dichloroethene	50.0	42.7		ug/L		85	63 - 134
1,2-Dichloropropane	50.0	46.2		ug/L		92	70 - 130
1,3-Dichloropropane	50.0	44.4		ug/L		89	70 - 130
2,2-Dichloropropane	50.0	45.9		ug/L		92	52 - 135
1,1-Dichloropropene	50.0	45.0		ug/L		90	70 - 130
Ethylbenzene	50.0	46.4		ug/L		93	70 - 130
Ethyl methacrylate	50.0	45.7		ug/L		91	68 - 130
Hexachlorobutadiene	50.0	50.2		ug/L		100	53 - 140
2-Hexanone	200	169		ug/L		84	65 - 137
Isopropylbenzene	50.0	49.0		ug/L		98	70 - 130
Methylene bromide	50.0	47.7		ug/L		95	70 - 130
Methylene Chloride	50.0	45.1		ug/L		90	66 - 135
4-Methyl-2-pentanone (MIBK)	200	179		ug/L		89	69 - 138
Methyl tert-butyl ether	50.0	47.2		ug/L		94	66 - 130
m-Xylene & p-Xylene	50.0	47.7		ug/L		95	70 - 130
Naphthalene	50.0	43.4		ug/L		87	47 - 149
n-Butylbenzene	50.0	46.0		ug/L		92	67 - 130
N-Propylbenzene	50.0	46.4		ug/L		93	70 - 130
o-Chlorotoluene	50.0	44.9		ug/L		90	70 - 130
o-Xylene	50.0	47.9		ug/L		96	70 - 130
p-Chlorotoluene	50.0	44.4		ug/L		89	70 - 130
p-Isopropyltoluene	50.0	47.5		ug/L		95	65 - 130
sec-Butylbenzene	50.0	47.1		ug/L		94	66 - 130
Styrene	50.0	47.5		ug/L		95	70 - 130
tert-Butylbenzene	50.0	44.9		ug/L		90	64 - 139
1,1,1,2-Tetrachloroethane	50.0	50.4		ug/L		101	67 - 131
1,1,2,2-Tetrachloroethane	50.0	42.2		ug/L		84	70 - 131
Tetrachloroethene	50.0	46.8		ug/L		94	65 - 130
Toluene	50.0	46.6		ug/L		93	70 - 130
trans-1,2-Dichloroethene	50.0	44.3		ug/L		89	70 - 130
trans-1,3-Dichloropropene	50.0	47.2		ug/L		94	63 - 130
1,2,3-Trichlorobenzene	50.0	45.0		ug/L		90	60 - 138
1,2,4-Trichlorobenzene	50.0	46.4		ug/L		93	60 - 140
1,1,1-Trichloroethane	50.0	47.6		ug/L		95	68 - 130
1,1,2-Trichloroethane	50.0	47.4		ug/L		95	70 - 130
Trichloroethene	50.0	49.4		ug/L		99	70 - 130
Trichlorofluoromethane	50.0	44.7		ug/L		89	65 - 138

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

Lab Sample ID: LCS 400-657479/1002
Matrix: Water
Analysis Batch: 657479

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	45.0		ug/L		90	70 - 130
1,2,4-Trimethylbenzene	50.0	45.4		ug/L		91	70 - 130
1,3,5-Trimethylbenzene	50.0	46.2		ug/L		92	69 - 130
Vinyl acetate	100	103		ug/L		103	26 - 160
Vinyl chloride	50.0	43.6		ug/L		87	59 - 136
Xylenes, Total	100	95.6		ug/L		96	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*72 - 130*
Dibromofluoromethane	*99*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Lab Sample ID: MB 400-657639/4
Matrix: Water
Analysis Batch: 657639

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			01/15/24 08:29	1
Acrolein	ND		20	3.3	ug/L			01/15/24 08:29	1
Acrylonitrile	ND		10	2.8	ug/L			01/15/24 08:29	1
Benzene	ND		1.0	0.50	ug/L			01/15/24 08:29	1
Bromobenzene	ND		1.0	0.54	ug/L			01/15/24 08:29	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/15/24 08:29	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/15/24 08:29	1
Bromoform	ND		5.0	0.25	ug/L			01/15/24 08:29	1
Bromomethane	ND		1.0	0.98	ug/L			01/15/24 08:29	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/15/24 08:29	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/15/24 08:29	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/15/24 08:29	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/15/24 08:29	1
Chloroethane	ND		1.0	0.76	ug/L			01/15/24 08:29	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/15/24 08:29	1
Chloroform	ND		1.0	0.90	ug/L			01/15/24 08:29	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/15/24 08:29	1
Chloromethane	ND		1.0	0.90	ug/L			01/15/24 08:29	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/15/24 08:29	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/15/24 08:29	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/15/24 08:29	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/15/24 08:29	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/15/24 08:29	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/15/24 08:29	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/15/24 08:29	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/15/24 08:29	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/15/24 08:29	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/15/24 08:29	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 08:29	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 08:29	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/24 08:29	1

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

Lab Sample ID: MB 400-657639/4
Matrix: Water
Analysis Batch: 657639

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			01/15/24 08:29	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/15/24 08:29	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/15/24 08:29	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/15/24 08:29	1
2-Hexanone	ND		25	1.4	ug/L			01/15/24 08:29	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/15/24 08:29	1
Methylene bromide	ND		5.0	0.22	ug/L			01/15/24 08:29	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/15/24 08:29	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/15/24 08:29	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/15/24 08:29	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/15/24 08:29	1
Naphthalene	ND		5.0	3.0	ug/L			01/15/24 08:29	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/15/24 08:29	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/15/24 08:29	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/15/24 08:29	1
o-Xylene	ND		5.0	0.60	ug/L			01/15/24 08:29	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/15/24 08:29	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/15/24 08:29	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/15/24 08:29	1
Styrene	ND		1.0	1.0	ug/L			01/15/24 08:29	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/15/24 08:29	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/15/24 08:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/15/24 08:29	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/15/24 08:29	1
Toluene	ND		1.0	0.90	ug/L			01/15/24 08:29	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/15/24 08:29	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/15/24 08:29	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/15/24 08:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/15/24 08:29	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/15/24 08:29	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/15/24 08:29	1
Trichloroethene	ND		1.0	0.15	ug/L			01/15/24 08:29	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/15/24 08:29	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/15/24 08:29	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/15/24 08:29	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/15/24 08:29	1
Vinyl acetate	ND		25	0.93	ug/L			01/15/24 08:29	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/15/24 08:29	1
Xylenes, Total	ND		10	1.6	ug/L			01/15/24 08:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*72 - 130*		*01/15/24 08:29*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*01/15/24 08:29*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*01/15/24 08:29*	*1*

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

Lab Sample ID: LCS 400-657639/1002
Matrix: Water
Analysis Batch: 657639

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	199		ug/L		99	43 - 160
Acrolein	500	572		ug/L		114	38 - 160
Acrylonitrile	500	470		ug/L		94	64 - 142
Benzene	50.0	53.0		ug/L		106	70 - 130
Bromobenzene	50.0	50.6		ug/L		101	70 - 132
Bromochloromethane	50.0	54.0		ug/L		108	70 - 130
Bromodichloromethane	50.0	57.8		ug/L		116	67 - 133
Bromoform	50.0	57.1		ug/L		114	57 - 140
Bromomethane	50.0	57.1		ug/L		114	10 - 160
2-Butanone (MEK)	200	203		ug/L		102	61 - 145
Carbon disulfide	50.0	48.0		ug/L		96	61 - 137
Carbon tetrachloride	50.0	58.7		ug/L		117	61 - 137
Chlorobenzene	50.0	53.7		ug/L		107	70 - 130
Chloroethane	50.0	55.0		ug/L		110	55 - 141
2-Chloroethyl vinyl ether	50.0	51.9		ug/L		104	10 - 160
Chloroform	50.0	50.9		ug/L		102	69 - 130
1-Chlorohexane	50.0	48.3		ug/L		97	69 - 130
Chloromethane	50.0	47.9		ug/L		96	58 - 137
cis-1,2-Dichloroethene	50.0	53.6		ug/L		107	68 - 130
cis-1,3-Dichloropropene	50.0	56.5		ug/L		113	69 - 132
Dibromochloromethane	50.0	56.5		ug/L		113	67 - 135
1,2-Dichlorobenzene	50.0	51.5		ug/L		103	67 - 130
1,3-Dichlorobenzene	50.0	51.1		ug/L		102	70 - 130
1,4-Dichlorobenzene	50.0	53.7		ug/L		107	70 - 130
Dichlorodifluoromethane	50.0	49.6		ug/L		99	41 - 146
1,1-Dichloroethane	50.0	51.0		ug/L		102	70 - 130
1,2-Dichloroethane	50.0	51.7		ug/L		103	69 - 130
1,1-Dichloroethene	50.0	49.9		ug/L		100	63 - 134
1,2-Dichloropropane	50.0	51.5		ug/L		103	70 - 130
1,3-Dichloropropane	50.0	49.2		ug/L		98	70 - 130
2,2-Dichloropropane	50.0	52.7		ug/L		105	52 - 135
1,1-Dichloropropene	50.0	52.7		ug/L		105	70 - 130
Ethylbenzene	50.0	52.5		ug/L		105	70 - 130
Ethyl methacrylate	50.0	50.5		ug/L		101	68 - 130
Hexachlorobutadiene	50.0	53.0		ug/L		106	53 - 140
2-Hexanone	200	185		ug/L		93	65 - 137
Isopropylbenzene	50.0	53.2		ug/L		106	70 - 130
Methylene bromide	50.0	53.8		ug/L		108	70 - 130
Methylene Chloride	50.0	52.1		ug/L		104	66 - 135
4-Methyl-2-pentanone (MIBK)	200	195		ug/L		98	69 - 138
Methyl tert-butyl ether	50.0	52.3		ug/L		105	66 - 130
m-Xylene & p-Xylene	50.0	53.1		ug/L		106	70 - 130
Naphthalene	50.0	46.2		ug/L		92	47 - 149
n-Butylbenzene	50.0	50.9		ug/L		102	67 - 130
N-Propylbenzene	50.0	50.4		ug/L		101	70 - 130
o-Chlorotoluene	50.0	49.0		ug/L		98	70 - 130
o-Xylene	50.0	52.9		ug/L		106	70 - 130
p-Chlorotoluene	50.0	51.7		ug/L		103	70 - 130

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

Lab Sample ID: LCS 400-657639/1002
Matrix: Water
Analysis Batch: 657639

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	51.0		ug/L		102	65 - 130
sec-Butylbenzene	50.0	52.1		ug/L		104	66 - 130
Styrene	50.0	52.4		ug/L		105	70 - 130
tert-Butylbenzene	50.0	49.1		ug/L		98	64 - 139
1,1,1,2-Tetrachloroethane	50.0	56.2		ug/L		112	67 - 131
1,1,2,2-Tetrachloroethane	50.0	45.8		ug/L		92	70 - 131
Tetrachloroethene	50.0	54.4		ug/L		109	65 - 130
Toluene	50.0	53.1		ug/L		106	70 - 130
trans-1,2-Dichloroethene	50.0	51.5		ug/L		103	70 - 130
trans-1,3-Dichloropropene	50.0	53.1		ug/L		106	63 - 130
1,2,3-Trichlorobenzene	50.0	49.5		ug/L		99	60 - 138
1,2,4-Trichlorobenzene	50.0	50.7		ug/L		101	60 - 140
1,1,1-Trichloroethane	50.0	54.0		ug/L		108	68 - 130
1,1,2-Trichloroethane	50.0	51.3		ug/L		103	70 - 130
Trichloroethene	50.0	57.2		ug/L		114	70 - 130
Trichlorofluoromethane	50.0	52.7		ug/L		105	65 - 138
1,2,3-Trichloropropane	50.0	46.4		ug/L		93	70 - 130
1,2,4-Trimethylbenzene	50.0	49.7		ug/L		99	70 - 130
1,3,5-Trimethylbenzene	50.0	50.8		ug/L		102	69 - 130
Vinyl acetate	100	120		ug/L		120	26 - 160
Vinyl chloride	50.0	52.7		ug/L		105	59 - 136
Xylenes, Total	100	106		ug/L		106	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*72 - 130*
Dibromofluoromethane	*102*		*75 - 126*
Toluene-d8 (Surr)	*99*		*64 - 132*

Lab Sample ID: 400-249496-10 MS
Matrix: Water
Analysis Batch: 657639

Client Sample ID: MW6D-ROX-010924
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND		200	162		ug/L		81	43 - 150
Acrolein	ND		500	501		ug/L		100	38 - 150
Acrylonitrile	ND		500	443		ug/L		89	62 - 149
Benzene	ND		50.0	45.5		ug/L		91	56 - 142
Bromobenzene	ND		50.0	40.0		ug/L		80	59 - 136
Bromochloromethane	ND		50.0	47.7		ug/L		95	64 - 140
Bromodichloromethane	ND		50.0	49.5		ug/L		99	59 - 143
Bromoform	ND		50.0	48.8		ug/L		98	50 - 140
Bromomethane	ND		50.0	50.4		ug/L		101	10 - 150
2-Butanone (MEK)	ND		200	185		ug/L		93	55 - 150
Carbon disulfide	ND		50.0	41.8		ug/L		84	48 - 150
Carbon tetrachloride	ND		50.0	49.0		ug/L		98	55 - 145
Chlorobenzene	ND		50.0	43.1		ug/L		86	64 - 130
Chloroethane	ND		50.0	46.5		ug/L		93	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	2.35	J F1	ug/L		5	10 - 150

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

Lab Sample ID: 400-249496-10 MS
Matrix: Water
Analysis Batch: 657639

Client Sample ID: MW6D-ROX-010924
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	ND		50.0	44.8		ug/L		90	60 - 141
1-Chlorohexane	ND		50.0	36.5		ug/L		73	56 - 136
Chloromethane	ND		50.0	40.1		ug/L		80	49 - 148
cis-1,2-Dichloroethene	ND		50.0	47.1		ug/L		94	59 - 143
cis-1,3-Dichloropropene	ND		50.0	49.1		ug/L		98	57 - 140
Dibromochloromethane	ND		50.0	48.2		ug/L		96	56 - 143
1,2-Dichlorobenzene	ND		50.0	40.0		ug/L		80	52 - 137
1,3-Dichlorobenzene	ND		50.0	39.2		ug/L		78	54 - 135
1,4-Dichlorobenzene	ND		50.0	40.1		ug/L		80	53 - 135
Dichlorodifluoromethane	ND		50.0	40.2		ug/L		80	16 - 150
1,1-Dichloroethane	ND		50.0	44.8		ug/L		90	61 - 144
1,2-Dichloroethane	ND		50.0	46.8		ug/L		94	60 - 141
1,1-Dichloroethene	ND		50.0	43.5		ug/L		87	54 - 147
1,2-Dichloropropane	ND		50.0	45.1		ug/L		90	66 - 137
1,3-Dichloropropane	ND		50.0	43.0		ug/L		86	66 - 133
2,2-Dichloropropane	ND		50.0	45.4		ug/L		91	42 - 144
1,1-Dichloropropene	ND		50.0	44.5		ug/L		89	65 - 136
Ethylbenzene	ND		50.0	41.2		ug/L		82	58 - 131
Ethyl methacrylate	ND		50.0	43.7		ug/L		87	64 - 130
Hexachlorobutadiene	ND		50.0	36.7		ug/L		73	31 - 149
2-Hexanone	ND		200	160		ug/L		80	65 - 140
Isopropylbenzene	ND		50.0	40.3		ug/L		81	56 - 133
Methylene bromide	ND		50.0	48.1		ug/L		96	63 - 138
Methylene Chloride	ND		50.0	45.8		ug/L		92	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	177		ug/L		88	63 - 146
Methyl tert-butyl ether	ND		50.0	48.7		ug/L		97	59 - 137
m-Xylene & p-Xylene	ND		50.0	41.3		ug/L		83	57 - 130
Naphthalene	ND		50.0	42.2		ug/L		84	25 - 150
n-Butylbenzene	ND		50.0	35.5		ug/L		71	41 - 142
N-Propylbenzene	ND		50.0	38.2		ug/L		76	51 - 138
o-Chlorotoluene	ND		50.0	38.2		ug/L		76	53 - 134
o-Xylene	ND		50.0	41.9		ug/L		84	61 - 130
p-Chlorotoluene	ND		50.0	36.5		ug/L		73	54 - 133
p-Isopropyltoluene	ND		50.0	37.6		ug/L		75	48 - 139
sec-Butylbenzene	ND		50.0	38.7		ug/L		77	50 - 138
Styrene	ND		50.0	41.2		ug/L		82	58 - 131
tert-Butylbenzene	ND		50.0	38.4		ug/L		77	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	46.3		ug/L		93	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	41.3		ug/L		83	66 - 135
Tetrachloroethene	ND		50.0	42.7		ug/L		85	52 - 133
Toluene	ND		50.0	43.4		ug/L		87	65 - 130
trans-1,2-Dichloroethene	ND		50.0	44.4		ug/L		89	61 - 143
trans-1,3-Dichloropropene	ND		50.0	44.6		ug/L		89	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	39.0		ug/L		78	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	39.1		ug/L		78	39 - 148
1,1,1-Trichloroethane	ND		50.0	46.5		ug/L		93	57 - 142
1,1,2-Trichloroethane	ND		50.0	45.4		ug/L		91	66 - 131
Trichloroethene	ND		50.0	48.0		ug/L		96	64 - 136
Trichlorofluoromethane	ND		50.0	45.5		ug/L		91	54 - 150

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

Lab Sample ID: 400-249496-10 MS
Matrix: Water
Analysis Batch: 657639

Client Sample ID: MW6D-ROX-010924
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	ND		50.0	42.8		ug/L		86	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	38.3		ug/L		77	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	38.1		ug/L		76	52 - 135
Vinyl acetate	ND		100	105		ug/L		105	26 - 150
Vinyl chloride	ND		50.0	44.0		ug/L		88	46 - 150
Xylenes, Total	ND		100	83.2		ug/L		83	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*72 - 130*
Dibromofluoromethane	*102*		*75 - 126*
Toluene-d8 (Surr)	*95*		*64 - 132*

Lab Sample ID: 400-249496-10 MSD
Matrix: Water
Analysis Batch: 657639

Client Sample ID: MW6D-ROX-010924
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	199		ug/L		99	43 - 150	20	30
Acrolein	ND		500	556		ug/L		111	38 - 150	10	31
Acrylonitrile	ND		500	515		ug/L		103	62 - 149	15	30
Benzene	ND		50.0	49.8		ug/L		100	56 - 142	9	30
Bromobenzene	ND		50.0	41.8		ug/L		84	59 - 136	4	30
Bromochloromethane	ND		50.0	52.8		ug/L		106	64 - 140	10	30
Bromodichloromethane	ND		50.0	52.7		ug/L		105	59 - 143	6	30
Bromoform	ND		50.0	54.7		ug/L		109	50 - 140	11	30
Bromomethane	ND		50.0	53.8		ug/L		108	10 - 150	7	50
2-Butanone (MEK)	ND		200	219		ug/L		110	55 - 150	17	30
Carbon disulfide	ND		50.0	46.2		ug/L		92	48 - 150	10	30
Carbon tetrachloride	ND		50.0	53.5		ug/L		107	55 - 145	9	30
Chlorobenzene	ND		50.0	44.6		ug/L		89	64 - 130	3	30
Chloroethane	ND		50.0	49.5		ug/L		99	50 - 150	6	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	48.3		ug/L		97	60 - 141	8	30
1-Chlorohexane	ND		50.0	39.0		ug/L		78	56 - 136	6	30
Chloromethane	ND		50.0	42.2		ug/L		84	49 - 148	5	31
cis-1,2-Dichloroethene	ND		50.0	51.5		ug/L		103	59 - 143	9	30
cis-1,3-Dichloropropene	ND		50.0	52.8		ug/L		106	57 - 140	7	30
Dibromochloromethane	ND		50.0	51.9		ug/L		104	56 - 143	7	30
1,2-Dichlorobenzene	ND		50.0	39.0		ug/L		78	52 - 137	3	30
1,3-Dichlorobenzene	ND		50.0	38.9		ug/L		78	54 - 135	1	30
1,4-Dichlorobenzene	ND		50.0	38.8		ug/L		78	53 - 135	3	30
Dichlorodifluoromethane	ND		50.0	42.5		ug/L		85	16 - 150	5	31
1,1-Dichloroethane	ND		50.0	48.4		ug/L		97	61 - 144	8	30
1,2-Dichloroethane	ND		50.0	51.9		ug/L		104	60 - 141	10	30
1,1-Dichloroethene	ND		50.0	47.2		ug/L		94	54 - 147	8	30
1,2-Dichloropropane	ND		50.0	49.5		ug/L		99	66 - 137	9	30
1,3-Dichloropropane	ND		50.0	46.9		ug/L		94	66 - 133	9	30
2,2-Dichloropropane	ND		50.0	49.2		ug/L		98	42 - 144	8	31

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

Lab Sample ID: 400-249496-10 MSD
Matrix: Water
Analysis Batch: 657639

Client Sample ID: MW6D-ROX-010924
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloropropene	ND		50.0	48.7		ug/L		97	65 - 136	9	30
Ethylbenzene	ND		50.0	43.0		ug/L		86	58 - 131	4	30
Ethyl methacrylate	ND		50.0	49.7		ug/L		99	64 - 130	13	30
Hexachlorobutadiene	ND		50.0	34.5		ug/L		69	31 - 149	6	36
2-Hexanone	ND		200	185		ug/L		92	65 - 140	15	30
Isopropylbenzene	ND		50.0	43.4		ug/L		87	56 - 133	7	30
Methylene bromide	ND		50.0	53.8		ug/L		108	63 - 138	11	30
Methylene Chloride	ND		50.0	50.4		ug/L		101	60 - 146	9	32
4-Methyl-2-pentanone (MIBK)	ND		200	214		ug/L		107	63 - 146	19	30
Methyl tert-butyl ether	ND		50.0	55.4		ug/L		111	59 - 137	13	30
m-Xylene & p-Xylene	ND		50.0	42.7		ug/L		85	57 - 130	3	30
Naphthalene	ND		50.0	37.0		ug/L		74	25 - 150	13	30
n-Butylbenzene	ND		50.0	35.3		ug/L		71	41 - 142	1	31
N-Propylbenzene	ND		50.0	39.1		ug/L		78	51 - 138	2	30
o-Chlorotoluene	ND		50.0	39.4		ug/L		79	53 - 134	3	30
o-Xylene	ND		50.0	43.5		ug/L		87	61 - 130	4	30
p-Chlorotoluene	ND		50.0	39.7		ug/L		79	54 - 133	8	30
p-Isopropyltoluene	ND		50.0	38.3		ug/L		77	48 - 139	2	30
sec-Butylbenzene	ND		50.0	39.8		ug/L		80	50 - 138	3	30
Styrene	ND		50.0	43.4		ug/L		87	58 - 131	5	30
tert-Butylbenzene	ND		50.0	39.3		ug/L		79	54 - 146	2	30
1,1,1,2-Tetrachloroethane	ND		50.0	48.4		ug/L		97	59 - 137	4	30
1,1,2,2-Tetrachloroethane	ND		50.0	45.2		ug/L		90	66 - 135	9	30
Tetrachloroethene	ND		50.0	45.1		ug/L		90	52 - 133	5	30
Toluene	ND		50.0	46.1		ug/L		92	65 - 130	6	30
trans-1,2-Dichloroethene	ND		50.0	48.1		ug/L		96	61 - 143	8	30
trans-1,3-Dichloropropene	ND		50.0	48.3		ug/L		97	53 - 133	8	30
1,2,3-Trichlorobenzene	ND		50.0	32.9		ug/L		66	43 - 145	17	30
1,2,4-Trichlorobenzene	ND		50.0	33.7		ug/L		67	39 - 148	15	30
1,1,1-Trichloroethane	ND		50.0	50.7		ug/L		101	57 - 142	8	30
1,1,2-Trichloroethane	ND		50.0	49.2		ug/L		98	66 - 131	8	30
Trichloroethene	ND		50.0	51.7		ug/L		103	64 - 136	7	30
Trichlorofluoromethane	ND		50.0	47.0		ug/L		94	54 - 150	3	30
1,2,3-Trichloropropane	ND		50.0	48.9		ug/L		98	65 - 133	13	30
1,2,4-Trimethylbenzene	ND		50.0	38.1		ug/L		76	50 - 139	0	30
1,3,5-Trimethylbenzene	ND		50.0	39.7		ug/L		79	52 - 135	4	30
Vinyl acetate	ND		100	112		ug/L		112	26 - 150	7	33
Vinyl chloride	ND		50.0	44.8		ug/L		90	46 - 150	2	30
Xylenes, Total	ND		100	86.3		ug/L		86	59 - 130	4	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*72 - 130*
Dibromofluoromethane	*103*		*75 - 126*
Toluene-d8 (Surr)	*94*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-657287/1-A
Matrix: Water
Analysis Batch: 657431

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657287

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		01/11/24 09:49	01/11/24 17:24	1
Benzenethiol	ND		10	9.9	ug/L		01/11/24 09:49	01/11/24 17:24	1
Benzoic acid	ND		30	24	ug/L		01/11/24 09:49	01/11/24 17:24	1
Benzyl alcohol	ND		10	7.3	ug/L		01/11/24 09:49	01/11/24 17:24	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		01/11/24 09:49	01/11/24 17:24	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		01/11/24 09:49	01/11/24 17:24	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		01/11/24 09:49	01/11/24 17:24	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		01/11/24 09:49	01/11/24 17:24	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		01/11/24 09:49	01/11/24 17:24	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		01/11/24 09:49	01/11/24 17:24	1
4-Chloroaniline	ND		10	4.7	ug/L		01/11/24 09:49	01/11/24 17:24	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		01/11/24 09:49	01/11/24 17:24	1
2-Chloronaphthalene	ND		10	3.8	ug/L		01/11/24 09:49	01/11/24 17:24	1
2-Chlorophenol	ND		10	4.1	ug/L		01/11/24 09:49	01/11/24 17:24	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		01/11/24 09:49	01/11/24 17:24	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		01/11/24 09:49	01/11/24 17:24	1
Dibenzofuran	ND		10	4.0	ug/L		01/11/24 09:49	01/11/24 17:24	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/11/24 09:49	01/11/24 17:24	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		01/11/24 09:49	01/11/24 17:24	1
Diethyl phthalate	ND		10	4.4	ug/L		01/11/24 09:49	01/11/24 17:24	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		01/11/24 09:49	01/11/24 17:24	1
Dimethyl phthalate	ND		10	4.2	ug/L		01/11/24 09:49	01/11/24 17:24	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		01/11/24 09:49	01/11/24 17:24	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/11/24 09:49	01/11/24 17:24	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		01/11/24 09:49	01/11/24 17:24	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		01/11/24 09:49	01/11/24 17:24	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		01/11/24 09:49	01/11/24 17:24	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		01/11/24 09:49	01/11/24 17:24	1
1,4-Dioxane	ND		10	4.3	ug/L		01/11/24 09:49	01/11/24 17:24	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		01/11/24 09:49	01/11/24 17:24	1
Hexachlorobenzene	ND		10	9.7	ug/L		01/11/24 09:49	01/11/24 17:24	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		01/11/24 09:49	01/11/24 17:24	1
Hexachloroethane	ND		10	5.2	ug/L		01/11/24 09:49	01/11/24 17:24	1
Indene	ND		10	3.6	ug/L		01/11/24 09:49	01/11/24 17:24	1
Isophorone	ND		10	5.2	ug/L		01/11/24 09:49	01/11/24 17:24	1
2-Methylphenol	ND		10	3.2	ug/L		01/11/24 09:49	01/11/24 17:24	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		01/11/24 09:49	01/11/24 17:24	1
2-Nitroaniline	ND		10	5.0	ug/L		01/11/24 09:49	01/11/24 17:24	1
3-Nitroaniline	ND		10	4.7	ug/L		01/11/24 09:49	01/11/24 17:24	1
4-Nitroaniline	ND		10	4.1	ug/L		01/11/24 09:49	01/11/24 17:24	1
Nitrobenzene	ND		10	4.7	ug/L		01/11/24 09:49	01/11/24 17:24	1
2-Nitrophenol	ND		10	4.6	ug/L		01/11/24 09:49	01/11/24 17:24	1
4-Nitrophenol	ND		10	3.3	ug/L		01/11/24 09:49	01/11/24 17:24	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		01/11/24 09:49	01/11/24 17:24	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		01/11/24 09:49	01/11/24 17:24	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		01/11/24 09:49	01/11/24 17:24	1
Pentachlorophenol	ND		20	12	ug/L		01/11/24 09:49	01/11/24 17:24	1
Phenol	ND		10	4.2	ug/L		01/11/24 09:49	01/11/24 17:24	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-657287/1-A
Matrix: Water
Analysis Batch: 657431

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657287

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	ND		10	10	ug/L		01/11/24 09:49	01/11/24 17:24	1
Quinoline	ND		10	2.4	ug/L		01/11/24 09:49	01/11/24 17:24	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		01/11/24 09:49	01/11/24 17:24	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/11/24 09:49	01/11/24 17:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*21 - 114*	*01/11/24 09:49*	*01/11/24 17:24*	*1*
2-Fluorophenol	*47*		*10 - 105*	*01/11/24 09:49*	*01/11/24 17:24*	*1*
Nitrobenzene-d5	*69*		*16 - 127*	*01/11/24 09:49*	*01/11/24 17:24*	*1*
Phenol-d5	*35*		*10 - 129*	*01/11/24 09:49*	*01/11/24 17:24*	*1*
Terphenyl-d14	*87*		*13 - 150*	*01/11/24 09:49*	*01/11/24 17:24*	*1*
2,4,6-Tribromophenol	*76*		*10 - 150*	*01/11/24 09:49*	*01/11/24 17:24*	*1*

Lab Sample ID: LCS 400-657287/2-A
Matrix: Water
Analysis Batch: 657431

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657287

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	31.3		ug/L		26	10 - 127
Benzoic acid	120	99.7		ug/L		83	19 - 126
Benzyl alcohol	120	71.5		ug/L		60	17 - 109
Bis(2-chloroethoxy)methane	120	66.1		ug/L		55	24 - 125
Bis(2-chloroethyl)ether	120	74.8		ug/L		62	10 - 121
bis (2-chloroisopropyl) ether	120	60.7		ug/L		51	14 - 123
Bis(2-ethylhexyl) phthalate	120	101		ug/L		84	16 - 150
4-Bromophenyl phenyl ether	120	91.2		ug/L		76	17 - 150
Butyl benzyl phthalate	120	96.2		ug/L		80	21 - 150
4-Chloroaniline	120	62.0		ug/L		52	10 - 124
4-Chloro-3-methylphenol	120	79.6		ug/L		66	37 - 131
2-Chloronaphthalene	120	83.5		ug/L		70	24 - 132
2-Chlorophenol	120	74.7		ug/L		62	27 - 124
4-Chlorophenyl phenyl ether	120	90.0		ug/L		75	27 - 147
Dibenz[a,h]acridine	114	113		ug/L		99	40 - 140
Dibenzofuran	120	87.3		ug/L		73	30 - 135
3,3'-Dichlorobenzidine	160	130		ug/L		81	10 - 150
2,4-Dichlorophenol	120	84.1		ug/L		70	33 - 132
Diethyl phthalate	120	97.4		ug/L		81	37 - 145
2,4-Dimethylphenol	120	104		ug/L		87	38 - 132
Dimethyl phthalate	120	87.3		ug/L		73	32 - 137
Di-n-butyl phthalate	120	104		ug/L		87	27 - 150
4,6-Dinitro-ortho-cresol	240	163		ug/L		68	14 - 150
2,4-Dinitrophenol	240	121		ug/L		50	15 - 150
2,4-Dinitrotoluene	120	92.6		ug/L		77	35 - 136
2,6-Dinitrotoluene	120	86.6		ug/L		72	29 - 140
Di-n-octyl phthalate	120	99.4		ug/L		83	26 - 150
1,4-Dioxane	120	47.3		ug/L		39	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	90.3		ug/L		75	23 - 138
Hexachlorobenzene	120	101		ug/L		84	10 - 150

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-657287/2-A
Matrix: Water
Analysis Batch: 657431

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657287

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorocyclopentadiene	120	77.6		ug/L		65	10 - 124
Hexachloroethane	120	75.2		ug/L		63	10 - 127
Indene	120	85.4		ug/L		71	18 - 150
Isophorone	120	78.9		ug/L		66	28 - 127
2-Methylphenol	120	79.9		ug/L		67	34 - 124
3 & 4 Methylphenol	120	72.0		ug/L		60	32 - 122
2-Nitroaniline	120	82.7		ug/L		69	24 - 139
3-Nitroaniline	120	73.3		ug/L		61	10 - 128
4-Nitroaniline	120	71.7		ug/L		60	28 - 118
Nitrobenzene	120	78.9		ug/L		66	29 - 120
2-Nitrophenol	120	87.4		ug/L		73	25 - 148
4-Nitrophenol	240	178		ug/L		74	12 - 129
N-Nitrosodimethylamine	120	59.5		ug/L		50	10 - 115
N-Nitrosodi-n-propylamine	120	80.5		ug/L		67	24 - 142
N-Nitrosodiphenylamine	119	93.5		ug/L		79	29 - 138
Pentachlorophenol	240	128		ug/L		53	19 - 150
Phenol	120	52.6		ug/L		44	11 - 95
Pyridine	240	24.0		ug/L		10	10 - 82
Quinoline	114	78.5		ug/L		69	40 - 140
2,4,5-Trichlorophenol	120	88.2		ug/L		73	30 - 144
2,4,6-Trichlorophenol	120	86.0		ug/L		72	27 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*21 - 114*
2-Fluorophenol	*54*		*10 - 105*
Nitrobenzene-d5	*87*		*16 - 127*
Phenol-d5	*39*		*10 - 129*
Terphenyl-d14	*89*		*13 - 150*
2,4,6-Tribromophenol	*78*		*10 - 150*

Lab Sample ID: LCS 400-657287/4-A
Matrix: Water
Analysis Batch: 657431

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657287

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	98.8		ug/L		82	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*21 - 114*
2-Fluorophenol	*46*		*10 - 105*
Nitrobenzene-d5	*67*		*16 - 127*
Phenol-d5	*37*		*10 - 129*
Terphenyl-d14	*86*		*13 - 150*
2,4,6-Tribromophenol	*76*		*10 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-657287/3-A
Matrix: Water
Analysis Batch: 657431

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657287

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	49.4	*1	ug/L		41	10 - 127	45	40
Benzoic acid			120	101		ug/L		85	19 - 126	2	40
Benzyl alcohol			120	67.8		ug/L		56	17 - 109	5	40
Bis(2-chloroethoxy)methane			120	48.5		ug/L		40	24 - 125	31	40
Bis(2-chloroethyl)ether			120	58.7		ug/L		49	10 - 121	24	40
bis (2-chloroisopropyl) ether			120	46.7		ug/L		39	14 - 123	26	40
Bis(2-ethylhexyl) phthalate			120	70.3		ug/L		59	16 - 150	35	40
4-Bromophenyl phenyl ether			120	66.5		ug/L		55	17 - 150	31	40
Butyl benzyl phthalate			120	66.5		ug/L		55	21 - 150	36	40
4-Chloroaniline			120	61.3		ug/L		51	10 - 124	1	40
4-Chloro-3-methylphenol			120	61.1		ug/L		51	37 - 131	26	40
2-Chloronaphthalene			120	64.5		ug/L		54	24 - 132	26	40
2-Chlorophenol			120	61.0		ug/L		51	27 - 124	20	40
4-Chlorophenyl phenyl ether			120	66.8		ug/L		56	27 - 147	30	40
Dibenz[a,h]acridine			114	94.2		ug/L		83	40 - 140	18	40
Dibenzofuran			120	63.3		ug/L		53	30 - 135	32	40
3,3'-Dichlorobenzidine			160	128		ug/L		80	10 - 150	1	40
2,4-Dichlorophenol			120	64.6		ug/L		54	33 - 132	26	40
Diethyl phthalate			120	72.4		ug/L		60	37 - 145	29	40
2,4-Dimethylphenol			120	80.7		ug/L		67	38 - 132	26	40
Dimethyl phthalate			120	67.5		ug/L		56	32 - 137	26	40
Di-n-butyl phthalate			120	74.8		ug/L		62	27 - 150	33	40
4,6-Dinitro-ortho-cresol			240	130		ug/L		54	14 - 150	22	40
2,4-Dinitrophenol			240	119		ug/L		49	15 - 150	2	40
2,4-Dinitrotoluene			120	68.3		ug/L		57	35 - 136	30	40
2,6-Dinitrotoluene			120	65.9		ug/L		55	29 - 140	27	40
Di-n-octyl phthalate			120	76.9		ug/L		64	26 - 150	25	40
1,4-Dioxane			120	42.9		ug/L		36	10 - 87	10	40
1,2-Diphenylhydrazine (as Azobenzene)			120	64.7		ug/L		54	23 - 138	33	40
Hexachlorobenzene			120	71.0		ug/L		59	10 - 150	34	40
Hexachlorocyclopentadiene			120	61.7		ug/L		51	10 - 124	23	40
Hexachloroethane			120	57.9		ug/L		48	10 - 127	26	40
Indene			120	63.4		ug/L		53	18 - 150	30	40
Isophorone			120	58.8		ug/L		49	28 - 127	29	40
2-Methylphenol			120	68.9		ug/L		57	34 - 124	15	40
3 & 4 Methylphenol			120	66.8		ug/L		56	32 - 122	8	40
2-Nitroaniline			120	68.4		ug/L		57	24 - 139	19	40
3-Nitroaniline			120	81.1		ug/L		68	10 - 128	10	40
4-Nitroaniline			120	74.0		ug/L		62	28 - 118	3	40
Nitrobenzene			120	57.2		ug/L		48	29 - 120	32	40
2-Nitrophenol			120	64.3		ug/L		54	25 - 148	31	40
4-Nitrophenol			240	177		ug/L		74	12 - 129	0	40
N-Nitrosodimethylamine			120	74.7		ug/L		62	10 - 115	23	40
N-Nitrosodi-n-propylamine			120	64.5		ug/L		54	24 - 142	22	40
N-Nitrosodiphenylamine			119	67.2		ug/L		56	29 - 138	33	40
Pentachlorophenol			240	103		ug/L		43	19 - 150	22	40
Phenol			120	49.8		ug/L		41	11 - 95	6	40
Pyridine			240	43.4	*1	ug/L		18	10 - 82	58	40

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-657287/3-A
Matrix: Water
Analysis Batch: 657431

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657287

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Quinoline			114	93.5		ug/L		82	40 - 140	17	40
2,4,5-Trichlorophenol			120	64.9		ug/L		54	30 - 144	30	40
2,4,6-Trichlorophenol			120	63.8		ug/L		53	27 - 147	30	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*54*		*21 - 114*
2-Fluorophenol	*42*		*10 - 105*
Nitrobenzene-d5	*57*		*16 - 127*
Phenol-d5	*37*		*10 - 129*
Terphenyl-d14	*66*		*13 - 150*
2,4,6-Tribromophenol	*58*		*10 - 150*

Lab Sample ID: LCSD 400-657287/5-A
Matrix: Water
Analysis Batch: 657431

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657287

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	105		ug/L		87	40 - 140	6	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*80*		*21 - 114*
2-Fluorophenol	*46*		*10 - 105*
Nitrobenzene-d5	*72*		*16 - 127*
Phenol-d5	*38*		*10 - 129*
Terphenyl-d14	*90*		*13 - 150*
2,4,6-Tribromophenol	*75*		*10 - 150*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-657287/1-A
Matrix: Water
Analysis Batch: 658308

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657287

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		01/11/24 09:49	01/22/24 14:30	1
Acenaphthylene	ND		0.20	0.044	ug/L		01/11/24 09:49	01/22/24 14:30	1
Anthracene	ND		0.20	0.047	ug/L		01/11/24 09:49	01/22/24 14:30	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		01/11/24 09:49	01/22/24 14:30	1
Benzo[a]pyrene	ND	*3	0.20	0.064	ug/L		01/11/24 09:49	01/22/24 14:30	1
Benzo[b]fluoranthene	ND	*3	0.20	0.037	ug/L		01/11/24 09:49	01/22/24 14:30	1
Benzo[g,h,i]perylene	ND	*3	0.20	0.027	ug/L		01/11/24 09:49	01/22/24 14:30	1
Benzo[k]fluoranthene	ND	*3	0.20	0.062	ug/L		01/11/24 09:49	01/22/24 14:30	1
Chrysene	ND		0.20	0.033	ug/L		01/11/24 09:49	01/22/24 14:30	1
Dibenz(a,h)anthracene	ND	*3	0.20	0.048	ug/L		01/11/24 09:49	01/22/24 14:30	1
Fluoranthene	ND		0.20	0.034	ug/L		01/11/24 09:49	01/22/24 14:30	1
Fluorene	ND		0.20	0.089	ug/L		01/11/24 09:49	01/22/24 14:30	1
Indeno[1,2,3-cd]pyrene	ND	*3	0.20	0.034	ug/L		01/11/24 09:49	01/22/24 14:30	1
Phenanthrene	ND		0.20	0.090	ug/L		01/11/24 09:49	01/22/24 14:30	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 400-657287/1-A
Matrix: Water
Analysis Batch: 658308

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657287

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		0.20	0.039	ug/L		01/11/24 09:49	01/22/24 14:30	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		01/11/24 09:49	01/22/24 14:30	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		01/11/24 09:49	01/22/24 14:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*155*	*S1+*	*18 - 147*	*01/11/24 09:49*	*01/22/24 14:30*	*1*
2-Fluorobiphenyl	*81*		*15 - 128*	*01/11/24 09:49*	*01/22/24 14:30*	*1*
Nitrobenzene-d5	*86*		*10 - 144*	*01/11/24 09:49*	*01/22/24 14:30*	*1*

Lab Sample ID: LCS 400-657287/2-A
Matrix: Water
Analysis Batch: 657398

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657287

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	106		ug/L		89	40 - 140
Acenaphthylene	120	109		ug/L		91	40 - 140
Anthracene	120	109		ug/L		91	40 - 140
Benzo[a]anthracene	120	114		ug/L		95	40 - 140
Benzo[a]pyrene	120	116		ug/L		97	40 - 140
Benzo[b]fluoranthene	120	132		ug/L		110	40 - 140
Benzo[g,h,i]perylene	120	108		ug/L		90	40 - 140
Benzo[k]fluoranthene	120	115		ug/L		96	40 - 140
Chrysene	120	106		ug/L		89	40 - 140
Dibenz(a,h)anthracene	120	117		ug/L		98	40 - 140
Fluoranthene	120	111		ug/L		93	40 - 140
Fluorene	120	109		ug/L		91	40 - 140
Indeno[1,2,3-cd]pyrene	120	119		ug/L		100	40 - 140
Phenanthrene	120	110		ug/L		92	40 - 140
Pyrene	120	107		ug/L		89	40 - 140
1-Methylnaphthalene	120	69.0		ug/L		57	40 - 140
2-Methylnaphthalene	120	71.6		ug/L		60	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*80*		*18 - 147*
2-Fluorobiphenyl	*86*		*15 - 128*
Nitrobenzene-d5	*64*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-657564/1-A
Matrix: Water
Analysis Batch: 657579

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657564

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		01/12/24 13:32	01/12/24 16:39	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/12/24 13:32	01/12/24 16:39	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-657564/1-A
Matrix: Water
Analysis Batch: 657579

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657564

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	89	p	51 - 149	01/12/24 13:32	01/12/24 16:39	1

Lab Sample ID: LCS 400-657564/2-A
Matrix: Water
Analysis Batch: 657579

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657564

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0983		ug/L		98	60 - 140		
1,2-Dibromoethane			0.100	0.0878		ug/L		88	60 - 140		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	67	p	51 - 149

Lab Sample ID: LCSD 400-657564/3-A
Matrix: Water
Analysis Batch: 657579

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657564

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.111		ug/L		110	60 - 140	12	30
1,2-Dibromoethane			0.100	0.0981		ug/L		98	60 - 140	11	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	96	p	51 - 149

LAB (LOCATION)

400-249496 COC

Shell Oil Products US Chain Of Custody Record

AECOM

☐ 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
Melissa Remiger	25278	DATE: 1/9/2024
PO #	**GSAP Project ID**	PAGE: 1 of 2
60721927 3.1.2	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 60721927 3.1.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions
PHONE NO.: 314-802-1207
E-MAIL: melissa.remiger@aecom.com
AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell
SAMPLER NAME(S) (Print): C. McDavid, T. Jenkins
LAB USE ONLY

TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C° | Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

* Please include "J" values on Reports.
* Please provide sample receipt upon login.
* Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS 60721927 3.1.2

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 8270 SIMS
	TB-ROX-010924-8260-A	1/9/2024	0000	Water	2					2	X			
	TB-ROX-010924-8011-A	1/9/2024	0000	Water	2					2		X		
	MW24-ROX-010924	1/9/2024	0935	Water	6			2		8	X	X	X	X
	MW5-ROX-010924	1/9/2024	1045	Water	6			2		8	X	X	X	X
	MW3-ROX-010924	1/9/2024	1245	Water	6			2		8	X	X	X	X
	MW3-ROX-010924-DUP	1/9/2024	1245	Water	6			2		8	X	X	X	X

amsavid 61-69-29

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 6339 6598 2704, 6339 6598 2690	1/9/2024	1600
	Sammy Earnest	1.10.24	1002 4.5°C IRS

Version: 27Sept23

CUSTODY SEALS: 1599814, 1599815, 1599816, 1599817

LAB (LOCATION)

Shell Oil Products US Chain Of Custody Record

AECOM

☐ 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
Melissa Remiger	25278	DATE: 1/9/2024
PO #	**GSAP Project ID**	PAGE: 2 of 2
60721927 – 3.1.2	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 60721927 – 3.1.2
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions
PHONE NO.: 314-802-1207
E-MAIL: melissa.remiger@aecom.com
AECOM Other ID:
PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell
SAMPLER NAME(S) (Print): J. Mayer, E. Chalfant
LAB USE ONLY
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____
TEMPERATURE ON RECEIPT C° | Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

* Please include "J" values on Reports.
* Please provide sample receipt upon login.
* Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

REQUESTED ANALYSIS 60721927 – 3.1.2

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 8270 SIMS
	TB-ROX-010924-8260-B	1/9/2024	0000	Water	2					2	X			
	TB-ROX-010924-8011-B	1/9/2024	0000	Water	2					2		X		
	MW6D-ROX-010924-EB	1/9/2024	0830	Water	6			2		8	X	X	X	X
	MW6D-ROX-010924	1/9/2024	0955	Water	6			2		8	X	X	X	X
	MW6C-ROX-010924	1/9/2024	1050	Water	6			2		8	X	X	X	X
	MW6A-ROX-010924	1/9/2024	1155	Water	6			2		8	X	X	X	X
	MW6B-ROX-010924	1/8/2024	1255	Water	6			2		8	X	X	X	X

EOC 01/8/24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
E. CHALFANT	FEDEX: See Page 1	1/9/2024	1600
Relinquished by: (Signature)	Received by: (Signature) Tammy Earnest	Date: 1.10.24	Time: 1002 4.5°C IR8
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS - See Page 1

Leah Klingensmith

From: Massa, Mary <Mary.Massa@aecom.com>
Sent: Thursday, January 11, 2024 8:21 AM
To: Leah Klingensmith; Howell, Brett; Remiger, Melissa
Subject: RE: ***Please Note***400-249496-1 ROXANA QUARTERLY GW Sample Confirmation files from Eurofins Southeast
Attachments: 1Q24 Roxana GW COC_010924.pdf

CAUTION: EXTERNAL EMAIL - Sent from an email domain that is not formally trusted by Eurofins.

Do not click on links or open attachments unless you recognise the sender and are certain that the content is safe.

Ope yes, MW-6B was collected on 1/9/24. My apologies for not catching that, please see attached for the corrected COC.

Thank you,
Mary Massa *(D'Angelo)*, RG *(MO)*

Geologist, US West Environment
M +1 (314) 795-7580
mary.massa@aecom.com

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100 N. Broadway
20th Floor
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From: Leah Klingensmith <Leah.Klingensmith@et.eurofinsus.com>
Sent: Thursday, January 11, 2024 8:15 AM
To: Howell, Brett <brett.howell@aecom.com>; Massa, Mary <Mary.Massa@aecom.com>; Remiger, Melissa <melissa.remiger@aecom.com>
Subject: ***Please Note***400-249496-1 ROXANA QUARTERLY GW Sample Confirmation files from Eurofins Southeast

Hello,

Was MW6B really collected on the 8th or should the collection date be the 9th?

Attached, please find the Sample Confirmation files for job 400-249496-1; ROXANA QUARTERLY GW

Please feel free to contact me if you have any questions.

Thank you.

Leah Klingensmith
Project Manager

Eurofins Pensacola
Phone: 615-301-5038

E-mail: Leah.Klingensmith@et.eurofinsus.com
www.eurofinsus.com/env



Reference: [400-744544]
Attachments: 4

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- [ ] ACCUTEST (_____)
- [ ] CALSCIENCE (_____)
- [x] 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
- [x] OTHER _ENV. SERVICES

Print Bill To Contact Name:	PlaNet Site or Project ID
Melissa Remiger	25278
PO #	**GSAP Project ID**
60721927 – 3.1.2	USPC/00114/R/02

[ ] CHECK IF NO INCIDENT # APPLIES

DATE: 1/9/2024

PAGE: 2 of 2

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.1.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO.: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

SAMPLER NAME(S) (Print): J. Mayer, E. Chalfant

LAB USE ONLY

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS):
- [x] STANDARD (14 DAY)
- [ ] 5 DAYS
- [ ] 3 DAYS
- [ ] 2 DAYS
- [ ] 24 HOURS
- [ ] RESULTS NEEDED ON WEEKEND

- [ ] LA - RWQCB REPORT FORMAT

DELIVERABLES: [ ] LEVEL 1 [x] LEVEL 2 [ ] LEVEL 3 [x] LEVEL 4 [x] OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

* Please include "J" values on Reports.
* Please provide sample receipt upon login.
* Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

- [x] SHELL CONTRACT RATE APPLIES
- [ ] STATE REIMBURSEMENT RATE APPLIES
- [ ] EDD NOT NEEDED
- [x] RECEIPT VERIFICATION REQUESTED
- [ ] PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.1.2

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 8270 SIMS
	TB-ROX-010924-8260-B	1/9/2024	0000	Water	2					2	X			
	TB-ROX-010924-8011-B	1/9/2024	0000	Water	2					2		X		
	MW6D-ROX-010924-EB	1/9/2024	0830	Water	6			2		8	X	X	X	X
	MW6D-ROX-010924	1/9/2024	0955	Water	6			2		8	X	X	X	X
	MW6C-ROX-010924	1/9/2024	1050	Water	6			2		8	X	X	X	X
	MW6A-ROX-010924	1/9/2024	1155	Water	6			2		8	X	X	X	X
	MW6B-ROX-010924	1/9/2024	1255	Water	6			2		8	X	X	X	X

EOC 01857124

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
E. CHALFANT	FEDEX: See Page 1	1/9/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

CUSTODY SEALS - See Page 1

Version: 27Sept23

Page 85 of 87

3/11/2024 (Rev. 1)

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-249496-1

Login Number: 249496
List Number: 1
Creator: Earnest, Tamantha

List Source: Eurofins 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	4.5°C IR8
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").	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. Job ID: 400-249496-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24

Roxana Groundwater Quarterly – 1st Quarter 2024 Data Review

Laboratory SDG: 400-249617-1

Data Reviewer: Andrei Niculau

Peer Reviewer: Cheyana Cokley

Date Reviewed: 2/27/2024

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

Sample Identification	Sample Identification
TB-ROX-011124-8260-B	TB-ROX-011124-8260-A
P93C-ROX-011124	P57-ROX-011124
P57-ROX-011124-DUP	T12-ROX-011124

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 that several SVOC and PAH LCS/LCSD recoveries, and/or SVOC LCS/LCSD RPDs, were outside evaluation criteria. Results for n-propylbenzene in field duplicate pair P57-ROX-011124/P57-ROX-011124-DUP were qualified as estimated **(J/J)** due to field duplicate RPD above evaluation criteria. VOCs in sample P93C-ROX-011124 were diluted to bring target analytes into calibration range of the instrument. The continuing calibration verifications (CCV) for several analytes were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (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 400-657968/1001	SVOCs	2-Chloroethyl vinyl ether	**162**	NA	10-160
LCS/LCSD 400-657668/2-A/3-A	SVOCs	Aniline	31/51	**49**	10-127/40
LCS/LCSD 400-657668/2-A/3-A	SVOCs	Benzoic acid	98/**135**	32	19-126/40
LCS/LCSD 400-657668/2-A/3-A	SVOCs	Pyridine	12/19	**49**	10-82/40
LCS/LCSD 400-657912/2-A/3-A	PAHs	Benzo[b]fluoranthene	137/**143**	4	40-140/40

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 LCS/LCSD 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 (%)
MB 400-657912/1-A	PAHs	Terphenyl-d_{14}	**194**	18-147

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
P57-ROX-011124	P57-ROX-011124-DUP

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
P57-ROX-011124	P57-ROX-011124-DUP	VOCs	n-Propylbenzene	**32**	**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 sample P93C-ROX-011124 which were diluted due to the nature of the sample matrix. VOCs were non-detect at a dilution factor of 500X, with raised reporting limits of 13000 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, the continuing calibration verification (CCV) for pyridine, bis(2-chloroethyl) ether, bis(2-chloroethoxy) methane, anthracene, and fluoranthene were outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
P93C-ROX-011124	SVOCs	Pyridine	**UJ**
P57-ROX-011124	SVOCs	Pyridine	**UJ**
P57-ROX-011124-DUP	SVOCs	Pyridine	**UJ**
T12-ROX-011124	SVOCs	Pyridine	**UJ**
P93C-ROX-011124	SVOCs	bis(2-Chloroethyl) ether	**UJ**
P57-ROX-011124	SVOCs	bis(2-Chloroethyl) ether	**UJ**
P57-ROX-011124-DUP	SVOCs	bis(2-Chloroethyl) ether	**UJ**
T12-ROX-011124	SVOCs	bis(2-Chloroethyl) ether	**UJ**
P93C-ROX-011124	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
P57-ROX-011124	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
P57-ROX-011124-DUP	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
T12-ROX-011124	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
P93C-ROX-011124	PAHs	Anthracene	**UJ**
P57-ROX-011124	PAHs	Anthracene	**J**
P57-ROX-011124-DUP	PAHs	Anthracene	**J**
T12-ROX-011124	PAHs	Anthracene	**J**
P93C-ROX-011124	PAHs	Fluoranthene	**UJ**
P57-ROX-011124	PAHs	Fluoranthene	**UJ**
P57-ROX-011124-DUP	PAHs	Fluoranthene	**UJ**
T12-ROX-011124	PAHs	Fluoranthene	**J**

Additionally, VOCs in sample P93C-ROX-011124 were qualified as estimated non-detect due to sample dilution and historical detections.

Sample ID	Parameter	Analyte	Qualification
P93C-ROX-011124	VOCs	All non-detects	**UJ**

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 1/22/2024 7:52:19 AM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-249617-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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1/22/2024 7:52:19 AM

Authorized for release by
Leah Klingensmith, Senior Project Manager
Leah.Klingensmith@et.eurofinsus.com
(615)301-5038

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Job Narrative
400-249617-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 1/12/2024 9:31 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 0.8°C and 1.0°C

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-657889 recovered above the upper control limit for 2-Chloroethyl vinyl ether, Acrolein and Vinyl acetate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260D: 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-011124-8260-B (400-249617-1), P93C-ROX-011124 (400-249617-3), P57-ROX-011124 (400-249617-4) and P57-ROX-011124-DUP (400-249617-5). 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 8260D: The following sample was diluted to bring the concentration of target analytes within the calibration range: P93C-ROX-011124 (400-249617-3). Elevated reporting limits (RLs) are provided.

Method 8260D: The following samples were diluted to bring the concentration of target analytes within the calibration range: P93C-ROX-011124 (400-249617-3) and T12-ROX-011124 (400-249617-6). Elevated reporting limits (RLs) are provided.

Method 8260D: The laboratory control sample (LCS) for analytical batch 400-657968 recovered outside control limits for the following analytes: 2-Chloroethyl vinyl ether. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-657968 recovered above the upper control limit for 1,2-Dichloropropane, 2-Chloroethyl vinyl ether, Acrolein, cis-1,3-Dichloropropene and Vinyl acetate. 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 400-657968/1).

Method 8260D: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following sample was received preserved with hydrochloric acid: T12-ROX-011124 (400-249617-6). 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 8270E: The initial calibration verification (ICV) analyzed in batch 400-653222 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-657759 recovered above the upper control limit for N-Nitrosodimethylamine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Job ID: 400-249617-1 (Continued) Eurofins Pensacola

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-657759 recovered outside acceptance criteria, low biased, for Bis(2-chloroethoxy)methane, Bis(2-chloroethyl)ether and Pyridine. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-657668 and analytical batch 400-657759 recovered outside control limits for the following analytes: Aniline and Pyridine.

Method 8270E: The laboratory control sample duplicate (LCSD) for preparation batch 400-657668 and analytical batch 400-657759 recovered outside control limits for the following analytes: Benzoic acid. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 8270E_SIM: 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: (MB 400-657912/1-A). These results have been reported and qualified.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-657957 recovered outside acceptance criteria, low biased, for Anthracene and Fluoranthene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E_SIM: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-657912 and analytical batch 400-657957 recovered outside control limits for the following analytes: Benzo[b]fluoranthene. 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 Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

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

Job ID: 400-249617-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-249617-1	TB-ROX-011124-8260-B	Water	01/11/24 12:00	01/12/24 09:31
400-249617-2	TB-ROX-011124-8011-B	Water	01/11/24 12:00	01/12/24 09:31
400-249617-3	P93C-ROX-011124	Water	01/11/24 09:45	01/12/24 09:31
400-249617-4	P57-ROX-011124	Water	01/11/24 10:50	01/12/24 09:31
400-249617-5	P57-ROX-011124-DUP	Water	01/11/24 10:50	01/12/24 09:31
400-249617-6	T12-ROX-011124	Water	01/11/24 11:55	01/12/24 09:31

Detection Summary

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

Job ID: 400-249617-1

Client Sample ID: TB-ROX-011124-8260-B — Lab Sample ID: 400-249617-1

No Detections.

Client Sample ID: TB-ROX-011124-8011-B — Lab Sample ID: 400-249617-2

No Detections.

Client Sample ID: P93C-ROX-011124 — Lab Sample ID: 400-249617-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene - DL	490000		2000	1000	ug/L	2000		8260D	Total/NA
Acenaphthene	0.12	J	0.21	0.10	ug/L	1		8270E SIM	Total/NA
Acenaphthylene	0.33		0.21	0.046	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	0.095	J	0.21	0.069	ug/L	1		8270E SIM	Total/NA
Phenol	63		10	4.4	ug/L	1		8270E	Total/NA

Client Sample ID: P57-ROX-011124 — Lab Sample ID: 400-249617-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	37		1.0	0.50	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	3.1	J	25	2.6	ug/L	1		8260D	Total/NA
Ethylbenzene	0.60	J	1.0	0.50	ug/L	1		8260D	Total/NA
Isopropylbenzene	20		1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	0.67	J	5.0	0.63	ug/L	1		8260D	Total/NA
n-Butylbenzene	2.1		1.0	0.76	ug/L	1		8260D	Total/NA
N-Propylbenzene	21		1.0	0.69	ug/L	1		8260D	Total/NA
sec-Butylbenzene	4.0		1.0	0.70	ug/L	1		8260D	Total/NA
tert-Butylbenzene	5.1		1.0	0.63	ug/L	1		8260D	Total/NA
Toluene	3.1		1.0	0.90	ug/L	1		8260D	Total/NA
Acenaphthene	0.32		0.21	0.10	ug/L	1		8270E SIM	Total/NA
Anthracene	0.17	J	0.21	0.048	ug/L	1		8270E SIM	Total/NA
Fluorene	0.54		0.21	0.091	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.40		0.21	0.093	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	27		0.21	0.082	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	22		0.21	0.068	ug/L	1		8270E SIM	Total/NA

Client Sample ID: P57-ROX-011124-DUP — Lab Sample ID: 400-249617-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	41		1.0	0.50	ug/L	1		8260D	Total/NA
Ethylbenzene	0.79	J	1.0	0.50	ug/L	1		8260D	Total/NA
Isopropylbenzene	25		1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	0.82	J	5.0	0.63	ug/L	1		8260D	Total/NA
n-Butylbenzene	3.1		1.0	0.76	ug/L	1		8260D	Total/NA
N-Propylbenzene	29		1.0	0.69	ug/L	1		8260D	Total/NA
sec-Butylbenzene	5.7		1.0	0.70	ug/L	1		8260D	Total/NA
tert-Butylbenzene	6.4		1.0	0.63	ug/L	1		8260D	Total/NA
Toluene	3.5		1.0	0.90	ug/L	1		8260D	Total/NA
Acenaphthene	0.32		0.21	0.10	ug/L	1		8270E SIM	Total/NA
Anthracene	0.16	J	0.21	0.049	ug/L	1		8270E SIM	Total/NA
Fluorene	0.51		0.21	0.093	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.37		0.21	0.094	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	25		0.21	0.084	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	19		0.21	0.069	ug/L	1		8270E SIM	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: 400-249617-1

Client Sample ID: T12-ROX-011124

Lab Sample ID: 400-249617-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1300		10	5.0	ug/L	10		8260D	Total/NA
Ethylbenzene	6.9	J	10	5.0	ug/L	10		8260D	Total/NA
Isopropylbenzene	11		10	5.3	ug/L	10		8260D	Total/NA
m-Xylene & p-Xylene	31	J	50	6.3	ug/L	10		8260D	Total/NA
N-Propylbenzene	10		10	6.9	ug/L	10		8260D	Total/NA
Toluene	24		10	9.0	ug/L	10		8260D	Total/NA
Xylenes, Total	34	J	100	16	ug/L	10		8260D	Total/NA
Acenaphthene	0.37		0.20	0.10	ug/L	1		8270E SIM	Total/NA
Anthracene	0.15	J	0.20	0.047	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.037	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Fluorene	0.28		0.20	0.090	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.52		0.20	0.091	ug/L	1		8270E SIM	Total/NA
Pyrene	0.039	J	0.20	0.039	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	16		0.20	0.080	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	24		0.20	0.066	ug/L	1		8270E SIM	Total/NA
Phenol	30		10	4.4	ug/L	1		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-249617-1

Client Sample ID: TB-ROX-011124-8260-B
Date Collected: 01/11/24 12:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249617-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/17/24 14:53	1
Acrolein	ND		20	3.3	ug/L			01/17/24 14:53	1
Acrylonitrile	ND		10	2.8	ug/L			01/17/24 14:53	1
Benzene	ND		1.0	0.50	ug/L			01/17/24 14:53	1
Bromobenzene	ND		1.0	0.54	ug/L			01/17/24 14:53	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/17/24 14:53	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/17/24 14:53	1
Bromoform	ND		5.0	0.25	ug/L			01/17/24 14:53	1
Bromomethane	ND		1.0	0.98	ug/L			01/17/24 14:53	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/17/24 14:53	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/17/24 14:53	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/17/24 14:53	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/17/24 14:53	1
Chloroethane	ND		1.0	0.76	ug/L			01/17/24 14:53	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/17/24 14:53	1
Chloroform	ND		1.0	0.90	ug/L			01/17/24 14:53	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/17/24 14:53	1
Chloromethane	ND		1.0	0.90	ug/L			01/17/24 14:53	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/17/24 14:53	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/17/24 14:53	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/17/24 14:53	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/17/24 14:53	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/17/24 14:53	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/17/24 14:53	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/17/24 14:53	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/17/24 14:53	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/17/24 14:53	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 14:53	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 14:53	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 14:53	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 14:53	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/17/24 14:53	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/17/24 14:53	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/17/24 14:53	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/17/24 14:53	1
2-Hexanone	ND		25	1.4	ug/L			01/17/24 14:53	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/17/24 14:53	1
Methylene bromide	ND		5.0	0.22	ug/L			01/17/24 14:53	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/17/24 14:53	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/17/24 14:53	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/17/24 14:53	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/17/24 14:53	1
Naphthalene	ND		5.0	3.0	ug/L			01/17/24 14:53	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/17/24 14:53	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/17/24 14:53	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/17/24 14:53	1
o-Xylene	ND		5.0	0.60	ug/L			01/17/24 14:53	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/17/24 14:53	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/17/24 14:53	1

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

Job ID: 400-249617-1

Client Sample ID: TB-ROX-011124-8260-B
Date Collected: 01/11/24 12:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249617-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/17/24 14:53	1
Styrene	ND		1.0	1.0	ug/L			01/17/24 14:53	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/17/24 14:53	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/17/24 14:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/17/24 14:53	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/17/24 14:53	1
Toluene	ND		1.0	0.90	ug/L			01/17/24 14:53	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 14:53	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/17/24 14:53	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/17/24 14:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/17/24 14:53	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/17/24 14:53	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/17/24 14:53	1
Trichloroethene	ND		1.0	0.15	ug/L			01/17/24 14:53	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/17/24 14:53	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/17/24 14:53	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/17/24 14:53	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/17/24 14:53	1
Vinyl acetate	ND		25	0.93	ug/L			01/17/24 14:53	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/17/24 14:53	1
Xylenes, Total	ND		10	1.6	ug/L			01/17/24 14:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*72 - 130*		*01/17/24 14:53*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*01/17/24 14:53*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*01/17/24 14:53*	*1*

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

Job ID: 400-249617-1

Client Sample ID: TB-ROX-011124-8011-B
Date Collected: 01/11/24 12:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249617-2
Matrix: Water

Method: EPA 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		01/17/24 10:31	01/17/24 18:19	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/17/24 10:31	01/17/24 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*124*		*51 - 149*	*01/17/24 10:31*	*01/17/24 18:19*	*1*

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

Job ID: 400-249617-1

Client Sample ID: P93C-ROX-011124
Date Collected: 01/11/24 09:45
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249617-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		13000	5000	ug/L			01/17/24 20:35	500
Acrolein	ND		10000	1700	ug/L			01/17/24 20:35	500
Acrylonitrile	ND		5000	1400	ug/L			01/17/24 20:35	500
Bromobenzene	ND		500	270	ug/L			01/17/24 20:35	500
Bromochloromethane	ND		500	110	ug/L			01/17/24 20:35	500
Bromodichloromethane	ND		500	250	ug/L			01/17/24 20:35	500
Bromoform	ND		2500	130	ug/L			01/17/24 20:35	500
Bromomethane	ND		500	490	ug/L			01/17/24 20:35	500
2-Butanone (MEK)	ND		13000	1300	ug/L			01/17/24 20:35	500
Carbon disulfide	ND		500	250	ug/L			01/17/24 20:35	500
Carbon tetrachloride	ND		500	95	ug/L			01/17/24 20:35	500
Chlorobenzene	ND		500	450	ug/L			01/17/24 20:35	500
Chloroethane	ND		500	380	ug/L			01/17/24 20:35	500
2-Chloroethyl vinyl ether	ND		2500	1000	ug/L			01/17/24 20:35	500
Chloroform	ND		500	450	ug/L			01/17/24 20:35	500
1-Chlorohexane	ND		500	160	ug/L			01/17/24 20:35	500
Chloromethane	ND		500	450	ug/L			01/17/24 20:35	500
cis-1,2-Dichloroethene	ND		500	100	ug/L			01/17/24 20:35	500
cis-1,3-Dichloropropene	ND		2500	250	ug/L			01/17/24 20:35	500
Dibromochloromethane	ND		500	120	ug/L			01/17/24 20:35	500
1,2-Dichlorobenzene	ND		500	250	ug/L			01/17/24 20:35	500
1,3-Dichlorobenzene	ND		500	270	ug/L			01/17/24 20:35	500
1,4-Dichlorobenzene	ND		500	320	ug/L			01/17/24 20:35	500
Dichlorodifluoromethane	ND		500	430	ug/L			01/17/24 20:35	500
1,1-Dichloroethane	ND		500	250	ug/L			01/17/24 20:35	500
1,2-Dichloroethane	ND		500	95	ug/L			01/17/24 20:35	500
1,1-Dichloroethene	ND		500	250	ug/L			01/17/24 20:35	500
1,2-Dichloropropane	ND		500	250	ug/L			01/17/24 20:35	500
1,3-Dichloropropane	ND		500	250	ug/L			01/17/24 20:35	500
2,2-Dichloropropane	ND		500	250	ug/L			01/17/24 20:35	500
1,1-Dichloropropene	ND		500	250	ug/L			01/17/24 20:35	500
Ethylbenzene	ND		500	250	ug/L			01/17/24 20:35	500
Ethyl methacrylate	ND		500	300	ug/L			01/17/24 20:35	500
Hexachlorobutadiene	ND		2500	450	ug/L			01/17/24 20:35	500
2-Hexanone	ND		13000	700	ug/L			01/17/24 20:35	500
Isopropylbenzene	ND		500	270	ug/L			01/17/24 20:35	500
Methylene bromide	ND		2500	110	ug/L			01/17/24 20:35	500
Methylene Chloride	ND		2500	1500	ug/L			01/17/24 20:35	500
4-Methyl-2-pentanone (MIBK)	ND		13000	900	ug/L			01/17/24 20:35	500
Methyl tert-butyl ether	ND		500	110	ug/L			01/17/24 20:35	500
m-Xylene & p-Xylene	ND		2500	320	ug/L			01/17/24 20:35	500
Naphthalene	ND		2500	1500	ug/L			01/17/24 20:35	500
n-Butylbenzene	ND		500	380	ug/L			01/17/24 20:35	500
N-Propylbenzene	ND		500	350	ug/L			01/17/24 20:35	500
o-Chlorotoluene	ND		500	290	ug/L			01/17/24 20:35	500
o-Xylene	ND		2500	300	ug/L			01/17/24 20:35	500
p-Chlorotoluene	ND		500	280	ug/L			01/17/24 20:35	500
p-Isopropyltoluene	ND		500	360	ug/L			01/17/24 20:35	500
sec-Butylbenzene	ND		500	350	ug/L			01/17/24 20:35	500

Client Sample ID: P93C-ROX-011124
Date Collected: 01/11/24 09:45
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249617-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		500	500	ug/L			01/17/24 20:35	500
tert-Butylbenzene	ND		500	320	ug/L			01/17/24 20:35	500
1,1,1,2-Tetrachloroethane	ND		500	80	ug/L			01/17/24 20:35	500
1,1,2,2-Tetrachloroethane	ND		500	250	ug/L			01/17/24 20:35	500
Tetrachloroethene	ND		500	450	ug/L			01/17/24 20:35	500
Toluene	ND		500	450	ug/L			01/17/24 20:35	500
trans-1,2-Dichloroethene	ND		500	250	ug/L			01/17/24 20:35	500
trans-1,3-Dichloropropene	ND		2500	100	ug/L			01/17/24 20:35	500
1,2,3-Trichlorobenzene	ND		500	450	ug/L			01/17/24 20:35	500
1,2,4-Trichlorobenzene	ND		500	410	ug/L			01/17/24 20:35	500
1,1,1-Trichloroethane	ND		500	90	ug/L			01/17/24 20:35	500
1,1,2-Trichloroethane	ND		2500	110	ug/L			01/17/24 20:35	500
Trichloroethene	ND		500	75	ug/L			01/17/24 20:35	500
Trichlorofluoromethane	ND		500	260	ug/L			01/17/24 20:35	500
1,2,3-Trichloropropane	ND		2500	420	ug/L			01/17/24 20:35	500
1,2,4-Trimethylbenzene	ND		500	410	ug/L			01/17/24 20:35	500
1,3,5-Trimethylbenzene	ND		500	280	ug/L			01/17/24 20:35	500
Vinyl acetate	ND		13000	470	ug/L			01/17/24 20:35	500
Vinyl chloride	ND		500	250	ug/L			01/17/24 20:35	500
Xylenes, Total	ND		5000	800	ug/L			01/17/24 20:35	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*72 - 130*		*01/17/24 20:35*	*500*
Dibromofluoromethane	*97*		*75 - 126*		*01/17/24 20:35*	*500*
Toluene-d8 (Surr)	*97*		*64 - 132*		*01/17/24 20:35*	*500*

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**490000**		2000	1000	ug/L			01/18/24 16:29	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*72 - 130*		*01/18/24 16:29*	*2000*
Dibromofluoromethane	*101*		*75 - 126*		*01/18/24 16:29*	*2000*
Toluene-d8 (Surr)	*96*		*64 - 132*		*01/18/24 16:29*	*2000*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.12**	**J**	0.21	0.10	ug/L		01/17/24 11:35	01/17/24 18:24	1
Acenaphthylene	**0.33**		0.21	0.046	ug/L		01/17/24 11:35	01/17/24 18:24	1
Anthracene	ND		0.21	0.049	ug/L		01/17/24 11:35	01/17/24 18:24	1
Benzo[a]anthracene	ND		0.21	0.036	ug/L		01/17/24 11:35	01/17/24 18:24	1
Benzo[a]pyrene	ND		0.21	0.067	ug/L		01/17/24 11:35	01/17/24 18:24	1
Benzo[b]fluoranthene	ND	*+	0.21	0.039	ug/L		01/17/24 11:35	01/17/24 18:24	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		01/17/24 11:35	01/17/24 18:24	1
Benzo[k]fluoranthene	ND		0.21	0.065	ug/L		01/17/24 11:35	01/17/24 18:24	1
Chrysene	ND		0.21	0.034	ug/L		01/17/24 11:35	01/17/24 18:24	1
Dibenz(a,h)anthracene	ND		0.21	0.050	ug/L		01/17/24 11:35	01/17/24 18:24	1
Fluoranthene	ND		0.21	0.036	ug/L		01/17/24 11:35	01/17/24 18:24	1
Fluorene	ND		0.21	0.093	ug/L		01/17/24 11:35	01/17/24 18:24	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.036	ug/L		01/17/24 11:35	01/17/24 18:24	1

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

Job ID: 400-249617-1

Client Sample ID: P93C-ROX-011124
Date Collected: 01/11/24 09:45
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249617-3
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		0.21	0.094	ug/L		01/17/24 11:35	01/17/24 18:24	1
Pyrene	ND		0.21	0.041	ug/L		01/17/24 11:35	01/17/24 18:24	1
1-Methylnaphthalene	ND		0.21	0.084	ug/L		01/17/24 11:35	01/17/24 18:24	1
2-Methylnaphthalene	**0.095**	**J**	0.21	0.069	ug/L		01/17/24 11:35	01/17/24 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*126*		*18 - 147*	*01/17/24 11:35*	*01/17/24 18:24*	*1*
2-Fluorobiphenyl	*49*		*15 - 128*	*01/17/24 11:35*	*01/17/24 18:24*	*1*
Nitrobenzene-d5	*54*		*10 - 144*	*01/17/24 11:35*	*01/17/24 18:24*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	10	9.1	ug/L		01/15/24 09:26	01/16/24 15:10	1
Benzenethiol	ND		10	10	ug/L		01/15/24 09:26	01/16/24 15:10	1
Benzoic acid	ND	*+	31	25	ug/L		01/15/24 09:26	01/16/24 15:10	1
Benzyl alcohol	ND		10	7.6	ug/L		01/15/24 09:26	01/16/24 15:10	1
Bis(2-chloroethoxy)methane	ND		10	4.8	ug/L		01/15/24 09:26	01/16/24 15:10	1
Bis(2-chloroethyl)ether	ND		10	4.1	ug/L		01/15/24 09:26	01/16/24 15:10	1
bis (2-chloroisopropyl) ether	ND		10	1.9	ug/L		01/15/24 09:26	01/16/24 15:10	1
Bis(2-ethylhexyl) phthalate	ND		10	9.3	ug/L		01/15/24 09:26	01/16/24 15:10	1
4-Bromophenyl phenyl ether	ND		10	9.0	ug/L		01/15/24 09:26	01/16/24 15:10	1
Butyl benzyl phthalate	ND		10	6.1	ug/L		01/15/24 09:26	01/16/24 15:10	1
4-Chloroaniline	ND		10	4.9	ug/L		01/15/24 09:26	01/16/24 15:10	1
4-Chloro-3-methylphenol	ND		10	5.5	ug/L		01/15/24 09:26	01/16/24 15:10	1
2-Chloronaphthalene	ND		10	4.0	ug/L		01/15/24 09:26	01/16/24 15:10	1
2-Chlorophenol	ND		10	4.3	ug/L		01/15/24 09:26	01/16/24 15:10	1
4-Chlorophenyl phenyl ether	ND		10	3.9	ug/L		01/15/24 09:26	01/16/24 15:10	1
Dibenz[a,h]acridine	ND		10	2.9	ug/L		01/15/24 09:26	01/16/24 15:10	1
Dibenzofuran	ND		10	4.2	ug/L		01/15/24 09:26	01/16/24 15:10	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/15/24 09:26	01/16/24 15:10	1
2,4-Dichlorophenol	ND		10	4.5	ug/L		01/15/24 09:26	01/16/24 15:10	1
Diethyl phthalate	ND		10	4.6	ug/L		01/15/24 09:26	01/16/24 15:10	1
2,4-Dimethylphenol	ND		10	5.4	ug/L		01/15/24 09:26	01/16/24 15:10	1
Dimethyl phthalate	ND		10	4.4	ug/L		01/15/24 09:26	01/16/24 15:10	1
Di-n-butyl phthalate	ND		10	4.8	ug/L		01/15/24 09:26	01/16/24 15:10	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/15/24 09:26	01/16/24 15:10	1
2,4-Dinitrophenol	ND		31	4.8	ug/L		01/15/24 09:26	01/16/24 15:10	1
2,4-Dinitrotoluene	ND		10	5.3	ug/L		01/15/24 09:26	01/16/24 15:10	1
2,6-Dinitrotoluene	ND		10	4.1	ug/L		01/15/24 09:26	01/16/24 15:10	1
Di-n-octyl phthalate	ND		10	6.3	ug/L		01/15/24 09:26	01/16/24 15:10	1
1,4-Dioxane	ND		10	4.5	ug/L		01/15/24 09:26	01/16/24 15:10	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.4	ug/L		01/15/24 09:26	01/16/24 15:10	1
Hexachlorobenzene	ND		10	10	ug/L		01/15/24 09:26	01/16/24 15:10	1
Hexachlorocyclopentadiene	ND		21	4.7	ug/L		01/15/24 09:26	01/16/24 15:10	1
Hexachloroethane	ND		10	5.4	ug/L		01/15/24 09:26	01/16/24 15:10	1
Indene	ND		10	3.8	ug/L		01/15/24 09:26	01/16/24 15:10	1
Isophorone	ND		10	5.4	ug/L		01/15/24 09:26	01/16/24 15:10	1
2-Methylphenol	ND		10	3.3	ug/L		01/15/24 09:26	01/16/24 15:10	1
3 & 4 Methylphenol	ND		21	4.8	ug/L		01/15/24 09:26	01/16/24 15:10	1

Client Sample ID: P93C-ROX-011124
Date Collected: 01/11/24 09:45
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249617-3
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	5.2	ug/L		01/15/24 09:26	01/16/24 15:10	1
3-Nitroaniline	ND		10	4.9	ug/L		01/15/24 09:26	01/16/24 15:10	1
4-Nitroaniline	ND		10	4.3	ug/L		01/15/24 09:26	01/16/24 15:10	1
Nitrobenzene	ND		10	4.9	ug/L		01/15/24 09:26	01/16/24 15:10	1
2-Nitrophenol	ND		10	4.8	ug/L		01/15/24 09:26	01/16/24 15:10	1
4-Nitrophenol	ND		10	3.4	ug/L		01/15/24 09:26	01/16/24 15:10	1
N-Nitrosodimethylamine	ND		10	2.3	ug/L		01/15/24 09:26	01/16/24 15:10	1
N-Nitrosodi-n-propylamine	ND		10	2.6	ug/L		01/15/24 09:26	01/16/24 15:10	1
N-Nitrosodiphenylamine	ND		10	3.9	ug/L		01/15/24 09:26	01/16/24 15:10	1
Pentachlorophenol	ND		21	12	ug/L		01/15/24 09:26	01/16/24 15:10	1
Phenol	**63**		10	4.4	ug/L		01/15/24 09:26	01/16/24 15:10	1
Pyridine	ND	*1	10	10	ug/L		01/15/24 09:26	01/16/24 15:10	1
Quinoline	ND		10	2.5	ug/L		01/15/24 09:26	01/16/24 15:10	1
2,4,5-Trichlorophenol	ND		10	4.2	ug/L		01/15/24 09:26	01/16/24 15:10	1
2,4,6-Trichlorophenol	ND		10	3.7	ug/L		01/15/24 09:26	01/16/24 15:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*21 - 114*	*01/15/24 09:26*	*01/16/24 15:10*	*1*
2-Fluorophenol	*44*		*10 - 105*	*01/15/24 09:26*	*01/16/24 15:10*	*1*
Nitrobenzene-d5	*69*		*16 - 127*	*01/15/24 09:26*	*01/16/24 15:10*	*1*
Phenol-d5	*39*		*10 - 129*	*01/15/24 09:26*	*01/16/24 15:10*	*1*
Terphenyl-d14	*98*		*13 - 150*	*01/15/24 09:26*	*01/16/24 15:10*	*1*
2,4,6-Tribromophenol	*103*		*10 - 150*	*01/15/24 09:26*	*01/16/24 15:10*	*1*

Method: EPA 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	0.016	ug/L		01/17/24 10:31	01/17/24 18:40	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		01/17/24 10:31	01/17/24 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*51 - 149*	*01/17/24 10:31*	*01/17/24 18:40*	*1*

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

Job ID: 400-249617-1

Client Sample ID: P57-ROX-011124
Date Collected: 01/11/24 10:50
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249617-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/17/24 17:55	1
Acrolein	ND		20	3.3	ug/L			01/17/24 17:55	1
Acrylonitrile	ND		10	2.8	ug/L			01/17/24 17:55	1
Benzene	**37**		1.0	0.50	ug/L			01/17/24 17:55	1
Bromobenzene	ND		1.0	0.54	ug/L			01/17/24 17:55	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/17/24 17:55	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/17/24 17:55	1
Bromoform	ND		5.0	0.25	ug/L			01/17/24 17:55	1
Bromomethane	ND		1.0	0.98	ug/L			01/17/24 17:55	1
2-Butanone (MEK)	**3.1**	**J**	25	2.6	ug/L			01/17/24 17:55	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/17/24 17:55	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/17/24 17:55	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/17/24 17:55	1
Chloroethane	ND		1.0	0.76	ug/L			01/17/24 17:55	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/17/24 17:55	1
Chloroform	ND		1.0	0.90	ug/L			01/17/24 17:55	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/17/24 17:55	1
Chloromethane	ND		1.0	0.90	ug/L			01/17/24 17:55	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/17/24 17:55	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/17/24 17:55	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/17/24 17:55	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/17/24 17:55	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/17/24 17:55	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/17/24 17:55	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/17/24 17:55	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/17/24 17:55	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/17/24 17:55	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 17:55	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 17:55	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 17:55	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 17:55	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/17/24 17:55	1
Ethylbenzene	**0.60**	**J**	1.0	0.50	ug/L			01/17/24 17:55	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/17/24 17:55	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/17/24 17:55	1
2-Hexanone	ND		25	1.4	ug/L			01/17/24 17:55	1
Isopropylbenzene	**20**		1.0	0.53	ug/L			01/17/24 17:55	1
Methylene bromide	ND		5.0	0.22	ug/L			01/17/24 17:55	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/17/24 17:55	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/17/24 17:55	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/17/24 17:55	1
m-Xylene & p-Xylene	**0.67**	**J**	5.0	0.63	ug/L			01/17/24 17:55	1
Naphthalene	ND		5.0	3.0	ug/L			01/17/24 17:55	1
n-Butylbenzene	**2.1**		1.0	0.76	ug/L			01/17/24 17:55	1
N-Propylbenzene	**21**		1.0	0.69	ug/L			01/17/24 17:55	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/17/24 17:55	1
o-Xylene	ND		5.0	0.60	ug/L			01/17/24 17:55	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/17/24 17:55	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/17/24 17:55	1

Client Sample ID: P57-ROX-011124
Date Collected: 01/11/24 10:50
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249617-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**4.0**		1.0	0.70	ug/L			01/17/24 17:55	1
Styrene	ND		1.0	1.0	ug/L			01/17/24 17:55	1
tert-Butylbenzene	**5.1**		1.0	0.63	ug/L			01/17/24 17:55	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/17/24 17:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/17/24 17:55	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/17/24 17:55	1
Toluene	**3.1**		1.0	0.90	ug/L			01/17/24 17:55	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 17:55	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/17/24 17:55	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/17/24 17:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/17/24 17:55	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/17/24 17:55	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/17/24 17:55	1
Trichloroethene	ND		1.0	0.15	ug/L			01/17/24 17:55	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/17/24 17:55	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/17/24 17:55	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/17/24 17:55	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/17/24 17:55	1
Vinyl acetate	ND		25	0.93	ug/L			01/17/24 17:55	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/17/24 17:55	1
Xylenes, Total	ND		10	1.6	ug/L			01/17/24 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*72 - 130*		*01/17/24 17:55*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*01/17/24 17:55*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*01/17/24 17:55*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.32**		0.21	0.10	ug/L		01/17/24 11:35	01/17/24 18:45	1
Acenaphthylene	ND		0.21	0.045	ug/L		01/17/24 11:35	01/17/24 18:45	1
Anthracene	**0.17**	**J**	0.21	0.048	ug/L		01/17/24 11:35	01/17/24 18:45	1
Benzo[a]anthracene	ND		0.21	0.035	ug/L		01/17/24 11:35	01/17/24 18:45	1
Benzo[a]pyrene	ND		0.21	0.066	ug/L		01/17/24 11:35	01/17/24 18:45	1
Benzo[b]fluoranthene	ND	*+	0.21	0.038	ug/L		01/17/24 11:35	01/17/24 18:45	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		01/17/24 11:35	01/17/24 18:45	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		01/17/24 11:35	01/17/24 18:45	1
Chrysene	ND		0.21	0.034	ug/L		01/17/24 11:35	01/17/24 18:45	1
Dibenz(a,h)anthracene	ND		0.21	0.049	ug/L		01/17/24 11:35	01/17/24 18:45	1
Fluoranthene	ND		0.21	0.035	ug/L		01/17/24 11:35	01/17/24 18:45	1
Fluorene	**0.54**		0.21	0.091	ug/L		01/17/24 11:35	01/17/24 18:45	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.035	ug/L		01/17/24 11:35	01/17/24 18:45	1
Phenanthrene	**0.40**		0.21	0.093	ug/L		01/17/24 11:35	01/17/24 18:45	1
Pyrene	ND		0.21	0.040	ug/L		01/17/24 11:35	01/17/24 18:45	1
1-Methylnaphthalene	**27**		0.21	0.082	ug/L		01/17/24 11:35	01/17/24 18:45	1
2-Methylnaphthalene	**22**		0.21	0.068	ug/L		01/17/24 11:35	01/17/24 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*136*		*18 - 147*	*01/17/24 11:35*	*01/17/24 18:45*	*1*
2-Fluorobiphenyl	*65*		*15 - 128*	*01/17/24 11:35*	*01/17/24 18:45*	*1*

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

Job ID: 400-249617-1

Client Sample ID: P57-ROX-011124
Date Collected: 01/11/24 10:50
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249617-4
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*79*		*10 - 144*	*01/17/24 11:35*	*01/17/24 18:45*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	11	9.4	ug/L		01/15/24 09:26	01/16/24 15:36	1
Benzenethiol	ND		11	11	ug/L		01/15/24 09:26	01/16/24 15:36	1
Benzoic acid	ND	*+	32	26	ug/L		01/15/24 09:26	01/16/24 15:36	1
Benzyl alcohol	ND		11	7.9	ug/L		01/15/24 09:26	01/16/24 15:36	1
Bis(2-chloroethoxy)methane	ND		11	4.9	ug/L		01/15/24 09:26	01/16/24 15:36	1
Bis(2-chloroethyl)ether	ND		11	4.2	ug/L		01/15/24 09:26	01/16/24 15:36	1
bis (2-chloroisopropyl) ether	ND		11	1.9	ug/L		01/15/24 09:26	01/16/24 15:36	1
Bis(2-ethylhexyl) phthalate	ND		11	9.6	ug/L		01/15/24 09:26	01/16/24 15:36	1
4-Bromophenyl phenyl ether	ND		11	9.3	ug/L		01/15/24 09:26	01/16/24 15:36	1
Butyl benzyl phthalate	ND		11	6.2	ug/L		01/15/24 09:26	01/16/24 15:36	1
4-Chloroaniline	ND		11	5.1	ug/L		01/15/24 09:26	01/16/24 15:36	1
4-Chloro-3-methylphenol	ND		11	5.7	ug/L		01/15/24 09:26	01/16/24 15:36	1
2-Chloronaphthalene	ND		11	4.1	ug/L		01/15/24 09:26	01/16/24 15:36	1
2-Chlorophenol	ND		11	4.4	ug/L		01/15/24 09:26	01/16/24 15:36	1
4-Chlorophenyl phenyl ether	ND		11	4.0	ug/L		01/15/24 09:26	01/16/24 15:36	1
Dibenz[a,h]acridine	ND		11	3.0	ug/L		01/15/24 09:26	01/16/24 15:36	1
Dibenzofuran	ND		11	4.3	ug/L		01/15/24 09:26	01/16/24 15:36	1
3,3'-Dichlorobenzidine	ND		12	12	ug/L		01/15/24 09:26	01/16/24 15:36	1
2,4-Dichlorophenol	ND		11	4.6	ug/L		01/15/24 09:26	01/16/24 15:36	1
Diethyl phthalate	ND		11	4.7	ug/L		01/15/24 09:26	01/16/24 15:36	1
2,4-Dimethylphenol	ND		11	5.6	ug/L		01/15/24 09:26	01/16/24 15:36	1
Dimethyl phthalate	ND		11	4.5	ug/L		01/15/24 09:26	01/16/24 15:36	1
Di-n-butyl phthalate	ND		11	4.9	ug/L		01/15/24 09:26	01/16/24 15:36	1
4,6-Dinitro-ortho-cresol	ND		11	11	ug/L		01/15/24 09:26	01/16/24 15:36	1
2,4-Dinitrophenol	ND		32	4.9	ug/L		01/15/24 09:26	01/16/24 15:36	1
2,4-Dinitrotoluene	ND		11	5.5	ug/L		01/15/24 09:26	01/16/24 15:36	1
2,6-Dinitrotoluene	ND		11	4.2	ug/L		01/15/24 09:26	01/16/24 15:36	1
Di-n-octyl phthalate	ND		11	6.5	ug/L		01/15/24 09:26	01/16/24 15:36	1
1,4-Dioxane	ND		11	4.6	ug/L		01/15/24 09:26	01/16/24 15:36	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	3.5	ug/L		01/15/24 09:26	01/16/24 15:36	1
Hexachlorobenzene	ND		11	10	ug/L		01/15/24 09:26	01/16/24 15:36	1
Hexachlorocyclopentadiene	ND		22	4.8	ug/L		01/15/24 09:26	01/16/24 15:36	1
Hexachloroethane	ND		11	5.6	ug/L		01/15/24 09:26	01/16/24 15:36	1
Indene	ND		11	3.9	ug/L		01/15/24 09:26	01/16/24 15:36	1
Isophorone	ND		11	5.6	ug/L		01/15/24 09:26	01/16/24 15:36	1
2-Methylphenol	ND		11	3.4	ug/L		01/15/24 09:26	01/16/24 15:36	1
3 & 4 Methylphenol	ND		22	4.9	ug/L		01/15/24 09:26	01/16/24 15:36	1
2-Nitroaniline	ND		11	5.4	ug/L		01/15/24 09:26	01/16/24 15:36	1
3-Nitroaniline	ND		11	5.1	ug/L		01/15/24 09:26	01/16/24 15:36	1
4-Nitroaniline	ND		11	4.4	ug/L		01/15/24 09:26	01/16/24 15:36	1
Nitrobenzene	ND		11	5.1	ug/L		01/15/24 09:26	01/16/24 15:36	1
2-Nitrophenol	ND		11	4.9	ug/L		01/15/24 09:26	01/16/24 15:36	1
4-Nitrophenol	ND		11	3.5	ug/L		01/15/24 09:26	01/16/24 15:36	1
N-Nitrosodimethylamine	ND		11	2.4	ug/L		01/15/24 09:26	01/16/24 15:36	1

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

Job ID: 400-249617-1

Client Sample ID: P57-ROX-011124
Date Collected: 01/11/24 10:50
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249617-4
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		11	2.7	ug/L		01/15/24 09:26	01/16/24 15:36	1
N-Nitrosodiphenylamine	ND		11	4.0	ug/L		01/15/24 09:26	01/16/24 15:36	1
Pentachlorophenol	ND		22	13	ug/L		01/15/24 09:26	01/16/24 15:36	1
Phenol	ND		11	4.5	ug/L		01/15/24 09:26	01/16/24 15:36	1
Pyridine	ND	*1	11	11	ug/L		01/15/24 09:26	01/16/24 15:36	1
Quinoline	ND		11	2.6	ug/L		01/15/24 09:26	01/16/24 15:36	1
2,4,5-Trichlorophenol	ND		11	4.3	ug/L		01/15/24 09:26	01/16/24 15:36	1
2,4,6-Trichlorophenol	ND		11	3.8	ug/L		01/15/24 09:26	01/16/24 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*21 - 114*	*01/15/24 09:26*	*01/16/24 15:36*	*1*
2-Fluorophenol	*46*		*10 - 105*	*01/15/24 09:26*	*01/16/24 15:36*	*1*
Nitrobenzene-d5	*67*		*16 - 127*	*01/15/24 09:26*	*01/16/24 15:36*	*1*
Phenol-d5	*36*		*10 - 129*	*01/15/24 09:26*	*01/16/24 15:36*	*1*
Terphenyl-d14	*96*		*13 - 150*	*01/15/24 09:26*	*01/16/24 15:36*	*1*
2,4,6-Tribromophenol	*94*		*10 - 150*	*01/15/24 09:26*	*01/16/24 15:36*	*1*

Method: EPA 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		01/17/24 10:31	01/17/24 19:01	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/17/24 10:31	01/17/24 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*51 - 149*	*01/17/24 10:31*	*01/17/24 19:01*	*1*

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

Job ID: 400-249617-1

Client Sample ID: P57-ROX-011124-DUP

Date Collected: 01/11/24 10:50
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249617-5

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/17/24 18:18	1
Acrolein	ND		20	3.3	ug/L			01/17/24 18:18	1
Acrylonitrile	ND		10	2.8	ug/L			01/17/24 18:18	1
Benzene	**41**		1.0	0.50	ug/L			01/17/24 18:18	1
Bromobenzene	ND		1.0	0.54	ug/L			01/17/24 18:18	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/17/24 18:18	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/17/24 18:18	1
Bromoform	ND		5.0	0.25	ug/L			01/17/24 18:18	1
Bromomethane	ND		1.0	0.98	ug/L			01/17/24 18:18	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/17/24 18:18	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/17/24 18:18	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/17/24 18:18	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/17/24 18:18	1
Chloroethane	ND		1.0	0.76	ug/L			01/17/24 18:18	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/17/24 18:18	1
Chloroform	ND		1.0	0.90	ug/L			01/17/24 18:18	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/17/24 18:18	1
Chloromethane	ND		1.0	0.90	ug/L			01/17/24 18:18	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/17/24 18:18	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/17/24 18:18	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/17/24 18:18	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/17/24 18:18	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/17/24 18:18	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/17/24 18:18	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/17/24 18:18	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/17/24 18:18	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/17/24 18:18	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 18:18	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 18:18	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 18:18	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 18:18	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/17/24 18:18	1
Ethylbenzene	**0.79**	**J**	1.0	0.50	ug/L			01/17/24 18:18	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/17/24 18:18	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/17/24 18:18	1
2-Hexanone	ND		25	1.4	ug/L			01/17/24 18:18	1
Isopropylbenzene	**25**		1.0	0.53	ug/L			01/17/24 18:18	1
Methylene bromide	ND		5.0	0.22	ug/L			01/17/24 18:18	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/17/24 18:18	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/17/24 18:18	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/17/24 18:18	1
m-Xylene & p-Xylene	**0.82**	**J**	5.0	0.63	ug/L			01/17/24 18:18	1
Naphthalene	ND		5.0	3.0	ug/L			01/17/24 18:18	1
n-Butylbenzene	**3.1**		1.0	0.76	ug/L			01/17/24 18:18	1
N-Propylbenzene	**29**		1.0	0.69	ug/L			01/17/24 18:18	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/17/24 18:18	1
o-Xylene	ND		5.0	0.60	ug/L			01/17/24 18:18	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/17/24 18:18	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/17/24 18:18	1

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

Job ID: 400-249617-1

Client Sample ID: P57-ROX-011124-DUP

Date Collected: 01/11/24 10:50
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249617-5

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**5.7**		1.0	0.70	ug/L			01/17/24 18:18	1
Styrene	ND		1.0	1.0	ug/L			01/17/24 18:18	1
tert-Butylbenzene	**6.4**		1.0	0.63	ug/L			01/17/24 18:18	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/17/24 18:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/17/24 18:18	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/17/24 18:18	1
Toluene	**3.5**		1.0	0.90	ug/L			01/17/24 18:18	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 18:18	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/17/24 18:18	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/17/24 18:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/17/24 18:18	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/17/24 18:18	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/17/24 18:18	1
Trichloroethene	ND		1.0	0.15	ug/L			01/17/24 18:18	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/17/24 18:18	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/17/24 18:18	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/17/24 18:18	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/17/24 18:18	1
Vinyl acetate	ND		25	0.93	ug/L			01/17/24 18:18	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/17/24 18:18	1
Xylenes, Total	ND		10	1.6	ug/L			01/17/24 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 130*		*01/17/24 18:18*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*01/17/24 18:18*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*01/17/24 18:18*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.32**		0.21	0.10	ug/L		01/17/24 11:35	01/17/24 19:05	1
Acenaphthylene	ND		0.21	0.046	ug/L		01/17/24 11:35	01/17/24 19:05	1
Anthracene	**0.16**	**J**	0.21	0.049	ug/L		01/17/24 11:35	01/17/24 19:05	1
Benzo[a]anthracene	ND		0.21	0.036	ug/L		01/17/24 11:35	01/17/24 19:05	1
Benzo[a]pyrene	ND		0.21	0.067	ug/L		01/17/24 11:35	01/17/24 19:05	1
Benzo[b]fluoranthene	ND	*+	0.21	0.039	ug/L		01/17/24 11:35	01/17/24 19:05	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		01/17/24 11:35	01/17/24 19:05	1
Benzo[k]fluoranthene	ND		0.21	0.065	ug/L		01/17/24 11:35	01/17/24 19:05	1
Chrysene	ND		0.21	0.035	ug/L		01/17/24 11:35	01/17/24 19:05	1
Dibenz(a,h)anthracene	ND		0.21	0.050	ug/L		01/17/24 11:35	01/17/24 19:05	1
Fluoranthene	ND		0.21	0.036	ug/L		01/17/24 11:35	01/17/24 19:05	1
Fluorene	**0.51**		0.21	0.093	ug/L		01/17/24 11:35	01/17/24 19:05	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.036	ug/L		01/17/24 11:35	01/17/24 19:05	1
Phenanthrene	**0.37**		0.21	0.094	ug/L		01/17/24 11:35	01/17/24 19:05	1
Pyrene	ND		0.21	0.041	ug/L		01/17/24 11:35	01/17/24 19:05	1
1-Methylnaphthalene	**25**		0.21	0.084	ug/L		01/17/24 11:35	01/17/24 19:05	1
2-Methylnaphthalene	**19**		0.21	0.069	ug/L		01/17/24 11:35	01/17/24 19:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*125*		*18 - 147*	*01/17/24 11:35*	*01/17/24 19:05*	*1*
2-Fluorobiphenyl	*61*		*15 - 128*	*01/17/24 11:35*	*01/17/24 19:05*	*1*

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

Job ID: 400-249617-1

Client Sample ID: P57-ROX-011124-DUP
Date Collected: 01/11/24 10:50
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249617-5
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*75*		*10 - 144*	*01/17/24 11:35*	*01/17/24 19:05*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	11	9.2	ug/L		01/15/24 09:26	01/16/24 16:01	1
Benzenethiol	ND		11	10	ug/L		01/15/24 09:26	01/16/24 16:01	1
Benzoic acid	ND	*+	32	25	ug/L		01/15/24 09:26	01/16/24 16:01	1
Benzyl alcohol	ND		11	7.7	ug/L		01/15/24 09:26	01/16/24 16:01	1
Bis(2-chloroethoxy)methane	ND		11	4.9	ug/L		01/15/24 09:26	01/16/24 16:01	1
Bis(2-chloroethyl)ether	ND		11	4.1	ug/L		01/15/24 09:26	01/16/24 16:01	1
bis (2-chloroisopropyl) ether	ND		11	1.9	ug/L		01/15/24 09:26	01/16/24 16:01	1
Bis(2-ethylhexyl) phthalate	ND		11	9.4	ug/L		01/15/24 09:26	01/16/24 16:01	1
4-Bromophenyl phenyl ether	ND		11	9.1	ug/L		01/15/24 09:26	01/16/24 16:01	1
Butyl benzyl phthalate	ND		11	6.1	ug/L		01/15/24 09:26	01/16/24 16:01	1
4-Chloroaniline	ND		11	5.0	ug/L		01/15/24 09:26	01/16/24 16:01	1
4-Chloro-3-methylphenol	ND		11	5.6	ug/L		01/15/24 09:26	01/16/24 16:01	1
2-Chloronaphthalene	ND		11	4.0	ug/L		01/15/24 09:26	01/16/24 16:01	1
2-Chlorophenol	ND		11	4.3	ug/L		01/15/24 09:26	01/16/24 16:01	1
4-Chlorophenyl phenyl ether	ND		11	3.9	ug/L		01/15/24 09:26	01/16/24 16:01	1
Dibenz[a,h]acridine	ND		11	3.0	ug/L		01/15/24 09:26	01/16/24 16:01	1
Dibenzofuran	ND		11	4.2	ug/L		01/15/24 09:26	01/16/24 16:01	1
3,3'-Dichlorobenzidine	ND		12	12	ug/L		01/15/24 09:26	01/16/24 16:01	1
2,4-Dichlorophenol	ND		11	4.5	ug/L		01/15/24 09:26	01/16/24 16:01	1
Diethyl phthalate	ND		11	4.6	ug/L		01/15/24 09:26	01/16/24 16:01	1
2,4-Dimethylphenol	ND		11	5.5	ug/L		01/15/24 09:26	01/16/24 16:01	1
Dimethyl phthalate	ND		11	4.4	ug/L		01/15/24 09:26	01/16/24 16:01	1
Di-n-butyl phthalate	ND		11	4.9	ug/L		01/15/24 09:26	01/16/24 16:01	1
4,6-Dinitro-ortho-cresol	ND		11	11	ug/L		01/15/24 09:26	01/16/24 16:01	1
2,4-Dinitrophenol	ND		32	4.9	ug/L		01/15/24 09:26	01/16/24 16:01	1
2,4-Dinitrotoluene	ND		11	5.4	ug/L		01/15/24 09:26	01/16/24 16:01	1
2,6-Dinitrotoluene	ND		11	4.1	ug/L		01/15/24 09:26	01/16/24 16:01	1
Di-n-octyl phthalate	ND		11	6.3	ug/L		01/15/24 09:26	01/16/24 16:01	1
1,4-Dioxane	ND		11	4.5	ug/L		01/15/24 09:26	01/16/24 16:01	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	3.5	ug/L		01/15/24 09:26	01/16/24 16:01	1
Hexachlorobenzene	ND		11	10	ug/L		01/15/24 09:26	01/16/24 16:01	1
Hexachlorocyclopentadiene	ND		21	4.8	ug/L		01/15/24 09:26	01/16/24 16:01	1
Hexachloroethane	ND		11	5.5	ug/L		01/15/24 09:26	01/16/24 16:01	1
Indene	ND		11	3.8	ug/L		01/15/24 09:26	01/16/24 16:01	1
Isophorone	ND		11	5.5	ug/L		01/15/24 09:26	01/16/24 16:01	1
2-Methylphenol	ND		11	3.4	ug/L		01/15/24 09:26	01/16/24 16:01	1
3 & 4 Methylphenol	ND		21	4.9	ug/L		01/15/24 09:26	01/16/24 16:01	1
2-Nitroaniline	ND		11	5.3	ug/L		01/15/24 09:26	01/16/24 16:01	1
3-Nitroaniline	ND		11	5.0	ug/L		01/15/24 09:26	01/16/24 16:01	1
4-Nitroaniline	ND		11	4.3	ug/L		01/15/24 09:26	01/16/24 16:01	1
Nitrobenzene	ND		11	5.0	ug/L		01/15/24 09:26	01/16/24 16:01	1
2-Nitrophenol	ND		11	4.9	ug/L		01/15/24 09:26	01/16/24 16:01	1
4-Nitrophenol	ND		11	3.5	ug/L		01/15/24 09:26	01/16/24 16:01	1
N-Nitrosodimethylamine	ND		11	2.3	ug/L		01/15/24 09:26	01/16/24 16:01	1

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

Job ID: 400-249617-1

Client Sample ID: P57-ROX-011124-DUP
Date Collected: 01/11/24 10:50
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249617-5
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		11	2.6	ug/L		01/15/24 09:26	01/16/24 16:01	1
N-Nitrosodiphenylamine	ND		11	3.9	ug/L		01/15/24 09:26	01/16/24 16:01	1
Pentachlorophenol	ND		21	13	ug/L		01/15/24 09:26	01/16/24 16:01	1
Phenol	ND		11	4.4	ug/L		01/15/24 09:26	01/16/24 16:01	1
Pyridine	ND	*1	11	11	ug/L		01/15/24 09:26	01/16/24 16:01	1
Quinoline	ND		11	2.5	ug/L		01/15/24 09:26	01/16/24 16:01	1
2,4,5-Trichlorophenol	ND		11	4.2	ug/L		01/15/24 09:26	01/16/24 16:01	1
2,4,6-Trichlorophenol	ND		11	3.7	ug/L		01/15/24 09:26	01/16/24 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*21 - 114*	*01/15/24 09:26*	*01/16/24 16:01*	*1*
2-Fluorophenol	*51*		*10 - 105*	*01/15/24 09:26*	*01/16/24 16:01*	*1*
Nitrobenzene-d5	*67*		*16 - 127*	*01/15/24 09:26*	*01/16/24 16:01*	*1*
Phenol-d5	*40*		*10 - 129*	*01/15/24 09:26*	*01/16/24 16:01*	*1*
Terphenyl-d14	*100*		*13 - 150*	*01/15/24 09:26*	*01/16/24 16:01*	*1*
2,4,6-Tribromophenol	*101*		*10 - 150*	*01/15/24 09:26*	*01/16/24 16:01*	*1*

Method: EPA 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		01/17/24 10:31	01/17/24 19:43	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/17/24 10:31	01/17/24 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*01/17/24 10:31*	*01/17/24 19:43*	*1*

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

Job ID: 400-249617-1

Client Sample ID: T12-ROX-011124
Date Collected: 01/11/24 11:55
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249617-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		250	100	ug/L			01/18/24 16:06	10
Acrolein	ND		200	33	ug/L			01/18/24 16:06	10
Acrylonitrile	ND		100	28	ug/L			01/18/24 16:06	10
Benzene	**1300**		10	5.0	ug/L			01/18/24 16:06	10
Bromobenzene	ND		10	5.4	ug/L			01/18/24 16:06	10
Bromochloromethane	ND		10	2.1	ug/L			01/18/24 16:06	10
Bromodichloromethane	ND		10	5.0	ug/L			01/18/24 16:06	10
Bromoform	ND		50	2.5	ug/L			01/18/24 16:06	10
Bromomethane	ND		10	9.8	ug/L			01/18/24 16:06	10
2-Butanone (MEK)	ND		250	26	ug/L			01/18/24 16:06	10
Carbon disulfide	ND		10	5.0	ug/L			01/18/24 16:06	10
Carbon tetrachloride	ND		10	1.9	ug/L			01/18/24 16:06	10
Chlorobenzene	ND		10	9.0	ug/L			01/18/24 16:06	10
Chloroethane	ND		10	7.6	ug/L			01/18/24 16:06	10
2-Chloroethyl vinyl ether	ND	*+	50	20	ug/L			01/18/24 16:06	10
Chloroform	ND		10	9.0	ug/L			01/18/24 16:06	10
1-Chlorohexane	ND		10	3.2	ug/L			01/18/24 16:06	10
Chloromethane	ND		10	9.0	ug/L			01/18/24 16:06	10
cis-1,2-Dichloroethene	ND		10	2.0	ug/L			01/18/24 16:06	10
cis-1,3-Dichloropropene	ND		50	5.0	ug/L			01/18/24 16:06	10
Dibromochloromethane	ND		10	2.4	ug/L			01/18/24 16:06	10
1,2-Dichlorobenzene	ND		10	5.0	ug/L			01/18/24 16:06	10
1,3-Dichlorobenzene	ND		10	5.4	ug/L			01/18/24 16:06	10
1,4-Dichlorobenzene	ND		10	6.4	ug/L			01/18/24 16:06	10
Dichlorodifluoromethane	ND		10	8.5	ug/L			01/18/24 16:06	10
1,1-Dichloroethane	ND		10	5.0	ug/L			01/18/24 16:06	10
1,2-Dichloroethane	ND		10	1.9	ug/L			01/18/24 16:06	10
1,1-Dichloroethene	ND		10	5.0	ug/L			01/18/24 16:06	10
1,2-Dichloropropane	ND		10	5.0	ug/L			01/18/24 16:06	10
1,3-Dichloropropane	ND		10	5.0	ug/L			01/18/24 16:06	10
2,2-Dichloropropane	ND		10	5.0	ug/L			01/18/24 16:06	10
1,1-Dichloropropene	ND		10	5.0	ug/L			01/18/24 16:06	10
Ethylbenzene	**6.9**	**J**	10	5.0	ug/L			01/18/24 16:06	10
Ethyl methacrylate	ND		10	6.0	ug/L			01/18/24 16:06	10
Hexachlorobutadiene	ND		50	9.0	ug/L			01/18/24 16:06	10
2-Hexanone	ND		250	14	ug/L			01/18/24 16:06	10
Isopropylbenzene	**11**		10	5.3	ug/L			01/18/24 16:06	10
Methylene bromide	ND		50	2.2	ug/L			01/18/24 16:06	10
Methylene Chloride	ND		50	30	ug/L			01/18/24 16:06	10
4-Methyl-2-pentanone (MIBK)	ND		250	18	ug/L			01/18/24 16:06	10
Methyl tert-butyl ether	ND		10	2.2	ug/L			01/18/24 16:06	10
m-Xylene & p-Xylene	**31**	**J**	50	6.3	ug/L			01/18/24 16:06	10
Naphthalene	ND		50	30	ug/L			01/18/24 16:06	10
n-Butylbenzene	ND		10	7.6	ug/L			01/18/24 16:06	10
N-Propylbenzene	**10**		10	6.9	ug/L			01/18/24 16:06	10
o-Chlorotoluene	ND		10	5.7	ug/L			01/18/24 16:06	10
o-Xylene	ND		50	6.0	ug/L			01/18/24 16:06	10
p-Chlorotoluene	ND		10	5.6	ug/L			01/18/24 16:06	10
p-Isopropyltoluene	ND		10	7.1	ug/L			01/18/24 16:06	10

Client Sample ID: T12-ROX-011124
Date Collected: 01/11/24 11:55
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249617-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		10	7.0	ug/L			01/18/24 16:06	10
Styrene	ND		10	10	ug/L			01/18/24 16:06	10
tert-Butylbenzene	ND		10	6.3	ug/L			01/18/24 16:06	10
1,1,1,2-Tetrachloroethane	ND		10	1.6	ug/L			01/18/24 16:06	10
1,1,2,2-Tetrachloroethane	ND		10	5.0	ug/L			01/18/24 16:06	10
Tetrachloroethene	ND		10	9.0	ug/L			01/18/24 16:06	10
Toluene	**24**		10	9.0	ug/L			01/18/24 16:06	10
trans-1,2-Dichloroethene	ND		10	5.0	ug/L			01/18/24 16:06	10
trans-1,3-Dichloropropene	ND		50	2.0	ug/L			01/18/24 16:06	10
1,2,3-Trichlorobenzene	ND		10	9.0	ug/L			01/18/24 16:06	10
1,2,4-Trichlorobenzene	ND		10	8.2	ug/L			01/18/24 16:06	10
1,1,1-Trichloroethane	ND		10	1.8	ug/L			01/18/24 16:06	10
1,1,2-Trichloroethane	ND		50	2.1	ug/L			01/18/24 16:06	10
Trichloroethene	ND		10	1.5	ug/L			01/18/24 16:06	10
Trichlorofluoromethane	ND		10	5.2	ug/L			01/18/24 16:06	10
1,2,3-Trichloropropane	ND		50	8.4	ug/L			01/18/24 16:06	10
1,2,4-Trimethylbenzene	ND		10	8.2	ug/L			01/18/24 16:06	10
1,3,5-Trimethylbenzene	ND		10	5.6	ug/L			01/18/24 16:06	10
Vinyl acetate	ND		250	9.3	ug/L			01/18/24 16:06	10
Vinyl chloride	ND		10	5.0	ug/L			01/18/24 16:06	10
Xylenes, Total	**34**	**J**	100	16	ug/L			01/18/24 16:06	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 130*		*01/18/24 16:06*	*10*
Dibromofluoromethane	*97*		*75 - 126*		*01/18/24 16:06*	*10*
Toluene-d8 (Surr)	*97*		*64 - 132*		*01/18/24 16:06*	*10*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.37**		0.20	0.10	ug/L		01/17/24 11:35	01/17/24 19:25	1
Acenaphthylene	ND		0.20	0.044	ug/L		01/17/24 11:35	01/17/24 19:25	1
Anthracene	**0.15**	**J**	0.20	0.047	ug/L		01/17/24 11:35	01/17/24 19:25	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		01/17/24 11:35	01/17/24 19:25	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		01/17/24 11:35	01/17/24 19:25	1
Benzo[b]fluoranthene	ND	*+	0.20	0.037	ug/L		01/17/24 11:35	01/17/24 19:25	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/17/24 11:35	01/17/24 19:25	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		01/17/24 11:35	01/17/24 19:25	1
Chrysene	ND		0.20	0.033	ug/L		01/17/24 11:35	01/17/24 19:25	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		01/17/24 11:35	01/17/24 19:25	1
Fluoranthene	**0.037**	**J**	0.20	0.034	ug/L		01/17/24 11:35	01/17/24 19:25	1
Fluorene	**0.28**		0.20	0.090	ug/L		01/17/24 11:35	01/17/24 19:25	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		01/17/24 11:35	01/17/24 19:25	1
Phenanthrene	**0.52**		0.20	0.091	ug/L		01/17/24 11:35	01/17/24 19:25	1
Pyrene	**0.039**	**J**	0.20	0.039	ug/L		01/17/24 11:35	01/17/24 19:25	1
1-Methylnaphthalene	**16**		0.20	0.080	ug/L		01/17/24 11:35	01/17/24 19:25	1
2-Methylnaphthalene	**24**		0.20	0.066	ug/L		01/17/24 11:35	01/17/24 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*126*		*18 - 147*	*01/17/24 11:35*	*01/17/24 19:25*	*1*
2-Fluorobiphenyl	*71*		*15 - 128*	*01/17/24 11:35*	*01/17/24 19:25*	*1*

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

Job ID: 400-249617-1

Client Sample ID: T12-ROX-011124
Date Collected: 01/11/24 11:55
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249617-6
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	74		10 - 144	01/17/24 11:35	01/17/24 19:25	1

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	10	9.1	ug/L		01/15/24 09:26	01/16/24 16:26	1
Benzenethiol	ND		10	10	ug/L		01/15/24 09:26	01/16/24 16:26	1
Benzoic acid	ND	*+	31	25	ug/L		01/15/24 09:26	01/16/24 16:26	1
Benzyl alcohol	ND		10	7.6	ug/L		01/15/24 09:26	01/16/24 16:26	1
Bis(2-chloroethoxy)methane	ND		10	4.8	ug/L		01/15/24 09:26	01/16/24 16:26	1
Bis(2-chloroethyl)ether	ND		10	4.1	ug/L		01/15/24 09:26	01/16/24 16:26	1
bis (2-chloroisopropyl) ether	ND		10	1.9	ug/L		01/15/24 09:26	01/16/24 16:26	1
Bis(2-ethylhexyl) phthalate	ND		10	9.3	ug/L		01/15/24 09:26	01/16/24 16:26	1
4-Bromophenyl phenyl ether	ND		10	9.0	ug/L		01/15/24 09:26	01/16/24 16:26	1
Butyl benzyl phthalate	ND		10	6.1	ug/L		01/15/24 09:26	01/16/24 16:26	1
4-Chloroaniline	ND		10	4.9	ug/L		01/15/24 09:26	01/16/24 16:26	1
4-Chloro-3-methylphenol	ND		10	5.5	ug/L		01/15/24 09:26	01/16/24 16:26	1
2-Chloronaphthalene	ND		10	4.0	ug/L		01/15/24 09:26	01/16/24 16:26	1
2-Chlorophenol	ND		10	4.3	ug/L		01/15/24 09:26	01/16/24 16:26	1
4-Chlorophenyl phenyl ether	ND		10	3.9	ug/L		01/15/24 09:26	01/16/24 16:26	1
Dibenz[a,h]acridine	ND		10	2.9	ug/L		01/15/24 09:26	01/16/24 16:26	1
Dibenzofuran	ND		10	4.2	ug/L		01/15/24 09:26	01/16/24 16:26	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/15/24 09:26	01/16/24 16:26	1
2,4-Dichlorophenol	ND		10	4.5	ug/L		01/15/24 09:26	01/16/24 16:26	1
Diethyl phthalate	ND		10	4.6	ug/L		01/15/24 09:26	01/16/24 16:26	1
2,4-Dimethylphenol	ND		10	5.4	ug/L		01/15/24 09:26	01/16/24 16:26	1
Dimethyl phthalate	ND		10	4.4	ug/L		01/15/24 09:26	01/16/24 16:26	1
Di-n-butyl phthalate	ND		10	4.8	ug/L		01/15/24 09:26	01/16/24 16:26	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/15/24 09:26	01/16/24 16:26	1
2,4-Dinitrophenol	ND		31	4.8	ug/L		01/15/24 09:26	01/16/24 16:26	1
2,4-Dinitrotoluene	ND		10	5.3	ug/L		01/15/24 09:26	01/16/24 16:26	1
2,6-Dinitrotoluene	ND		10	4.1	ug/L		01/15/24 09:26	01/16/24 16:26	1
Di-n-octyl phthalate	ND		10	6.3	ug/L		01/15/24 09:26	01/16/24 16:26	1
1,4-Dioxane	ND		10	4.5	ug/L		01/15/24 09:26	01/16/24 16:26	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.4	ug/L		01/15/24 09:26	01/16/24 16:26	1
Hexachlorobenzene	ND		10	10	ug/L		01/15/24 09:26	01/16/24 16:26	1
Hexachlorocyclopentadiene	ND		21	4.7	ug/L		01/15/24 09:26	01/16/24 16:26	1
Hexachloroethane	ND		10	5.4	ug/L		01/15/24 09:26	01/16/24 16:26	1
Indene	ND		10	3.8	ug/L		01/15/24 09:26	01/16/24 16:26	1
Isophorone	ND		10	5.4	ug/L		01/15/24 09:26	01/16/24 16:26	1
2-Methylphenol	ND		10	3.3	ug/L		01/15/24 09:26	01/16/24 16:26	1
3 & 4 Methylphenol	ND		21	4.8	ug/L		01/15/24 09:26	01/16/24 16:26	1
2-Nitroaniline	ND		10	5.2	ug/L		01/15/24 09:26	01/16/24 16:26	1
3-Nitroaniline	ND		10	4.9	ug/L		01/15/24 09:26	01/16/24 16:26	1
4-Nitroaniline	ND		10	4.3	ug/L		01/15/24 09:26	01/16/24 16:26	1
Nitrobenzene	ND		10	4.9	ug/L		01/15/24 09:26	01/16/24 16:26	1
2-Nitrophenol	ND		10	4.8	ug/L		01/15/24 09:26	01/16/24 16:26	1
4-Nitrophenol	ND		10	3.4	ug/L		01/15/24 09:26	01/16/24 16:26	1
N-Nitrosodimethylamine	ND		10	2.3	ug/L		01/15/24 09:26	01/16/24 16:26	1

Client Sample ID: T12-ROX-011124

Date Collected: 01/11/24 11:55
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249617-6

Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.6	ug/L		01/15/24 09:26	01/16/24 16:26	1
N-Nitrosodiphenylamine	ND		10	3.9	ug/L		01/15/24 09:26	01/16/24 16:26	1
Pentachlorophenol	ND		21	12	ug/L		01/15/24 09:26	01/16/24 16:26	1
Phenol	**30**		10	4.4	ug/L		01/15/24 09:26	01/16/24 16:26	1
Pyridine	ND	*1	10	10	ug/L		01/15/24 09:26	01/16/24 16:26	1
Quinoline	ND		10	2.5	ug/L		01/15/24 09:26	01/16/24 16:26	1
2,4,5-Trichlorophenol	ND		10	4.2	ug/L		01/15/24 09:26	01/16/24 16:26	1
2,4,6-Trichlorophenol	ND		10	3.7	ug/L		01/15/24 09:26	01/16/24 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*21 - 114*	*01/15/24 09:26*	*01/16/24 16:26*	*1*
2-Fluorophenol	*44*		*10 - 105*	*01/15/24 09:26*	*01/16/24 16:26*	*1*
Nitrobenzene-d5	*64*		*16 - 127*	*01/15/24 09:26*	*01/16/24 16:26*	*1*
Phenol-d5	*37*		*10 - 129*	*01/15/24 09:26*	*01/16/24 16:26*	*1*
Terphenyl-d14	*95*		*13 - 150*	*01/15/24 09:26*	*01/16/24 16:26*	*1*
2,4,6-Tribromophenol	*97*		*10 - 150*	*01/15/24 09:26*	*01/16/24 16:26*	*1*

Method: EPA 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		01/17/24 10:31	01/17/24 20:04	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/17/24 10:31	01/17/24 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*51 - 149*	*01/17/24 10:31*	*01/17/24 20:04*	*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, high biased.
*1	LCS/LCSD RPD exceeds control limits.
E	Result exceeded calibration range.
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: 400-249617-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-130)	(75-126)	(64-132)
400-249617-1	TB-ROX-011124-8260-B	108	103	97
400-249617-3	P93C-ROX-011124	108	97	97
400-249617-3 - DL	P93C-ROX-011124	111	101	96
400-249617-4	P57-ROX-011124	111	94	98
400-249617-5	P57-ROX-011124-DUP	109	94	99
400-249617-6	T12-ROX-011124	109	97	97
LCS 400-657889/1001	Lab Control Sample	105	92	97
LCS 400-657968/1001	Lab Control Sample	108	95	98
MB 400-657889/5	Method Blank	109	109	97
MB 400-657968/28	Method Blank	110	108	98

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - 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	(21-114)	(10-105)	(16-127)	(10-129)	(13-150)	(10-150)
400-249617-3	P93C-ROX-011124	85	44	69	39	98	103
400-249617-4	P57-ROX-011124	78	46	67	36	96	94
400-249617-5	P57-ROX-011124-DUP	85	51	67	40	100	101
400-249617-6	T12-ROX-011124	75	44	64	37	95	97
LCS 400-657668/2-A	Lab Control Sample	76	49	83	42	94	86
LCS 400-657668/4-A	Lab Control Sample	84	49	67	40	107	79
LCSD 400-657668/3-A	Lab Control Sample Dup	83	54	84	50	100	92
LCSD 400-657668/5-A	Lab Control Sample Dup	83	44	62	38	97	80
MB 400-657668/1-A	Method Blank	90	50	73	38	104	82

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-249617-3	P93C-ROX-011124	126	49	54
400-249617-4	P57-ROX-011124	136	65	79
400-249617-5	P57-ROX-011124-DUP	125	61	75
400-249617-6	T12-ROX-011124	126	71	74
LCS 400-657912/2-A	Lab Control Sample	82	84	89

Surrogate Summary

Client: AECOM Technical Services Inc.
Job ID: 400-249617-1
Project/Site: ROXANA QUARTERLY GW

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
LCSD 400-657912/3-A	Lab Control Sample Dup	86	88	92
MB 400-657912/1-A	Method Blank	194 S1+	100	73

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-249617-2	TB-ROX-011124-8011-B	124
400-249617-3	P93C-ROX-011124	92
400-249617-4	P57-ROX-011124	86
400-249617-5	P57-ROX-011124-DUP	99
400-249617-6	T12-ROX-011124	93
LCS 400-657905/2-A	Lab Control Sample	86 p
LCSD 400-657905/3-A	Lab Control Sample Dup	85 p
MB 400-657905/1-A	Method Blank	86 p

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-249617-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Client Sample ID: TB-ROX-011124-8260-B

Lab Sample ID: 400-249617-1

Date Collected: 01/11/24 12:00

Matrix: Water

Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657889	01/17/24 14:53	BPO	EET PEN

Client Sample ID: TB-ROX-011124-8011-B

Lab Sample ID: 400-249617-2

Date Collected: 01/11/24 12:00

Matrix: Water

Date Received: 01/12/24 09:31

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	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 18:19	PG	EET PEN

Client Sample ID: P93C-ROX-011124

Lab Sample ID: 400-249617-3

Date Collected: 01/11/24 09:45

Matrix: Water

Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		500	5 mL	5 mL	657889	01/17/24 20:35	BPO	EET PEN
Total/NA	Analysis	8260D	DL	2000	5 mL	5 mL	657968	01/18/24 16:29	BPO	EET PEN
Total/NA	Prep	3510C			239.4 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 15:10	VC1	EET PEN
Total/NA	Prep	3510C			239.4 mL	1 mL	657912	01/17/24 11:35	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657957	01/17/24 18:24	TH	EET PEN
Total/NA	Prep	8011			36.1 mL	35 mL	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 18:40	PG	EET PEN

Client Sample ID: P57-ROX-011124

Lab Sample ID: 400-249617-4

Date Collected: 01/11/24 10:50

Matrix: Water

Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657889	01/17/24 17:55	BPO	EET PEN
Total/NA	Prep	3510C			232.4 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 15:36	VC1	EET PEN
Total/NA	Prep	3510C			243.2 mL	1 mL	657912	01/17/24 11:35	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657957	01/17/24 18:45	TH	EET PEN
Total/NA	Prep	8011			34.5 mL	35 mL	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 19:01	PG	EET PEN

Client Sample ID: P57-ROX-011124-DUP

Lab Sample ID: 400-249617-5

Date Collected: 01/11/24 10:50

Matrix: Water

Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657889	01/17/24 18:18	BPO	EET PEN
Total/NA	Prep	3510C			236.8 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 16:01	VC1	EET PEN

Lab Chronicle

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

Job ID: 400-249617-1

Client Sample ID: P57-ROX-011124-DUP

Lab Sample ID: 400-249617-5

Date Collected: 01/11/24 10:50

Matrix: Water

Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			238.4 mL	1 mL	657912	01/17/24 11:35	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657957	01/17/24 19:05	TH	EET PEN
Total/NA	Prep	8011			35.2 mL	35 mL	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 19:43	PG	EET PEN

Client Sample ID: T12-ROX-011124

Lab Sample ID: 400-249617-6

Date Collected: 01/11/24 11:55

Matrix: Water

Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		10	5 mL	5 mL	657968	01/18/24 16:06	BPO	EET PEN
Total/NA	Prep	3510C			239.2 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 16:26	VC1	EET PEN
Total/NA	Prep	3510C			248.6 mL	1 mL	657912	01/17/24 11:35	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657957	01/17/24 19:25	TH	EET PEN
Total/NA	Prep	8011			35.6 mL	35 mL	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 20:04	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-657668/1-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	3510C			250 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 13:03	VC1	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-657889/5

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	8260D		1	5 mL	5 mL	657889	01/17/24 14:08	BPO	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-657905/1-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	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 15:53	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-657912/1-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	3510C			250 mL	1 mL	657912	01/17/24 11:34	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657957	01/17/24 17:23	TH	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-657968/28

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	8260D		1	5 mL	5 mL	657968	01/18/24 10:26	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657668/2-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	3510C			250 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 13:29	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657668/4-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	3510C			250 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 14:19	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657889/1001

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	8260D		1	5 mL	5 mL	657889	01/17/24 09:48	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657905/2-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	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 16:13	PG	EET PEN

Lab Chronicle

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

Job ID: 400-249617-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657912/2-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	3510C			250 mL	1 mL	657912	01/17/24 11:34	STC	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	657957	01/17/24 17:44	TH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657968/1001
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	8260D		1	5 mL	5 mL	657968	01/18/24 09:15	BPO	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657668/3-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	3510C			250 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 13:54	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657668/5-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	3510C			250 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 14:45	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657905/3-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	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 16:34	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657912/3-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	3510C			250 mL	1 mL	657912	01/17/24 11:34	STC	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	657957	01/17/24 18:04	TH	EET PEN

Laboratory References:
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 657889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249617-1	TB-ROX-011124-8260-B	Total/NA	Water	8260D	
400-249617-3	P93C-ROX-011124	Total/NA	Water	8260D	
400-249617-4	P57-ROX-011124	Total/NA	Water	8260D	
400-249617-5	P57-ROX-011124-DUP	Total/NA	Water	8260D	
MB 400-657889/5	Method Blank	Total/NA	Water	8260D	
LCS 400-657889/1001	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 657968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249617-3 - DL	P93C-ROX-011124	Total/NA	Water	8260D	
400-249617-6	T12-ROX-011124	Total/NA	Water	8260D	
MB 400-657968/28	Method Blank	Total/NA	Water	8260D	
LCS 400-657968/1001	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 657668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249617-3	P93C-ROX-011124	Total/NA	Water	3510C	
400-249617-4	P57-ROX-011124	Total/NA	Water	3510C	
400-249617-5	P57-ROX-011124-DUP	Total/NA	Water	3510C	
400-249617-6	T12-ROX-011124	Total/NA	Water	3510C	
MB 400-657668/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-657668/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-657668/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-657668/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-657668/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 657759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249617-3	P93C-ROX-011124	Total/NA	Water	8270E	657668
400-249617-4	P57-ROX-011124	Total/NA	Water	8270E	657668
400-249617-5	P57-ROX-011124-DUP	Total/NA	Water	8270E	657668
400-249617-6	T12-ROX-011124	Total/NA	Water	8270E	657668
MB 400-657668/1-A	Method Blank	Total/NA	Water	8270E	657668
LCS 400-657668/2-A	Lab Control Sample	Total/NA	Water	8270E	657668
LCS 400-657668/4-A	Lab Control Sample	Total/NA	Water	8270E	657668
LCSD 400-657668/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	657668
LCSD 400-657668/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	657668

Prep Batch: 657912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249617-3	P93C-ROX-011124	Total/NA	Water	3510C	
400-249617-4	P57-ROX-011124	Total/NA	Water	3510C	
400-249617-5	P57-ROX-011124-DUP	Total/NA	Water	3510C	
400-249617-6	T12-ROX-011124	Total/NA	Water	3510C	
MB 400-657912/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-657912/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-657912/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

QC Association Summary

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

Job ID: 400-249617-1

GC/MS Semi VOA

Analysis Batch: 657957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249617-3	P93C-ROX-011124	Total/NA	Water	8270E SIM	657912
400-249617-4	P57-ROX-011124	Total/NA	Water	8270E SIM	657912
400-249617-5	P57-ROX-011124-DUP	Total/NA	Water	8270E SIM	657912
400-249617-6	T12-ROX-011124	Total/NA	Water	8270E SIM	657912
MB 400-657912/1-A	Method Blank	Total/NA	Water	8270E SIM	657912
LCS 400-657912/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	657912
LCSD 400-657912/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	657912

GC Semi VOA

Prep Batch: 657905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249617-2	TB-ROX-011124-8011-B	Total/NA	Water	8011	
400-249617-3	P93C-ROX-011124	Total/NA	Water	8011	
400-249617-4	P57-ROX-011124	Total/NA	Water	8011	
400-249617-5	P57-ROX-011124-DUP	Total/NA	Water	8011	
400-249617-6	T12-ROX-011124	Total/NA	Water	8011	
MB 400-657905/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-657905/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-657905/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 657923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249617-2	TB-ROX-011124-8011-B	Total/NA	Water	8011	657905
400-249617-3	P93C-ROX-011124	Total/NA	Water	8011	657905
400-249617-4	P57-ROX-011124	Total/NA	Water	8011	657905
400-249617-5	P57-ROX-011124-DUP	Total/NA	Water	8011	657905
400-249617-6	T12-ROX-011124	Total/NA	Water	8011	657905
MB 400-657905/1-A	Method Blank	Total/NA	Water	8011	657905
LCS 400-657905/2-A	Lab Control Sample	Total/NA	Water	8011	657905
LCSD 400-657905/3-A	Lab Control Sample Dup	Total/NA	Water	8011	657905

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-657889/5
Matrix: Water
Analysis Batch: 657889

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			01/17/24 14:08	1
Acrolein	ND		20	3.3	ug/L			01/17/24 14:08	1
Acrylonitrile	ND		10	2.8	ug/L			01/17/24 14:08	1
Benzene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Bromobenzene	ND		1.0	0.54	ug/L			01/17/24 14:08	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/17/24 14:08	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Bromoform	ND		5.0	0.25	ug/L			01/17/24 14:08	1
Bromomethane	ND		1.0	0.98	ug/L			01/17/24 14:08	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/17/24 14:08	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/17/24 14:08	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/17/24 14:08	1
Chloroethane	ND		1.0	0.76	ug/L			01/17/24 14:08	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/17/24 14:08	1
Chloroform	ND		1.0	0.90	ug/L			01/17/24 14:08	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/17/24 14:08	1
Chloromethane	ND		1.0	0.90	ug/L			01/17/24 14:08	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/17/24 14:08	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/17/24 14:08	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/17/24 14:08	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/17/24 14:08	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/17/24 14:08	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/17/24 14:08	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/17/24 14:08	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/17/24 14:08	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/17/24 14:08	1
2-Hexanone	ND		25	1.4	ug/L			01/17/24 14:08	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/17/24 14:08	1
Methylene bromide	ND		5.0	0.22	ug/L			01/17/24 14:08	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/17/24 14:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/17/24 14:08	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/17/24 14:08	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/17/24 14:08	1
Naphthalene	ND		5.0	3.0	ug/L			01/17/24 14:08	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/17/24 14:08	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/17/24 14:08	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/17/24 14:08	1
o-Xylene	ND		5.0	0.60	ug/L			01/17/24 14:08	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/17/24 14:08	1

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

Lab Sample ID: MB 400-657889/5
Matrix: Water
Analysis Batch: 657889

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			01/17/24 14:08	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/17/24 14:08	1
Styrene	ND		1.0	1.0	ug/L			01/17/24 14:08	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/17/24 14:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/17/24 14:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/17/24 14:08	1
Toluene	ND		1.0	0.90	ug/L			01/17/24 14:08	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/17/24 14:08	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/17/24 14:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/17/24 14:08	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/17/24 14:08	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/17/24 14:08	1
Trichloroethene	ND		1.0	0.15	ug/L			01/17/24 14:08	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/17/24 14:08	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/17/24 14:08	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/17/24 14:08	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/17/24 14:08	1
Vinyl acetate	ND		25	0.93	ug/L			01/17/24 14:08	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Xylenes, Total	ND		10	1.6	ug/L			01/17/24 14:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 130*		*01/17/24 14:08*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*01/17/24 14:08*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*01/17/24 14:08*	*1*

Lab Sample ID: LCS 400-657889/1001
Matrix: Water
Analysis Batch: 657889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	221		ug/L		111	43 - 160
Acrolein	500	604		ug/L		121	38 - 160
Acrylonitrile	500	544		ug/L		109	64 - 142
Benzene	50.0	54.0		ug/L		108	70 - 130
Bromobenzene	50.0	51.3		ug/L		103	70 - 132
Bromochloromethane	50.0	50.4		ug/L		101	70 - 130
Bromodichloromethane	50.0	56.0		ug/L		112	67 - 133
Bromoform	50.0	55.5		ug/L		111	57 - 140
Bromomethane	50.0	36.0		ug/L		72	10 - 160
2-Butanone (MEK)	200	227		ug/L		113	61 - 145
Carbon disulfide	50.0	40.6		ug/L		81	61 - 137
Carbon tetrachloride	50.0	47.5		ug/L		95	61 - 137
Chlorobenzene	50.0	51.0		ug/L		102	70 - 130
Chloroethane	50.0	45.3		ug/L		91	55 - 141
2-Chloroethyl vinyl ether	50.0	76.1		ug/L		152	10 - 160

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

Lab Sample ID: LCS 400-657889/1001
Matrix: Water
Analysis Batch: 657889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	51.4		ug/L		103	69 - 130
1-Chlorohexane	50.0	51.9		ug/L		104	69 - 130
Chloromethane	50.0	45.2		ug/L		90	58 - 137
cis-1,2-Dichloroethene	50.0	52.2		ug/L		104	68 - 130
cis-1,3-Dichloropropene	50.0	58.2		ug/L		116	69 - 132
Dibromochloromethane	50.0	54.2		ug/L		108	67 - 135
1,2-Dichlorobenzene	50.0	50.5		ug/L		101	67 - 130
1,3-Dichlorobenzene	50.0	50.7		ug/L		101	70 - 130
1,4-Dichlorobenzene	50.0	50.3		ug/L		101	70 - 130
Dichlorodifluoromethane	50.0	39.8		ug/L		80	41 - 146
1,1-Dichloroethane	50.0	52.9		ug/L		106	70 - 130
1,2-Dichloroethane	50.0	52.0		ug/L		104	69 - 130
1,1-Dichloroethene	50.0	45.7		ug/L		91	63 - 134
1,2-Dichloropropane	50.0	57.7		ug/L		115	70 - 130
1,3-Dichloropropane	50.0	56.3		ug/L		113	70 - 130
2,2-Dichloropropane	50.0	43.2		ug/L		86	52 - 135
1,1-Dichloropropene	50.0	51.1		ug/L		102	70 - 130
Ethylbenzene	50.0	51.6		ug/L		103	70 - 130
Ethyl methacrylate	50.0	56.0		ug/L		112	68 - 130
Hexachlorobutadiene	50.0	51.6		ug/L		103	53 - 140
2-Hexanone	200	216		ug/L		108	65 - 137
Isopropylbenzene	50.0	50.0		ug/L		100	70 - 130
Methylene bromide	50.0	50.7		ug/L		101	70 - 130
Methylene Chloride	50.0	53.4		ug/L		107	66 - 135
4-Methyl-2-pentanone (MIBK)	200	224		ug/L		112	69 - 138
Methyl tert-butyl ether	50.0	54.3		ug/L		109	66 - 130
m-Xylene & p-Xylene	50.0	50.8		ug/L		102	70 - 130
Naphthalene	50.0	51.2		ug/L		102	47 - 149
n-Butylbenzene	50.0	52.2		ug/L		104	67 - 130
N-Propylbenzene	50.0	51.7		ug/L		103	70 - 130
o-Chlorotoluene	50.0	51.9		ug/L		104	70 - 130
o-Xylene	50.0	52.1		ug/L		104	70 - 130
p-Chlorotoluene	50.0	52.3		ug/L		105	70 - 130
p-Isopropyltoluene	50.0	50.4		ug/L		101	65 - 130
sec-Butylbenzene	50.0	49.9		ug/L		100	66 - 130
Styrene	50.0	52.5		ug/L		105	70 - 130
tert-Butylbenzene	50.0	47.6		ug/L		95	64 - 139
1,1,1,2-Tetrachloroethane	50.0	53.3		ug/L		107	67 - 131
1,1,2,2-Tetrachloroethane	50.0	56.0		ug/L		112	70 - 131
Tetrachloroethene	50.0	49.0		ug/L		98	65 - 130
Toluene	50.0	50.1		ug/L		100	70 - 130
trans-1,2-Dichloroethene	50.0	48.0		ug/L		96	70 - 130
trans-1,3-Dichloropropene	50.0	55.2		ug/L		110	63 - 130
1,2,3-Trichlorobenzene	50.0	53.2		ug/L		106	60 - 138
1,2,4-Trichlorobenzene	50.0	53.0		ug/L		106	60 - 140
1,1,1-Trichloroethane	50.0	47.6		ug/L		95	68 - 130
1,1,2-Trichloroethane	50.0	55.9		ug/L		112	70 - 130
Trichloroethene	50.0	49.2		ug/L		98	70 - 130
Trichlorofluoromethane	50.0	43.6		ug/L		87	65 - 138

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

Lab Sample ID: LCS 400-657889/1001
Matrix: Water
Analysis Batch: 657889

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	51.7		ug/L		103	70 - 130
1,2,4-Trimethylbenzene	50.0	53.4		ug/L		107	70 - 130
1,3,5-Trimethylbenzene	50.0	51.2		ug/L		102	69 - 130
Vinyl acetate	100	130		ug/L		130	26 - 160
Vinyl chloride	50.0	47.3		ug/L		95	59 - 136
Xylenes, Total	100	103		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*72 - 130*
Dibromofluoromethane	*92*		*75 - 126*
Toluene-d8 (Surr)	*97*		*64 - 132*

Lab Sample ID: MB 400-657968/28
Matrix: Water
Analysis Batch: 657968

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			01/18/24 10:26	1
Acrolein	ND		20	3.3	ug/L			01/18/24 10:26	1
Acrylonitrile	ND		10	2.8	ug/L			01/18/24 10:26	1
Benzene	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Bromobenzene	ND		1.0	0.54	ug/L			01/18/24 10:26	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/18/24 10:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Bromoform	ND		5.0	0.25	ug/L			01/18/24 10:26	1
Bromomethane	ND		1.0	0.98	ug/L			01/18/24 10:26	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/18/24 10:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/18/24 10:26	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/18/24 10:26	1
Chloroethane	ND		1.0	0.76	ug/L			01/18/24 10:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/18/24 10:26	1
Chloroform	ND		1.0	0.90	ug/L			01/18/24 10:26	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/18/24 10:26	1
Chloromethane	ND		1.0	0.90	ug/L			01/18/24 10:26	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/18/24 10:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/18/24 10:26	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/18/24 10:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/18/24 10:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/18/24 10:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/18/24 10:26	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/18/24 10:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/18/24 10:26	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/18/24 10:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/18/24 10:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 10:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 10:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 10:26	1

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

Lab Sample ID: MB 400-657968/28
Matrix: Water
Analysis Batch: 657968

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			01/18/24 10:26	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/18/24 10:26	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/18/24 10:26	1
2-Hexanone	ND		25	1.4	ug/L			01/18/24 10:26	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/18/24 10:26	1
Methylene bromide	ND		5.0	0.22	ug/L			01/18/24 10:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/18/24 10:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/18/24 10:26	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/18/24 10:26	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/18/24 10:26	1
Naphthalene	ND		5.0	3.0	ug/L			01/18/24 10:26	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/18/24 10:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/18/24 10:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/18/24 10:26	1
o-Xylene	ND		5.0	0.60	ug/L			01/18/24 10:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/18/24 10:26	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/18/24 10:26	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/18/24 10:26	1
Styrene	ND		1.0	1.0	ug/L			01/18/24 10:26	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/18/24 10:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/18/24 10:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/18/24 10:26	1
Toluene	ND		1.0	0.90	ug/L			01/18/24 10:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/18/24 10:26	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/18/24 10:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/18/24 10:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/18/24 10:26	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/18/24 10:26	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/18/24 10:26	1
Trichloroethene	ND		1.0	0.15	ug/L			01/18/24 10:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/18/24 10:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/18/24 10:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/18/24 10:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/18/24 10:26	1
Vinyl acetate	ND		25	0.93	ug/L			01/18/24 10:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Xylenes, Total	ND		10	1.6	ug/L			01/18/24 10:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*72 - 130*		*01/18/24 10:26*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*01/18/24 10:26*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*01/18/24 10:26*	*1*

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

Lab Sample ID: LCS 400-657968/1001
Matrix: Water
Analysis Batch: 657968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	218		ug/L		109	43 - 160
Acrolein	500	637		ug/L		127	38 - 160
Acrylonitrile	500	535		ug/L		107	64 - 142
Benzene	50.0	58.9		ug/L		118	70 - 130
Bromobenzene	50.0	53.3		ug/L		107	70 - 132
Bromochloromethane	50.0	53.2		ug/L		106	70 - 130
Bromodichloromethane	50.0	58.6		ug/L		117	67 - 133
Bromoform	50.0	53.3		ug/L		107	57 - 140
Bromomethane	50.0	41.2		ug/L		82	10 - 160
2-Butanone (MEK)	200	226		ug/L		113	61 - 145
Carbon disulfide	50.0	47.0		ug/L		94	61 - 137
Carbon tetrachloride	50.0	52.2		ug/L		104	61 - 137
Chlorobenzene	50.0	54.3		ug/L		109	70 - 130
Chloroethane	50.0	55.8		ug/L		112	55 - 141
2-Chloroethyl vinyl ether	50.0	81.1	*+	ug/L		162	10 - 160
Chloroform	50.0	55.7		ug/L		111	69 - 130
1-Chlorohexane	50.0	59.2		ug/L		118	69 - 130
Chloromethane	50.0	48.4		ug/L		97	58 - 137
cis-1,2-Dichloroethene	50.0	55.8		ug/L		112	68 - 130
cis-1,3-Dichloropropene	50.0	61.7		ug/L		123	69 - 132
Dibromochloromethane	50.0	54.4		ug/L		109	67 - 135
1,2-Dichlorobenzene	50.0	51.8		ug/L		104	67 - 130
1,3-Dichlorobenzene	50.0	53.0		ug/L		106	70 - 130
1,4-Dichlorobenzene	50.0	52.7		ug/L		105	70 - 130
Dichlorodifluoromethane	50.0	46.7		ug/L		93	41 - 146
1,1-Dichloroethane	50.0	56.2		ug/L		112	70 - 130
1,2-Dichloroethane	50.0	55.8		ug/L		112	69 - 130
1,1-Dichloroethene	50.0	49.1		ug/L		98	63 - 134
1,2-Dichloropropane	50.0	61.6		ug/L		123	70 - 130
1,3-Dichloropropane	50.0	58.3		ug/L		117	70 - 130
2,2-Dichloropropane	50.0	45.6		ug/L		91	52 - 135
1,1-Dichloropropene	50.0	56.6		ug/L		113	70 - 130
Ethylbenzene	50.0	57.0		ug/L		114	70 - 130
Ethyl methacrylate	50.0	57.6		ug/L		115	68 - 130
Hexachlorobutadiene	50.0	55.3		ug/L		111	53 - 140
2-Hexanone	200	229		ug/L		114	65 - 137
Isopropylbenzene	50.0	54.3		ug/L		109	70 - 130
Methylene bromide	50.0	53.7		ug/L		107	70 - 130
Methylene Chloride	50.0	56.3		ug/L		113	66 - 135
4-Methyl-2-pentanone (MIBK)	200	229		ug/L		115	69 - 138
Methyl tert-butyl ether	50.0	55.7		ug/L		111	66 - 130
m-Xylene & p-Xylene	50.0	56.1		ug/L		112	70 - 130
Naphthalene	50.0	49.7		ug/L		99	47 - 149
n-Butylbenzene	50.0	59.2		ug/L		118	67 - 130
N-Propylbenzene	50.0	56.5		ug/L		113	70 - 130
o-Chlorotoluene	50.0	57.3		ug/L		115	70 - 130
o-Xylene	50.0	56.8		ug/L		114	70 - 130
p-Chlorotoluene	50.0	56.5		ug/L		113	70 - 130

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

Lab Sample ID: LCS 400-657968/1001
Matrix: Water
Analysis Batch: 657968

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	54.4		ug/L		109	65 - 130
sec-Butylbenzene	50.0	54.0		ug/L		108	66 - 130
Styrene	50.0	56.0		ug/L		112	70 - 130
tert-Butylbenzene	50.0	50.1		ug/L		100	64 - 139
1,1,1,2-Tetrachloroethane	50.0	55.4		ug/L		111	67 - 131
1,1,2,2-Tetrachloroethane	50.0	55.5		ug/L		111	70 - 131
Tetrachloroethene	50.0	51.6		ug/L		103	65 - 130
Toluene	50.0	55.1		ug/L		110	70 - 130
trans-1,2-Dichloroethene	50.0	52.5		ug/L		105	70 - 130
trans-1,3-Dichloropropene	50.0	57.5		ug/L		115	63 - 130
1,2,3-Trichlorobenzene	50.0	54.0		ug/L		108	60 - 138
1,2,4-Trichlorobenzene	50.0	55.2		ug/L		110	60 - 140
1,1,1-Trichloroethane	50.0	51.6		ug/L		103	68 - 130
1,1,2-Trichloroethane	50.0	56.8		ug/L		114	70 - 130
Trichloroethene	50.0	53.2		ug/L		106	70 - 130
Trichlorofluoromethane	50.0	49.9		ug/L		100	65 - 138
1,2,3-Trichloropropane	50.0	52.5		ug/L		105	70 - 130
1,2,4-Trimethylbenzene	50.0	58.1		ug/L		116	70 - 130
1,3,5-Trimethylbenzene	50.0	55.4		ug/L		111	69 - 130
Vinyl acetate	100	149		ug/L		149	26 - 160
Vinyl chloride	50.0	53.8		ug/L		108	59 - 136
Xylenes, Total	100	113		ug/L		113	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*108*		*72 - 130*
Dibromofluoromethane	*95*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-657668/1-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657668

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
Benzenethiol	ND		10	9.9	ug/L		01/15/24 09:26	01/16/24 13:03	1
Benzoic acid	ND		30	24	ug/L		01/15/24 09:26	01/16/24 13:03	1
Benzyl alcohol	ND		10	7.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		01/15/24 09:26	01/16/24 13:03	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		01/15/24 09:26	01/16/24 13:03	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Chloroaniline	ND		10	4.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
2-Chloronaphthalene	ND		10	3.8	ug/L		01/15/24 09:26	01/16/24 13:03	1
2-Chlorophenol	ND		10	4.1	ug/L		01/15/24 09:26	01/16/24 13:03	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-657668/1-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657668

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		01/15/24 09:26	01/16/24 13:03	1
Dibenzofuran	ND		10	4.0	ug/L		01/15/24 09:26	01/16/24 13:03	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
Diethyl phthalate	ND		10	4.4	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
Dimethyl phthalate	ND		10	4.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		01/15/24 09:26	01/16/24 13:03	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		01/15/24 09:26	01/16/24 13:03	1
1,4-Dioxane	ND		10	4.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
Hexachlorobenzene	ND		10	9.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		01/15/24 09:26	01/16/24 13:03	1
Hexachloroethane	ND		10	5.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
Indene	ND		10	3.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
Isophorone	ND		10	5.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
2-Methylphenol	ND		10	3.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
2-Nitroaniline	ND		10	5.0	ug/L		01/15/24 09:26	01/16/24 13:03	1
3-Nitroaniline	ND		10	4.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Nitroaniline	ND		10	4.1	ug/L		01/15/24 09:26	01/16/24 13:03	1
Nitrobenzene	ND		10	4.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
2-Nitrophenol	ND		10	4.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Nitrophenol	ND		10	3.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		01/15/24 09:26	01/16/24 13:03	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
Pentachlorophenol	ND		20	12	ug/L		01/15/24 09:26	01/16/24 13:03	1
Phenol	ND		10	4.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
Pyridine	ND		10	10	ug/L		01/15/24 09:26	01/16/24 13:03	1
Quinoline	ND		10	2.4	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/15/24 09:26	01/16/24 13:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*21 - 114*	*01/15/24 09:26*	*01/16/24 13:03*	*1*
2-Fluorophenol	*50*		*10 - 105*	*01/15/24 09:26*	*01/16/24 13:03*	*1*
Nitrobenzene-d5	*73*		*16 - 127*	*01/15/24 09:26*	*01/16/24 13:03*	*1*
Phenol-d5	*38*		*10 - 129*	*01/15/24 09:26*	*01/16/24 13:03*	*1*
Terphenyl-d14	*104*		*13 - 150*	*01/15/24 09:26*	*01/16/24 13:03*	*1*
2,4,6-Tribromophenol	*82*		*10 - 150*	*01/15/24 09:26*	*01/16/24 13:03*	*1*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-657668/2-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657668

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	37.0		ug/L		31	10 - 127
Benzoic acid	120	117		ug/L		98	19 - 126
Benzyl alcohol	120	79.6		ug/L		66	17 - 109
Bis(2-chloroethoxy)methane	120	66.3		ug/L		55	24 - 125
Bis(2-chloroethyl)ether	120	63.7		ug/L		53	10 - 121
bis (2-chloroisopropyl) ether	120	68.9		ug/L		57	14 - 123
Bis(2-ethylhexyl) phthalate	120	97.5		ug/L		81	16 - 150
4-Bromophenyl phenyl ether	120	106		ug/L		88	17 - 150
Butyl benzyl phthalate	120	105		ug/L		87	21 - 150
4-Chloroaniline	120	66.7		ug/L		56	10 - 124
4-Chloro-3-methylphenol	120	85.8		ug/L		72	37 - 131
2-Chloronaphthalene	120	96.3		ug/L		80	24 - 132
2-Chlorophenol	120	77.5		ug/L		65	27 - 124
4-Chlorophenyl phenyl ether	120	102		ug/L		85	27 - 147
Dibenz[a,h]acridine	114	125		ug/L		109	40 - 140
Dibenzofuran	120	94.4		ug/L		79	30 - 135
3,3'-Dichlorobenzidine	160	143		ug/L		89	10 - 150
2,4-Dichlorophenol	120	95.3		ug/L		79	33 - 132
Diethyl phthalate	120	95.9		ug/L		80	37 - 145
2,4-Dimethylphenol	120	114		ug/L		95	38 - 132
Dimethyl phthalate	120	94.0		ug/L		78	32 - 137
Di-n-butyl phthalate	120	107		ug/L		89	27 - 150
4,6-Dinitro-ortho-cresol	240	209		ug/L		87	14 - 150
2,4-Dinitrophenol	240	173		ug/L		72	15 - 150
2,4-Dinitrotoluene	120	95.7		ug/L		80	35 - 136
2,6-Dinitrotoluene	120	96.5		ug/L		80	29 - 140
Di-n-octyl phthalate	120	97.6		ug/L		81	26 - 150
1,4-Dioxane	120	46.4		ug/L		39	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	107		ug/L		89	23 - 138
Hexachlorobenzene	120	111		ug/L		93	10 - 150
Hexachlorocyclopentadiene	120	90.6		ug/L		76	10 - 124
Hexachloroethane	120	76.7		ug/L		64	10 - 127
Indene	120	92.8		ug/L		77	18 - 150
Isophorone	120	80.9		ug/L		67	28 - 127
2-Methylphenol	120	89.1		ug/L		74	34 - 124
3 & 4 Methylphenol	120	83.5		ug/L		70	32 - 122
2-Nitroaniline	120	95.8		ug/L		80	24 - 139
3-Nitroaniline	120	82.6		ug/L		69	10 - 128
4-Nitroaniline	120	82.6		ug/L		69	28 - 118
Nitrobenzene	120	79.3		ug/L		66	29 - 120
2-Nitrophenol	120	93.7		ug/L		78	25 - 148
4-Nitrophenol	240	211		ug/L		88	12 - 129
N-Nitrosodimethylamine	120	102		ug/L		85	10 - 115
N-Nitrosodi-n-propylamine	120	93.8		ug/L		78	24 - 142
N-Nitrosodiphenylamine	119	107		ug/L		90	29 - 138
Pentachlorophenol	240	164		ug/L		68	19 - 150
Phenol	120	51.2		ug/L		43	11 - 95
Pyridine	240	28.2		ug/L		12	10 - 82

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-657668/2-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657668

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Quinoline			114	76.7		ug/L		67	40 - 140		
2,4,5-Trichlorophenol			120	99.3		ug/L		83	30 - 144		
2,4,6-Trichlorophenol			120	98.0		ug/L		82	27 - 147		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*21 - 114*
2-Fluorophenol	*49*		*10 - 105*
Nitrobenzene-d5	*83*		*16 - 127*
Phenol-d5	*42*		*10 - 129*
Terphenyl-d14	*94*		*13 - 150*
2,4,6-Tribromophenol	*86*		*10 - 150*

Lab Sample ID: LCS 400-657668/4-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657668

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	83.7		ug/L		70	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*21 - 114*
2-Fluorophenol	*49*		*10 - 105*
Nitrobenzene-d5	*67*		*16 - 127*
Phenol-d5	*40*		*10 - 129*
Terphenyl-d14	*107*		*13 - 150*
2,4,6-Tribromophenol	*79*		*10 - 150*

Lab Sample ID: LCSD 400-657668/3-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657668

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	61.1	*1	ug/L		51	10 - 127	49	40
Benzoic acid			120	162	*+	ug/L		135	19 - 126	32	40
Benzyl alcohol			120	93.4		ug/L		78	17 - 109	16	40
Bis(2-chloroethoxy)methane			120	70.5		ug/L		59	24 - 125	6	40
Bis(2-chloroethyl)ether			120	61.8		ug/L		51	10 - 121	3	40
bis (2-chloroisopropyl) ether			120	70.4		ug/L		59	14 - 123	2	40
Bis(2-ethylhexyl) phthalate			120	104		ug/L		86	16 - 150	6	40
4-Bromophenyl phenyl ether			120	107		ug/L		89	17 - 150	1	40
Butyl benzyl phthalate			120	107		ug/L		89	21 - 150	2	40
4-Chloroaniline			120	71.7		ug/L		60	10 - 124	7	40
4-Chloro-3-methylphenol			120	93.4		ug/L		78	37 - 131	8	40
2-Chloronaphthalene			120	102		ug/L		85	24 - 132	6	40
2-Chlorophenol			120	87.3		ug/L		73	27 - 124	12	40
4-Chlorophenyl phenyl ether			120	106		ug/L		88	27 - 147	4	40
Dibenz[a,h]acridine			114	131		ug/L		115	40 - 140	5	40
Dibenzofuran			120	101		ug/L		84	30 - 135	7	40

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-657668/3-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657668

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine			160	148		ug/L		93	10 - 150	4	40
2,4-Dichlorophenol			120	101		ug/L		84	33 - 132	6	40
Diethyl phthalate			120	107		ug/L		89	37 - 145	11	40
2,4-Dimethylphenol			120	122		ug/L		102	38 - 132	7	40
Dimethyl phthalate			120	102		ug/L		85	32 - 137	8	40
Di-n-butyl phthalate			120	113		ug/L		95	27 - 150	6	40
4,6-Dinitro-ortho-cresol			240	225		ug/L		94	14 - 150	7	40
2,4-Dinitrophenol			240	194		ug/L		81	15 - 150	12	40
2,4-Dinitrotoluene			120	99.3		ug/L		83	35 - 136	4	40
2,6-Dinitrotoluene			120	96.9		ug/L		81	29 - 140	0	40
Di-n-octyl phthalate			120	103		ug/L		86	26 - 150	5	40
1,4-Dioxane			120	50.9		ug/L		42	10 - 87	9	40
1,2-Diphenylhydrazine (as Azobenzene)			120	109		ug/L		91	23 - 138	2	40
Hexachlorobenzene			120	117		ug/L		98	10 - 150	5	40
Hexachlorocyclopentadiene			120	101		ug/L		85	10 - 124	11	40
Hexachloroethane			120	82.6		ug/L		69	10 - 127	7	40
Indene			120	98.5		ug/L		82	18 - 150	6	40
Isophorone			120	83.4		ug/L		69	28 - 127	3	40
2-Methylphenol			120	94.9		ug/L		79	34 - 124	6	40
3 & 4 Methylphenol			120	90.2		ug/L		75	32 - 122	8	40
2-Nitroaniline			120	97.4		ug/L		81	24 - 139	2	40
3-Nitroaniline			120	91.3		ug/L		76	10 - 128	10	40
4-Nitroaniline			120	94.3		ug/L		79	28 - 118	13	40
Nitrobenzene			120	84.4		ug/L		70	29 - 120	6	40
2-Nitrophenol			120	100		ug/L		84	25 - 148	7	40
4-Nitrophenol			240	227		ug/L		94	12 - 129	7	40
N-Nitrosodimethylamine			120	115		ug/L		96	10 - 115	12	40
N-Nitrosodi-n-propylamine			120	102		ug/L		85	24 - 142	8	40
N-Nitrosodiphenylamine			119	113		ug/L		95	29 - 138	6	40
Pentachlorophenol			240	178		ug/L		74	19 - 150	8	40
Phenol			120	58.8		ug/L		49	11 - 95	14	40
Pyridine			240	46.5	*1	ug/L		19	10 - 82	49	40
Quinoline			114	97.9		ug/L		86	40 - 140	24	40
2,4,5-Trichlorophenol			120	104		ug/L		87	30 - 144	5	40
2,4,6-Trichlorophenol			120	102		ug/L		85	27 - 147	4	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*21 - 114*
2-Fluorophenol	*54*		*10 - 105*
Nitrobenzene-d5	*84*		*16 - 127*
Phenol-d5	*50*		*10 - 129*
Terphenyl-d14	*100*		*13 - 150*
2,4,6-Tribromophenol	*92*		*10 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-657668/5-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657668

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	72.3		ug/L		60	40 - 140	15	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*21 - 114*
2-Fluorophenol	*44*		*10 - 105*
Nitrobenzene-d5	*62*		*16 - 127*
Phenol-d5	*38*		*10 - 129*
Terphenyl-d14	*97*		*13 - 150*
2,4,6-Tribromophenol	*80*		*10 - 150*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-657912/1-A
Matrix: Water
Analysis Batch: 657957

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		01/17/24 11:34	01/17/24 17:23	1
Acenaphthylene	ND		0.20	0.044	ug/L		01/17/24 11:34	01/17/24 17:23	1
Anthracene	ND		0.20	0.047	ug/L		01/17/24 11:34	01/17/24 17:23	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		01/17/24 11:34	01/17/24 17:23	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		01/17/24 11:34	01/17/24 17:23	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		01/17/24 11:34	01/17/24 17:23	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/17/24 11:34	01/17/24 17:23	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		01/17/24 11:34	01/17/24 17:23	1
Chrysene	ND		0.20	0.033	ug/L		01/17/24 11:34	01/17/24 17:23	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		01/17/24 11:34	01/17/24 17:23	1
Fluoranthene	ND		0.20	0.034	ug/L		01/17/24 11:34	01/17/24 17:23	1
Fluorene	ND		0.20	0.089	ug/L		01/17/24 11:34	01/17/24 17:23	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		01/17/24 11:34	01/17/24 17:23	1
Phenanthrene	ND		0.20	0.090	ug/L		01/17/24 11:34	01/17/24 17:23	1
Pyrene	ND		0.20	0.039	ug/L		01/17/24 11:34	01/17/24 17:23	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		01/17/24 11:34	01/17/24 17:23	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		01/17/24 11:34	01/17/24 17:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*194*	*S1+*	*18 - 147*	*01/17/24 11:34*	*01/17/24 17:23*	*1*
2-Fluorobiphenyl	*100*		*15 - 128*	*01/17/24 11:34*	*01/17/24 17:23*	*1*
Nitrobenzene-d5	*73*		*10 - 144*	*01/17/24 11:34*	*01/17/24 17:23*	*1*

Lab Sample ID: LCS 400-657912/2-A
Matrix: Water
Analysis Batch: 657957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657912

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acenaphthene			120	118		ug/L		98	40 - 140		
Acenaphthylene			120	110		ug/L		92	40 - 140		
Anthracene			120	100	E	ug/L		83	40 - 140		

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 400-657912/2-A
Matrix: Water
Analysis Batch: 657957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657912

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzo[a]anthracene			120	133		ug/L		111	40 - 140		
Benzo[a]pyrene			120	122		ug/L		102	40 - 140		
Benzo[b]fluoranthene			120	164		ug/L		137	40 - 140		
Benzo[g,h,i]perylene			120	113		ug/L		94	40 - 140		
Benzo[k]fluoranthene			120	117		ug/L		97	40 - 140		
Chrysene			120	108		ug/L		90	40 - 140		
Dibenz(a,h)anthracene			120	134		ug/L		111	40 - 140		
Fluoranthene			120	97.6	E	ug/L		81	40 - 140		
Fluorene			120	123		ug/L		102	40 - 140		
Indeno[1,2,3-cd]pyrene			120	136		ug/L		113	40 - 140		
Phenanthrene			120	117		ug/L		97	40 - 140		
Pyrene			120	112		ug/L		93	40 - 140		
1-Methylnaphthalene			120	111		ug/L		92	40 - 140		
2-Methylnaphthalene			120	115		ug/L		96	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*82*		*18 - 147*
2-Fluorobiphenyl	*84*		*15 - 128*
Nitrobenzene-d5	*89*		*10 - 144*

Lab Sample ID: LCSD 400-657912/3-A
Matrix: Water
Analysis Batch: 657957

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657912

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	122		ug/L		102	40 - 140	4	40
Acenaphthylene			120	116		ug/L		96	40 - 140	5	40
Anthracene			120	103	E	ug/L		86	40 - 140	3	40
Benzo[a]anthracene			120	141		ug/L		117	40 - 140	6	40
Benzo[a]pyrene			120	130		ug/L		108	40 - 140	6	40
Benzo[b]fluoranthene			120	171	*+	ug/L		143	40 - 140	4	40
Benzo[g,h,i]perylene			120	125		ug/L		104	40 - 140	9	40
Benzo[k]fluoranthene			120	125		ug/L		104	40 - 140	6	40
Chrysene			120	115		ug/L		96	40 - 140	6	40
Dibenz(a,h)anthracene			120	144		ug/L		120	40 - 140	8	40
Fluoranthene			120	101	E	ug/L		84	40 - 140	3	40
Fluorene			120	128		ug/L		107	40 - 140	4	40
Indeno[1,2,3-cd]pyrene			120	146		ug/L		122	40 - 140	7	40
Phenanthrene			120	122		ug/L		102	40 - 140	4	40
Pyrene			120	118		ug/L		98	40 - 140	5	40
1-Methylnaphthalene			120	114		ug/L		95	40 - 140	3	40
2-Methylnaphthalene			120	117		ug/L		98	40 - 140	2	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*86*		*18 - 147*
2-Fluorobiphenyl	*88*		*15 - 128*
Nitrobenzene-d5	*92*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-657905/1-A
Matrix: Water
Analysis Batch: 657923

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657905

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		01/17/24 10:31	01/17/24 15:53	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/17/24 10:31	01/17/24 15:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*	*p*	*51 - 149*	*01/17/24 10:31*	*01/17/24 15:53*	*1*

Lab Sample ID: LCS 400-657905/2-A
Matrix: Water
Analysis Batch: 657923

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657905

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0986		ug/L		98	60 - 140		
1,2-Dibromoethane			0.100	0.0926		ug/L		92	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*86*	*p*	*51 - 149*

Lab Sample ID: LCSD 400-657905/3-A
Matrix: Water
Analysis Batch: 657923

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657905

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0963		ug/L		96	60 - 140	2	30
1,2-Dibromoethane			0.100	0.0915		ug/L		91	60 - 140	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*85*	*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
Melissa Remiger	25278	DATE: 1/11/2024
PO #	**GSAP Project ID**	PAGE: 1 of 2
60721927 – 3.1.2	USPC/00114/R/02	

SAMPLING COMPANY:	LOG CODE:
AECOM	

SITE ADDRESS: Street and City	State	AECOM Project / Task Number:
900 South Central Ave; ROXANA	IL	Roxana Quarterly GW 60721927 – 3.1.2

ADDRESS:	EDF DELIVERABLE TO (Name, Company, Office Location):	PHONE NO.:	E-MAIL:	AECOM Other ID:
100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA	Melissa Remiger - please see special instructions	314-802-1207	melissa.remiger@aecom.com	

PROJECT CONTACT (Hardcopy or PDF Report to):	TELEPHONE:	FAX:	Bill To Contact E-MAIL:
Melissa Remiger, Mary Massa, Brett Howell	314-429-0100	314-429-0462	melissa.remiger@aecom.com

SAMPLER NAME(S) (Print):	LAB USE ONLY
J. MAYER ; E. CHALFANT	

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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

*** Please include "J" values on Reports.**
*** Please provide sample receipt upon login.**
*** Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com**

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.1.2

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 8270 SIMS
	TB-ROX-011124-8260-B	1/11/2024	0000	Water	2					2	X			
	TB-ROX-01124-8011-B	1/11/2024	0000	Water	2					2		X		
	P93C-ROX-011124	1/11/2024	0945	Water	6			2		8	X	X	X	X
	P57-ROX-011124	1/11/2024	1050	Water	6			2		8	X	X	X	X
	P57-ROX-011124-DUP	1/11/2024	1050	Water	6			2		8	X	X	X	X
	T12-ROX-011124	1/11/2024	1155	Water	6			2		8	X	X	X	X

COC 1/11/24

FIELD NOTES:

TEMPERATURE ON RECEIPT C°
0.8
1.0 JR10

Container PID Readings or Laboratory Notes:

400-249617 COC

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
E. CHALFANT	FEDEX: 6339 6598 2667 ; 6339 6598 2689	1/11/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
		1.12.24	9:31
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS - 1599821 ; 1599820 ; 1599822 ; 1599823

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc. Job Number: 400-249617-1

Login Number: 249617 **List Source: Eurofins Pensacola**
List Number: 1
Creator: Roberts, Alexis J

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	0.8°C, 1.0°C IR10
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: 400-249617-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Roxana Groundwater Quarterly – 1st Quarter 2024 Data Review

Laboratory SDG: 400-249620-1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 2/28/2024

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

Sample Identification	Sample Identification
TB-TOX-011124-8260-A	TB-TOX-011124-8011-A
MW12-ROX-011124-EB	MW12-ROX-011124
ROST4PZE-ROX-011124	MW2-ROX-011124

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 that 2-butanone (MEK) was detected in equipment blank MW12-ROX-011124-EB. 2-Chloroethyl vinyl ether, benzo[b]fluoranthene, and several SVOC LCS/LCSD recoveries, and/or LCS/LCSD RPDs, were outside evaluation criteria. PAH surrogate recoveries for terphenyl-d_{14} and VOC by 8011 surrogate recoveries for 4-bromofluorobenzene in several investigative and quality control samples were outside criteria. The continuing calibration verification (CCV) for several analytes were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (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
MW12-ROX-011124-EB	VOCs	2-Butanone (MEK)	2.6 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 400-657968/1001	VOCs	2-Chloroethyl vinyl ether	**162**	NA	10-160
LCS/LCSD 400-657668/2-A/3-A	SVOCs	Aniline	31/51	**49**	10-127/40
LCS/LCSD 400-657668/2-A/3-A	SVOCs	Benzoic acid	98/**135**	32	19-126/40
LCS/LCSD 400-657668/2-A/3-A	SVOCs	Pyridine	12/19	**49**	10-82/40
LCS/LCSD 400-657912/2-A/3-A	PAHs	Benzo[b]fluoranthene	137/**143**	4	40-140/40

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 LCS/LCSD 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?

Yes

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW12-ROX-011124-EB	PAHs	Terphenyl-d_{14}	**155**	18-147
MW12-ROX-011124	PAHs	Terphenyl-d_{14}	**150**	18-147
MB 400-657912/1-A	PAHs	Terphenyl-d_{14}	**194**	18-147
MW12-ROX-011124	VOCs by 8011	4-Bromofluorobenzene	**220**	51-149
ROST4PZE-ROX-011124	VOCs by 8011	4-Bromofluorobenzene	**289**	51-149

Qualifications due to surrogate recoveries were not required if only one of three base/neutral 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 (CCV) for pyridine, bis(2-chloroethyl) ether, bis(2-chloroethoxy) methane, anthracene, and fluoranthene were outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW12-ROX-011124	SVOCs	Pyridine	**UJ**
MW12-ROX-011124	SVOCs	bis(2-Chloroethyl) ether	**UJ**
MW12-ROX-011124	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
MW12-ROX-011124	PAHs	Anthracene	**UJ**
MW12-ROX-011124	PAHs	Fluoranthene	**J**
ROST4PZE-ROX-011124	SVOCs	Pyridine	**UJ**
ROST4PZE-ROX-011124	SVOCs	bis(2-Chloroethyl) ether	**UJ**
ROST4PZE-ROX-011124	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
ROST4PZE-ROX-011124	PAHs	Anthracene	**J**
ROST4PZE-ROX-011124	PAHs	Fluoranthene	**J**
MW2-ROX-011124	SVOCs	Pyridine	**UJ**
MW2-ROX-011124	SVOCs	bis(2-Chloroethyl) ether	**UJ**
MW2-ROX-011124	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
MW2-ROX-011124	PAHs	Anthracene	**UJ**
MW2-ROX-011124	PAHs	Fluoranthene	**UJ**

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ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 1/22/2024 7:58:57 AM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-249620-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

myEOL

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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Job Narrative
400-249620-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 1/12/2024 9:31 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 0.8°C and 1.0°C

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-657889 recovered above the upper control limit for 2-Chloroethyl vinyl ether, Acrolein and Vinyl acetate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260D: 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: MW12-ROX-011124-EB (400-249620-3), MW12-ROX-011124 (400-249620-4), ROST4PZE-ROX-011124 (400-249620-5) and MW2-ROX-011124 (400-249620-6). 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 8260D: The equipment blank for analytical batch 400-657889 contained 2-Butanone (MEK) above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the equipment blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8260D: The laboratory control sample (LCS) for analytical batch 400-657968 recovered outside control limits for the following analytes: 2-Chloroethyl vinyl ether. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-657968 recovered above the upper control limit for 1,2-Dichloropropane, 2-Chloroethyl vinyl ether, Acrolein, cis-1,3-Dichloropropene and Vinyl acetate. 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 400-657968/1).

Method 8260D: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following sample was received preserved with hydrochloric acid: TB-TOX-011124-8260-A (400-249620-1). 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 8270E: The initial calibration verification (ICV) analyzed in batch 400-653222 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-657759 recovered above the upper control limit for N-Nitrosodimethylamine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-657759 recovered outside acceptance

criteria, low biased, for Bis(2-chloroethoxy)methane, Bis(2-chloroethyl)ether and Pyridine. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-657668 and analytical batch 400-657759 recovered outside control limits for the following analytes: Aniline and Pyridine.

Method 8270E: The laboratory control sample duplicate (LCSD) for preparation batch 400-657668 and analytical batch 400-657759 recovered outside control limits for the following analytes: Benzoic acid. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 8270E_SIM: 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: MW12-ROX-011124-EB (400-249620-3), MW12-ROX-011124 (400-249620-4) and (MB 400-657912/1-A). These results have been reported and qualified.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-657957 recovered outside acceptance criteria, low biased, for Anthracene and Fluoranthene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E_SIM: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-657912 and analytical batch 400-657957 recovered outside control limits for the following analytes: Benzo[b]fluoranthene. 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 Semi VOA
Method 8011: Surrogate recovery for the following samples were outside control limits: MW12-ROX-011124 (400-249620-4) and ROST4PZE-ROX-011124 (400-249620-5). 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.

Sample Summary

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

Job ID: 400-249620-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-249620-1	TB-TOX-011124-8260-A	Water	01/11/24 12:00	01/12/24 09:31
400-249620-2	TB-TOX-011124-8011-A	Water	01/11/24 12:00	01/12/24 09:31
400-249620-3	MW12-ROX-011124-EB	Water	01/11/24 08:40	01/12/24 09:31
400-249620-4	MW12-ROX-011124	Water	01/11/24 09:55	01/12/24 09:31
400-249620-5	ROST4PZE-ROX-011124	Water	01/11/24 12:15	01/12/24 09:31
400-249620-6	MW2-ROX-011124	Water	01/11/24 13:45	01/12/24 09:31

Detection Summary

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

Job ID: 400-249620-1

Client Sample ID: TB-TOX-011124-8260-A — Lab Sample ID: 400-249620-1

No Detections.

Client Sample ID: TB-TOX-011124-8011-A — Lab Sample ID: 400-249620-2

No Detections.

Client Sample ID: MW12-ROX-011124-EB — Lab Sample ID: 400-249620-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	2.6	J	25	2.6	ug/L	1		8260D	Total/NA

Client Sample ID: MW12-ROX-011124 — Lab Sample ID: 400-249620-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.13	J	0.19	0.043	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.034	J	0.19	0.033	ug/L	1		8270E SIM	Total/NA

Client Sample ID: ROST4PZE-ROX-011124 — Lab Sample ID: 400-249620-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.95	J	1.0	0.50	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	8.6	J	25	2.6	ug/L	1		8260D	Total/NA
Ethylbenzene	8.7		1.0	0.50	ug/L	1		8260D	Total/NA
Isopropylbenzene	0.95	J	1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	5.4		5.0	0.63	ug/L	1		8260D	Total/NA
N-Propylbenzene	0.85	J	1.0	0.69	ug/L	1		8260D	Total/NA
o-Xylene	0.61	J	5.0	0.60	ug/L	1		8260D	Total/NA
Toluene	0.90	J	1.0	0.90	ug/L	1		8260D	Total/NA
1,2,4-Trimethylbenzene	10		1.0	0.82	ug/L	1		8260D	Total/NA
Xylenes, Total	6.0	J	10	1.6	ug/L	1		8260D	Total/NA
Acenaphthene	0.82		0.20	0.10	ug/L	1		8270E SIM	Total/NA
Anthracene	1.5		0.20	0.048	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.085	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Chrysene	0.11	J	0.20	0.033	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.37		0.20	0.034	ug/L	1		8270E SIM	Total/NA
Fluorene	0.64		0.20	0.090	ug/L	1		8270E SIM	Total/NA
Phenanthrene	4.7		0.20	0.091	ug/L	1		8270E SIM	Total/NA
Pyrene	0.49		0.20	0.039	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	9.2		0.20	0.081	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	2.6		0.20	0.067	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW2-ROX-011124 — Lab Sample ID: 400-249620-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	26		25	10	ug/L	1		8260D	Total/NA
Benzene	1.4		1.0	0.50	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	5.8	J	25	2.6	ug/L	1		8260D	Total/NA
Ethylbenzene	35		1.0	0.50	ug/L	1		8260D	Total/NA
Isopropylbenzene	32		1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	14		5.0	0.63	ug/L	1		8260D	Total/NA
Naphthalene	8.4		5.0	3.0	ug/L	1		8260D	Total/NA
n-Butylbenzene	2.7		1.0	0.76	ug/L	1		8260D	Total/NA
N-Propylbenzene	52		1.0	0.69	ug/L	1		8260D	Total/NA
o-Xylene	1.7	J	5.0	0.60	ug/L	1		8260D	Total/NA
p-Isopropyltoluene	2.8		1.0	0.71	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW2-ROX-011124 (Continued)

Lab Sample ID: 400-249620-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
sec-Butylbenzene	4.4		1.0	0.70	ug/L	1		8260D	Total/NA
tert-Butylbenzene	0.64	J	1.0	0.63	ug/L	1		8260D	Total/NA
Toluene	2.4		1.0	0.90	ug/L	1		8260D	Total/NA
1,2,4-Trimethylbenzene	5.4		1.0	0.82	ug/L	1		8260D	Total/NA
1,3,5-Trimethylbenzene	8.5		1.0	0.56	ug/L	1		8260D	Total/NA
Xylenes, Total	16		10	1.6	ug/L	1		8260D	Total/NA
1-Methylnaphthalene	6.9		0.20	0.078	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	9.1		0.20	0.064	ug/L	1		8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-249620-1

Client Sample ID: TB-TOX-011124-8260-A
Date Collected: 01/11/24 12:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249620-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/18/24 12:42	1
Acrolein	ND		20	3.3	ug/L			01/18/24 12:42	1
Acrylonitrile	ND		10	2.8	ug/L			01/18/24 12:42	1
Benzene	ND		1.0	0.50	ug/L			01/18/24 12:42	1
Bromobenzene	ND		1.0	0.54	ug/L			01/18/24 12:42	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/18/24 12:42	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/18/24 12:42	1
Bromoform	ND		5.0	0.25	ug/L			01/18/24 12:42	1
Bromomethane	ND		1.0	0.98	ug/L			01/18/24 12:42	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/18/24 12:42	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/18/24 12:42	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/18/24 12:42	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/18/24 12:42	1
Chloroethane	ND		1.0	0.76	ug/L			01/18/24 12:42	1
2-Chloroethyl vinyl ether	ND	*+	5.0	2.0	ug/L			01/18/24 12:42	1
Chloroform	ND		1.0	0.90	ug/L			01/18/24 12:42	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/18/24 12:42	1
Chloromethane	ND		1.0	0.90	ug/L			01/18/24 12:42	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/18/24 12:42	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/18/24 12:42	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/18/24 12:42	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/18/24 12:42	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/18/24 12:42	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/18/24 12:42	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/18/24 12:42	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/18/24 12:42	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/18/24 12:42	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/18/24 12:42	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 12:42	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 12:42	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 12:42	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/18/24 12:42	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/18/24 12:42	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/18/24 12:42	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/18/24 12:42	1
2-Hexanone	ND		25	1.4	ug/L			01/18/24 12:42	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/18/24 12:42	1
Methylene bromide	ND		5.0	0.22	ug/L			01/18/24 12:42	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/18/24 12:42	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/18/24 12:42	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/18/24 12:42	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/18/24 12:42	1
Naphthalene	ND		5.0	3.0	ug/L			01/18/24 12:42	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/18/24 12:42	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/18/24 12:42	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/18/24 12:42	1
o-Xylene	ND		5.0	0.60	ug/L			01/18/24 12:42	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/18/24 12:42	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/18/24 12:42	1

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

Job ID: 400-249620-1

Client Sample ID: TB-TOX-011124-8260-A
Date Collected: 01/11/24 12:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249620-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/18/24 12:42	1
Styrene	ND		1.0	1.0	ug/L			01/18/24 12:42	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/18/24 12:42	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/18/24 12:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/18/24 12:42	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/18/24 12:42	1
Toluene	ND		1.0	0.90	ug/L			01/18/24 12:42	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/18/24 12:42	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/18/24 12:42	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/18/24 12:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/18/24 12:42	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/18/24 12:42	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/18/24 12:42	1
Trichloroethene	ND		1.0	0.15	ug/L			01/18/24 12:42	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/18/24 12:42	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/18/24 12:42	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/18/24 12:42	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/18/24 12:42	1
Vinyl acetate	ND		25	0.93	ug/L			01/18/24 12:42	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/18/24 12:42	1
Xylenes, Total	ND		10	1.6	ug/L			01/18/24 12:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*72 - 130*		*01/18/24 12:42*	*1*
Dibromofluoromethane	*110*		*75 - 126*		*01/18/24 12:42*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*01/18/24 12:42*	*1*

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

Job ID: 400-249620-1

Client Sample ID: TB-TOX-011124-8011-A
Date Collected: 01/11/24 12:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249620-2
Matrix: Water

Method: EPA 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		01/17/24 10:31	01/17/24 20:25	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/17/24 10:31	01/17/24 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*01/17/24 10:31*	*01/17/24 20:25*	*1*

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

Job ID: 400-249620-1

Client Sample ID: MW12-ROX-011124-EB

Date Collected: 01/11/24 08:40
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249620-3

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/17/24 15:16	1
Acrolein	ND		20	3.3	ug/L			01/17/24 15:16	1
Acrylonitrile	ND		10	2.8	ug/L			01/17/24 15:16	1
Benzene	ND		1.0	0.50	ug/L			01/17/24 15:16	1
Bromobenzene	ND		1.0	0.54	ug/L			01/17/24 15:16	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/17/24 15:16	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/17/24 15:16	1
Bromoform	ND		5.0	0.25	ug/L			01/17/24 15:16	1
Bromomethane	ND		1.0	0.98	ug/L			01/17/24 15:16	1
2-Butanone (MEK)	**2.6**	**J**	25	2.6	ug/L			01/17/24 15:16	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/17/24 15:16	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/17/24 15:16	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/17/24 15:16	1
Chloroethane	ND		1.0	0.76	ug/L			01/17/24 15:16	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/17/24 15:16	1
Chloroform	ND		1.0	0.90	ug/L			01/17/24 15:16	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/17/24 15:16	1
Chloromethane	ND		1.0	0.90	ug/L			01/17/24 15:16	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/17/24 15:16	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/17/24 15:16	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/17/24 15:16	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/17/24 15:16	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/17/24 15:16	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/17/24 15:16	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/17/24 15:16	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/17/24 15:16	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/17/24 15:16	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 15:16	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 15:16	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 15:16	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 15:16	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/17/24 15:16	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/17/24 15:16	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/17/24 15:16	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/17/24 15:16	1
2-Hexanone	ND		25	1.4	ug/L			01/17/24 15:16	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/17/24 15:16	1
Methylene bromide	ND		5.0	0.22	ug/L			01/17/24 15:16	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/17/24 15:16	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/17/24 15:16	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/17/24 15:16	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/17/24 15:16	1
Naphthalene	ND		5.0	3.0	ug/L			01/17/24 15:16	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/17/24 15:16	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/17/24 15:16	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/17/24 15:16	1
o-Xylene	ND		5.0	0.60	ug/L			01/17/24 15:16	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/17/24 15:16	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/17/24 15:16	1

Client Sample ID: MW12-ROX-011124-EB

Lab Sample ID: 400-249620-3

Date Collected: 01/11/24 08:40

Matrix: Water

Date Received: 01/12/24 09:31

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/17/24 15:16	1
Styrene	ND		1.0	1.0	ug/L			01/17/24 15:16	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/17/24 15:16	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/17/24 15:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/17/24 15:16	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/17/24 15:16	1
Toluene	ND		1.0	0.90	ug/L			01/17/24 15:16	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 15:16	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/17/24 15:16	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/17/24 15:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/17/24 15:16	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/17/24 15:16	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/17/24 15:16	1
Trichloroethene	ND		1.0	0.15	ug/L			01/17/24 15:16	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/17/24 15:16	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/17/24 15:16	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/17/24 15:16	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/17/24 15:16	1
Vinyl acetate	ND		25	0.93	ug/L			01/17/24 15:16	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/17/24 15:16	1
Xylenes, Total	ND		10	1.6	ug/L			01/17/24 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 130*		*01/17/24 15:16*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/17/24 15:16*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*01/17/24 15:16*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.095	ug/L		01/17/24 11:35	01/17/24 19:46	1
Acenaphthylene	ND		0.19	0.042	ug/L		01/17/24 11:35	01/17/24 19:46	1
Anthracene	ND		0.19	0.045	ug/L		01/17/24 11:35	01/17/24 19:46	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		01/17/24 11:35	01/17/24 19:46	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		01/17/24 11:35	01/17/24 19:46	1
Benzo[b]fluoranthene	ND	*+	0.19	0.036	ug/L		01/17/24 11:35	01/17/24 19:46	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		01/17/24 11:35	01/17/24 19:46	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		01/17/24 11:35	01/17/24 19:46	1
Chrysene	ND		0.19	0.032	ug/L		01/17/24 11:35	01/17/24 19:46	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		01/17/24 11:35	01/17/24 19:46	1
Fluoranthene	ND		0.19	0.033	ug/L		01/17/24 11:35	01/17/24 19:46	1
Fluorene	ND		0.19	0.086	ug/L		01/17/24 11:35	01/17/24 19:46	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		01/17/24 11:35	01/17/24 19:46	1
Phenanthrene	ND		0.19	0.087	ug/L		01/17/24 11:35	01/17/24 19:46	1
Pyrene	ND		0.19	0.038	ug/L		01/17/24 11:35	01/17/24 19:46	1
1-Methylnaphthalene	ND		0.19	0.077	ug/L		01/17/24 11:35	01/17/24 19:46	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		01/17/24 11:35	01/17/24 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*155*	*S1+*	*18 - 147*	*01/17/24 11:35*	*01/17/24 19:46*	*1*
2-Fluorobiphenyl	*97*		*15 - 128*	*01/17/24 11:35*	*01/17/24 19:46*	*1*

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

Job ID: 400-249620-1

Client Sample ID: MW12-ROX-011124-EB

Date Collected: 01/11/24 08:40
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249620-3

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*78*		*10 - 144*	*01/17/24 11:35*	*01/17/24 19:46*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.6	8.3	ug/L		01/15/24 09:26	01/16/24 16:52	1
Benzenethiol	ND		9.6	9.5	ug/L		01/15/24 09:26	01/16/24 16:52	1
Benzoic acid	ND	*+	29	23	ug/L		01/15/24 09:26	01/16/24 16:52	1
Benzyl alcohol	ND		9.6	7.0	ug/L		01/15/24 09:26	01/16/24 16:52	1
Bis(2-chloroethoxy)methane	ND		9.6	4.4	ug/L		01/15/24 09:26	01/16/24 16:52	1
Bis(2-chloroethyl)ether	ND		9.6	3.7	ug/L		01/15/24 09:26	01/16/24 16:52	1
bis (2-chloroisopropyl) ether	ND		9.6	1.7	ug/L		01/15/24 09:26	01/16/24 16:52	1
Bis(2-ethylhexyl) phthalate	ND		9.6	8.5	ug/L		01/15/24 09:26	01/16/24 16:52	1
4-Bromophenyl phenyl ether	ND		9.6	8.2	ug/L		01/15/24 09:26	01/16/24 16:52	1
Butyl benzyl phthalate	ND		9.6	5.5	ug/L		01/15/24 09:26	01/16/24 16:52	1
4-Chloroaniline	ND		9.6	4.5	ug/L		01/15/24 09:26	01/16/24 16:52	1
4-Chloro-3-methylphenol	ND		9.6	5.1	ug/L		01/15/24 09:26	01/16/24 16:52	1
2-Chloronaphthalene	ND		9.6	3.6	ug/L		01/15/24 09:26	01/16/24 16:52	1
2-Chlorophenol	ND		9.6	3.9	ug/L		01/15/24 09:26	01/16/24 16:52	1
4-Chlorophenyl phenyl ether	ND		9.6	3.5	ug/L		01/15/24 09:26	01/16/24 16:52	1
Dibenz[a,h]acridine	ND		9.6	2.7	ug/L		01/15/24 09:26	01/16/24 16:52	1
Dibenzofuran	ND		9.6	3.8	ug/L		01/15/24 09:26	01/16/24 16:52	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/15/24 09:26	01/16/24 16:52	1
2,4-Dichlorophenol	ND		9.6	4.1	ug/L		01/15/24 09:26	01/16/24 16:52	1
Diethyl phthalate	ND		9.6	4.2	ug/L		01/15/24 09:26	01/16/24 16:52	1
2,4-Dimethylphenol	ND		9.6	5.0	ug/L		01/15/24 09:26	01/16/24 16:52	1
Dimethyl phthalate	ND		9.6	4.0	ug/L		01/15/24 09:26	01/16/24 16:52	1
Di-n-butyl phthalate	ND		9.6	4.4	ug/L		01/15/24 09:26	01/16/24 16:52	1
4,6-Dinitro-ortho-cresol	ND		9.6	9.6	ug/L		01/15/24 09:26	01/16/24 16:52	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		01/15/24 09:26	01/16/24 16:52	1
2,4-Dinitrotoluene	ND		9.6	4.9	ug/L		01/15/24 09:26	01/16/24 16:52	1
2,6-Dinitrotoluene	ND		9.6	3.7	ug/L		01/15/24 09:26	01/16/24 16:52	1
Di-n-octyl phthalate	ND		9.6	5.7	ug/L		01/15/24 09:26	01/16/24 16:52	1
1,4-Dioxane	ND		9.6	4.1	ug/L		01/15/24 09:26	01/16/24 16:52	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	3.2	ug/L		01/15/24 09:26	01/16/24 16:52	1
Hexachlorobenzene	ND		9.6	9.3	ug/L		01/15/24 09:26	01/16/24 16:52	1
Hexachlorocyclopentadiene	ND		19	4.3	ug/L		01/15/24 09:26	01/16/24 16:52	1
Hexachloroethane	ND		9.6	5.0	ug/L		01/15/24 09:26	01/16/24 16:52	1
Indene	ND		9.6	3.4	ug/L		01/15/24 09:26	01/16/24 16:52	1
Isophorone	ND		9.6	5.0	ug/L		01/15/24 09:26	01/16/24 16:52	1
2-Methylphenol	ND		9.6	3.1	ug/L		01/15/24 09:26	01/16/24 16:52	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		01/15/24 09:26	01/16/24 16:52	1
2-Nitroaniline	ND		9.6	4.8	ug/L		01/15/24 09:26	01/16/24 16:52	1
3-Nitroaniline	ND		9.6	4.5	ug/L		01/15/24 09:26	01/16/24 16:52	1
4-Nitroaniline	ND		9.6	3.9	ug/L		01/15/24 09:26	01/16/24 16:52	1
Nitrobenzene	ND		9.6	4.5	ug/L		01/15/24 09:26	01/16/24 16:52	1
2-Nitrophenol	ND		9.6	4.4	ug/L		01/15/24 09:26	01/16/24 16:52	1
4-Nitrophenol	ND		9.6	3.2	ug/L		01/15/24 09:26	01/16/24 16:52	1
N-Nitrosodimethylamine	ND		9.6	2.1	ug/L		01/15/24 09:26	01/16/24 16:52	1

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

Job ID: 400-249620-1

Client Sample ID: MW12-ROX-011124-EB

Date Collected: 01/11/24 08:40
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249620-3

Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	2.4	ug/L		01/15/24 09:26	01/16/24 16:52	1
N-Nitrosodiphenylamine	ND		9.6	3.5	ug/L		01/15/24 09:26	01/16/24 16:52	1
Pentachlorophenol	ND		19	11	ug/L		01/15/24 09:26	01/16/24 16:52	1
Phenol	ND		9.6	4.0	ug/L		01/15/24 09:26	01/16/24 16:52	1
Pyridine	ND	*1	9.6	9.6	ug/L		01/15/24 09:26	01/16/24 16:52	1
Quinoline	ND		9.6	2.3	ug/L		01/15/24 09:26	01/16/24 16:52	1
2,4,5-Trichlorophenol	ND		9.6	3.8	ug/L		01/15/24 09:26	01/16/24 16:52	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		01/15/24 09:26	01/16/24 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*21 - 114*	*01/15/24 09:26*	*01/16/24 16:52*	*1*
2-Fluorophenol	*44*		*10 - 105*	*01/15/24 09:26*	*01/16/24 16:52*	*1*
Nitrobenzene-d5	*66*		*16 - 127*	*01/15/24 09:26*	*01/16/24 16:52*	*1*
Phenol-d5	*35*		*10 - 129*	*01/15/24 09:26*	*01/16/24 16:52*	*1*
Terphenyl-d14	*98*		*13 - 150*	*01/15/24 09:26*	*01/16/24 16:52*	*1*
2,4,6-Tribromophenol	*86*		*10 - 150*	*01/15/24 09:26*	*01/16/24 16:52*	*1*

Method: EPA 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		01/17/24 10:31	01/17/24 20:45	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		01/17/24 10:31	01/17/24 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*51 - 149*	*01/17/24 10:31*	*01/17/24 20:45*	*1*

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

Job ID: 400-249620-1

Client Sample ID: MW12-ROX-011124
Date Collected: 01/11/24 09:55
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249620-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/17/24 18:41	1
Acrolein	ND		20	3.3	ug/L			01/17/24 18:41	1
Acrylonitrile	ND		10	2.8	ug/L			01/17/24 18:41	1
Benzene	ND		1.0	0.50	ug/L			01/17/24 18:41	1
Bromobenzene	ND		1.0	0.54	ug/L			01/17/24 18:41	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/17/24 18:41	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/17/24 18:41	1
Bromoform	ND		5.0	0.25	ug/L			01/17/24 18:41	1
Bromomethane	ND		1.0	0.98	ug/L			01/17/24 18:41	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/17/24 18:41	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/17/24 18:41	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/17/24 18:41	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/17/24 18:41	1
Chloroethane	ND		1.0	0.76	ug/L			01/17/24 18:41	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/17/24 18:41	1
Chloroform	ND		1.0	0.90	ug/L			01/17/24 18:41	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/17/24 18:41	1
Chloromethane	ND		1.0	0.90	ug/L			01/17/24 18:41	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/17/24 18:41	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/17/24 18:41	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/17/24 18:41	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/17/24 18:41	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/17/24 18:41	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/17/24 18:41	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/17/24 18:41	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/17/24 18:41	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/17/24 18:41	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 18:41	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 18:41	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 18:41	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 18:41	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/17/24 18:41	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/17/24 18:41	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/17/24 18:41	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/17/24 18:41	1
2-Hexanone	ND		25	1.4	ug/L			01/17/24 18:41	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/17/24 18:41	1
Methylene bromide	ND		5.0	0.22	ug/L			01/17/24 18:41	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/17/24 18:41	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/17/24 18:41	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/17/24 18:41	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/17/24 18:41	1
Naphthalene	ND		5.0	3.0	ug/L			01/17/24 18:41	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/17/24 18:41	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/17/24 18:41	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/17/24 18:41	1
o-Xylene	ND		5.0	0.60	ug/L			01/17/24 18:41	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/17/24 18:41	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/17/24 18:41	1

Client Sample ID: MW12-ROX-011124
Date Collected: 01/11/24 09:55
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249620-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/17/24 18:41	1
Styrene	ND		1.0	1.0	ug/L			01/17/24 18:41	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/17/24 18:41	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/17/24 18:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/17/24 18:41	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/17/24 18:41	1
Toluene	ND		1.0	0.90	ug/L			01/17/24 18:41	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 18:41	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/17/24 18:41	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/17/24 18:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/17/24 18:41	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/17/24 18:41	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/17/24 18:41	1
Trichloroethene	ND		1.0	0.15	ug/L			01/17/24 18:41	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/17/24 18:41	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/17/24 18:41	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/17/24 18:41	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/17/24 18:41	1
Vinyl acetate	ND		25	0.93	ug/L			01/17/24 18:41	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/17/24 18:41	1
Xylenes, Total	ND		10	1.6	ug/L			01/17/24 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 130*		*01/17/24 18:41*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*01/17/24 18:41*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*01/17/24 18:41*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.096	ug/L		01/17/24 11:35	01/17/24 20:06	1
Acenaphthylene	**0.13**	**J**	0.19	0.043	ug/L		01/17/24 11:35	01/17/24 20:06	1
Anthracene	ND		0.19	0.046	ug/L		01/17/24 11:35	01/17/24 20:06	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		01/17/24 11:35	01/17/24 20:06	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		01/17/24 11:35	01/17/24 20:06	1
Benzo[b]fluoranthene	ND	*+	0.19	0.036	ug/L		01/17/24 11:35	01/17/24 20:06	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		01/17/24 11:35	01/17/24 20:06	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		01/17/24 11:35	01/17/24 20:06	1
Chrysene	ND		0.19	0.032	ug/L		01/17/24 11:35	01/17/24 20:06	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		01/17/24 11:35	01/17/24 20:06	1
Fluoranthene	**0.034**	**J**	0.19	0.033	ug/L		01/17/24 11:35	01/17/24 20:06	1
Fluorene	ND		0.19	0.086	ug/L		01/17/24 11:35	01/17/24 20:06	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		01/17/24 11:35	01/17/24 20:06	1
Phenanthrene	ND		0.19	0.087	ug/L		01/17/24 11:35	01/17/24 20:06	1
Pyrene	ND		0.19	0.038	ug/L		01/17/24 11:35	01/17/24 20:06	1
1-Methylnaphthalene	ND		0.19	0.077	ug/L		01/17/24 11:35	01/17/24 20:06	1
2-Methylnaphthalene	ND		0.19	0.064	ug/L		01/17/24 11:35	01/17/24 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*150*	*S1+*	*18 - 147*	*01/17/24 11:35*	*01/17/24 20:06*	*1*
2-Fluorobiphenyl	*95*		*15 - 128*	*01/17/24 11:35*	*01/17/24 20:06*	*1*

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

Job ID: 400-249620-1

Client Sample ID: MW12-ROX-011124
Date Collected: 01/11/24 09:55
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249620-4
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*78*		*10 - 144*	*01/17/24 11:35*	*01/17/24 20:06*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.7	8.4	ug/L		01/15/24 09:26	01/16/24 17:17	1
Benzenethiol	ND		9.7	9.6	ug/L		01/15/24 09:26	01/16/24 17:17	1
Benzoic acid	ND	*+	29	23	ug/L		01/15/24 09:26	01/16/24 17:17	1
Benzyl alcohol	ND		9.7	7.1	ug/L		01/15/24 09:26	01/16/24 17:17	1
Bis(2-chloroethoxy)methane	ND		9.7	4.4	ug/L		01/15/24 09:26	01/16/24 17:17	1
Bis(2-chloroethyl)ether	ND		9.7	3.8	ug/L		01/15/24 09:26	01/16/24 17:17	1
bis (2-chloroisopropyl) ether	ND		9.7	1.7	ug/L		01/15/24 09:26	01/16/24 17:17	1
Bis(2-ethylhexyl) phthalate	ND		9.7	8.6	ug/L		01/15/24 09:26	01/16/24 17:17	1
4-Bromophenyl phenyl ether	ND		9.7	8.3	ug/L		01/15/24 09:26	01/16/24 17:17	1
Butyl benzyl phthalate	ND		9.7	5.6	ug/L		01/15/24 09:26	01/16/24 17:17	1
4-Chloroaniline	ND		9.7	4.5	ug/L		01/15/24 09:26	01/16/24 17:17	1
4-Chloro-3-methylphenol	ND		9.7	5.1	ug/L		01/15/24 09:26	01/16/24 17:17	1
2-Chloronaphthalene	ND		9.7	3.7	ug/L		01/15/24 09:26	01/16/24 17:17	1
2-Chlorophenol	ND		9.7	4.0	ug/L		01/15/24 09:26	01/16/24 17:17	1
4-Chlorophenyl phenyl ether	ND		9.7	3.6	ug/L		01/15/24 09:26	01/16/24 17:17	1
Dibenz[a,h]acridine	ND		9.7	2.7	ug/L		01/15/24 09:26	01/16/24 17:17	1
Dibenzofuran	ND		9.7	3.9	ug/L		01/15/24 09:26	01/16/24 17:17	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/15/24 09:26	01/16/24 17:17	1
2,4-Dichlorophenol	ND		9.7	4.2	ug/L		01/15/24 09:26	01/16/24 17:17	1
Diethyl phthalate	ND		9.7	4.3	ug/L		01/15/24 09:26	01/16/24 17:17	1
2,4-Dimethylphenol	ND		9.7	5.0	ug/L		01/15/24 09:26	01/16/24 17:17	1
Dimethyl phthalate	ND		9.7	4.1	ug/L		01/15/24 09:26	01/16/24 17:17	1
Di-n-butyl phthalate	ND		9.7	4.4	ug/L		01/15/24 09:26	01/16/24 17:17	1
4,6-Dinitro-ortho-cresol	ND		9.7	9.7	ug/L		01/15/24 09:26	01/16/24 17:17	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		01/15/24 09:26	01/16/24 17:17	1
2,4-Dinitrotoluene	ND		9.7	4.9	ug/L		01/15/24 09:26	01/16/24 17:17	1
2,6-Dinitrotoluene	ND		9.7	3.8	ug/L		01/15/24 09:26	01/16/24 17:17	1
Di-n-octyl phthalate	ND		9.7	5.8	ug/L		01/15/24 09:26	01/16/24 17:17	1
1,4-Dioxane	ND		9.7	4.2	ug/L		01/15/24 09:26	01/16/24 17:17	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	3.2	ug/L		01/15/24 09:26	01/16/24 17:17	1
Hexachlorobenzene	ND		9.7	9.4	ug/L		01/15/24 09:26	01/16/24 17:17	1
Hexachlorocyclopentadiene	ND		19	4.4	ug/L		01/15/24 09:26	01/16/24 17:17	1
Hexachloroethane	ND		9.7	5.0	ug/L		01/15/24 09:26	01/16/24 17:17	1
Indene	ND		9.7	3.5	ug/L		01/15/24 09:26	01/16/24 17:17	1
Isophorone	ND		9.7	5.0	ug/L		01/15/24 09:26	01/16/24 17:17	1
2-Methylphenol	ND		9.7	3.1	ug/L		01/15/24 09:26	01/16/24 17:17	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		01/15/24 09:26	01/16/24 17:17	1
2-Nitroaniline	ND		9.7	4.8	ug/L		01/15/24 09:26	01/16/24 17:17	1
3-Nitroaniline	ND		9.7	4.5	ug/L		01/15/24 09:26	01/16/24 17:17	1
4-Nitroaniline	ND		9.7	4.0	ug/L		01/15/24 09:26	01/16/24 17:17	1
Nitrobenzene	ND		9.7	4.5	ug/L		01/15/24 09:26	01/16/24 17:17	1
2-Nitrophenol	ND		9.7	4.4	ug/L		01/15/24 09:26	01/16/24 17:17	1
4-Nitrophenol	ND		9.7	3.2	ug/L		01/15/24 09:26	01/16/24 17:17	1
N-Nitrosodimethylamine	ND		9.7	2.1	ug/L		01/15/24 09:26	01/16/24 17:17	1

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

Job ID: 400-249620-1

Client Sample ID: MW12-ROX-011124
Date Collected: 01/11/24 09:55
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249620-4
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.7	2.4	ug/L		01/15/24 09:26	01/16/24 17:17	1
N-Nitrosodiphenylamine	ND		9.7	3.6	ug/L		01/15/24 09:26	01/16/24 17:17	1
Pentachlorophenol	ND		19	12	ug/L		01/15/24 09:26	01/16/24 17:17	1
Phenol	ND		9.7	4.1	ug/L		01/15/24 09:26	01/16/24 17:17	1
Pyridine	ND	*1	9.7	9.7	ug/L		01/15/24 09:26	01/16/24 17:17	1
Quinoline	ND		9.7	2.3	ug/L		01/15/24 09:26	01/16/24 17:17	1
2,4,5-Trichlorophenol	ND		9.7	3.9	ug/L		01/15/24 09:26	01/16/24 17:17	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		01/15/24 09:26	01/16/24 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*89*		*21 - 114*	*01/15/24 09:26*	*01/16/24 17:17*	*1*
2-Fluorophenol	*47*		*10 - 105*	*01/15/24 09:26*	*01/16/24 17:17*	*1*
Nitrobenzene-d5	*72*		*16 - 127*	*01/15/24 09:26*	*01/16/24 17:17*	*1*
Phenol-d5	*35*		*10 - 129*	*01/15/24 09:26*	*01/16/24 17:17*	*1*
Terphenyl-d14	*104*		*13 - 150*	*01/15/24 09:26*	*01/16/24 17:17*	*1*
2,4,6-Tribromophenol	*78*		*10 - 150*	*01/15/24 09:26*	*01/16/24 17:17*	*1*

Method: EPA 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		01/17/24 10:31	01/17/24 21:07	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/17/24 10:31	01/17/24 21:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*220*	*S1+*	*51 - 149*	*01/17/24 10:31*	*01/17/24 21:07*	*1*

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

Job ID: 400-249620-1

Client Sample ID: ROST4PZE-ROX-011124
Date Collected: 01/11/24 12:15
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249620-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/17/24 19:04	1
Acrolein	ND		20	3.3	ug/L			01/17/24 19:04	1
Acrylonitrile	ND		10	2.8	ug/L			01/17/24 19:04	1
Benzene	**0.95**	**J**	1.0	0.50	ug/L			01/17/24 19:04	1
Bromobenzene	ND		1.0	0.54	ug/L			01/17/24 19:04	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/17/24 19:04	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/17/24 19:04	1
Bromoform	ND		5.0	0.25	ug/L			01/17/24 19:04	1
Bromomethane	ND		1.0	0.98	ug/L			01/17/24 19:04	1
2-Butanone (MEK)	**8.6**	**J**	25	2.6	ug/L			01/17/24 19:04	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/17/24 19:04	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/17/24 19:04	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/17/24 19:04	1
Chloroethane	ND		1.0	0.76	ug/L			01/17/24 19:04	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/17/24 19:04	1
Chloroform	ND		1.0	0.90	ug/L			01/17/24 19:04	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/17/24 19:04	1
Chloromethane	ND		1.0	0.90	ug/L			01/17/24 19:04	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/17/24 19:04	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/17/24 19:04	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/17/24 19:04	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/17/24 19:04	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/17/24 19:04	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/17/24 19:04	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/17/24 19:04	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/17/24 19:04	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/17/24 19:04	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 19:04	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 19:04	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 19:04	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 19:04	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/17/24 19:04	1
Ethylbenzene	**8.7**		1.0	0.50	ug/L			01/17/24 19:04	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/17/24 19:04	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/17/24 19:04	1
2-Hexanone	ND		25	1.4	ug/L			01/17/24 19:04	1
Isopropylbenzene	**0.95**	**J**	1.0	0.53	ug/L			01/17/24 19:04	1
Methylene bromide	ND		5.0	0.22	ug/L			01/17/24 19:04	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/17/24 19:04	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/17/24 19:04	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/17/24 19:04	1
m-Xylene & p-Xylene	**5.4**		5.0	0.63	ug/L			01/17/24 19:04	1
Naphthalene	ND		5.0	3.0	ug/L			01/17/24 19:04	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/17/24 19:04	1
N-Propylbenzene	**0.85**	**J**	1.0	0.69	ug/L			01/17/24 19:04	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/17/24 19:04	1
o-Xylene	**0.61**	**J**	5.0	0.60	ug/L			01/17/24 19:04	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/17/24 19:04	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/17/24 19:04	1

Client Sample ID: ROST4PZE-ROX-011124

Lab Sample ID: 400-249620-5

Date Collected: 01/11/24 12:15

Matrix: Water

Date Received: 01/12/24 09:31

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/17/24 19:04	1
Styrene	ND		1.0	1.0	ug/L			01/17/24 19:04	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/17/24 19:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/17/24 19:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/17/24 19:04	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/17/24 19:04	1
Toluene	**0.90**	**J**	1.0	0.90	ug/L			01/17/24 19:04	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 19:04	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/17/24 19:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/17/24 19:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/17/24 19:04	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/17/24 19:04	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/17/24 19:04	1
Trichloroethene	ND		1.0	0.15	ug/L			01/17/24 19:04	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/17/24 19:04	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/17/24 19:04	1
1,2,4-Trimethylbenzene	**10**		1.0	0.82	ug/L			01/17/24 19:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/17/24 19:04	1
Vinyl acetate	ND		25	0.93	ug/L			01/17/24 19:04	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/17/24 19:04	1
Xylenes, Total	**6.0**	**J**	10	1.6	ug/L			01/17/24 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*72 - 130*		*01/17/24 19:04*	*1*
Dibromofluoromethane	*93*		*75 - 126*		*01/17/24 19:04*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*01/17/24 19:04*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.82**		0.20	0.10	ug/L		01/17/24 11:35	01/17/24 20:26	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/17/24 11:35	01/17/24 20:26	1
Anthracene	**1.5**		0.20	0.048	ug/L		01/17/24 11:35	01/17/24 20:26	1
Benzo[a]anthracene	**0.085**	**J**	0.20	0.034	ug/L		01/17/24 11:35	01/17/24 20:26	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		01/17/24 11:35	01/17/24 20:26	1
Benzo[b]fluoranthene	ND	*+	0.20	0.037	ug/L		01/17/24 11:35	01/17/24 20:26	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/17/24 11:35	01/17/24 20:26	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		01/17/24 11:35	01/17/24 20:26	1
Chrysene	**0.11**	**J**	0.20	0.033	ug/L		01/17/24 11:35	01/17/24 20:26	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		01/17/24 11:35	01/17/24 20:26	1
Fluoranthene	**0.37**		0.20	0.034	ug/L		01/17/24 11:35	01/17/24 20:26	1
Fluorene	**0.64**		0.20	0.090	ug/L		01/17/24 11:35	01/17/24 20:26	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		01/17/24 11:35	01/17/24 20:26	1
Phenanthrene	**4.7**		0.20	0.091	ug/L		01/17/24 11:35	01/17/24 20:26	1
Pyrene	**0.49**		0.20	0.039	ug/L		01/17/24 11:35	01/17/24 20:26	1
1-Methylnaphthalene	**9.2**		0.20	0.081	ug/L		01/17/24 11:35	01/17/24 20:26	1
2-Methylnaphthalene	**2.6**		0.20	0.067	ug/L		01/17/24 11:35	01/17/24 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*118*		*18 - 147*	*01/17/24 11:35*	*01/17/24 20:26*	*1*
2-Fluorobiphenyl	*82*		*15 - 128*	*01/17/24 11:35*	*01/17/24 20:26*	*1*

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

Job ID: 400-249620-1

Client Sample ID: ROST4PZE-ROX-011124
Date Collected: 01/11/24 12:15
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249620-5
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*88*		*10 - 144*	*01/17/24 11:35*	*01/17/24 20:26*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	10	8.8	ug/L		01/15/24 09:26	01/16/24 17:43	1
Benzenethiol	ND		10	10	ug/L		01/15/24 09:26	01/16/24 17:43	1
Benzoic acid	ND	*+	30	24	ug/L		01/15/24 09:26	01/16/24 17:43	1
Benzyl alcohol	ND		10	7.4	ug/L		01/15/24 09:26	01/16/24 17:43	1
Bis(2-chloroethoxy)methane	ND		10	4.7	ug/L		01/15/24 09:26	01/16/24 17:43	1
Bis(2-chloroethyl)ether	ND		10	4.0	ug/L		01/15/24 09:26	01/16/24 17:43	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		01/15/24 09:26	01/16/24 17:43	1
Bis(2-ethylhexyl) phthalate	ND		10	9.0	ug/L		01/15/24 09:26	01/16/24 17:43	1
4-Bromophenyl phenyl ether	ND		10	8.7	ug/L		01/15/24 09:26	01/16/24 17:43	1
Butyl benzyl phthalate	ND		10	5.9	ug/L		01/15/24 09:26	01/16/24 17:43	1
4-Chloroaniline	ND		10	4.8	ug/L		01/15/24 09:26	01/16/24 17:43	1
4-Chloro-3-methylphenol	ND		10	5.4	ug/L		01/15/24 09:26	01/16/24 17:43	1
2-Chloronaphthalene	ND		10	3.8	ug/L		01/15/24 09:26	01/16/24 17:43	1
2-Chlorophenol	ND		10	4.2	ug/L		01/15/24 09:26	01/16/24 17:43	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		01/15/24 09:26	01/16/24 17:43	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		01/15/24 09:26	01/16/24 17:43	1
Dibenzofuran	ND		10	4.1	ug/L		01/15/24 09:26	01/16/24 17:43	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/15/24 09:26	01/16/24 17:43	1
2,4-Dichlorophenol	ND		10	4.4	ug/L		01/15/24 09:26	01/16/24 17:43	1
Diethyl phthalate	ND		10	4.5	ug/L		01/15/24 09:26	01/16/24 17:43	1
2,4-Dimethylphenol	ND		10	5.3	ug/L		01/15/24 09:26	01/16/24 17:43	1
Dimethyl phthalate	ND		10	4.3	ug/L		01/15/24 09:26	01/16/24 17:43	1
Di-n-butyl phthalate	ND		10	4.7	ug/L		01/15/24 09:26	01/16/24 17:43	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/15/24 09:26	01/16/24 17:43	1
2,4-Dinitrophenol	ND		30	4.7	ug/L		01/15/24 09:26	01/16/24 17:43	1
2,4-Dinitrotoluene	ND		10	5.2	ug/L		01/15/24 09:26	01/16/24 17:43	1
2,6-Dinitrotoluene	ND		10	4.0	ug/L		01/15/24 09:26	01/16/24 17:43	1
Di-n-octyl phthalate	ND		10	6.1	ug/L		01/15/24 09:26	01/16/24 17:43	1
1,4-Dioxane	ND		10	4.4	ug/L		01/15/24 09:26	01/16/24 17:43	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		01/15/24 09:26	01/16/24 17:43	1
Hexachlorobenzene	ND		10	9.8	ug/L		01/15/24 09:26	01/16/24 17:43	1
Hexachlorocyclopentadiene	ND		20	4.6	ug/L		01/15/24 09:26	01/16/24 17:43	1
Hexachloroethane	ND		10	5.3	ug/L		01/15/24 09:26	01/16/24 17:43	1
Indene	ND		10	3.6	ug/L		01/15/24 09:26	01/16/24 17:43	1
Isophorone	ND		10	5.3	ug/L		01/15/24 09:26	01/16/24 17:43	1
2-Methylphenol	ND		10	3.2	ug/L		01/15/24 09:26	01/16/24 17:43	1
3 & 4 Methylphenol	ND		20	4.7	ug/L		01/15/24 09:26	01/16/24 17:43	1
2-Nitroaniline	ND		10	5.1	ug/L		01/15/24 09:26	01/16/24 17:43	1
3-Nitroaniline	ND		10	4.8	ug/L		01/15/24 09:26	01/16/24 17:43	1
4-Nitroaniline	ND		10	4.2	ug/L		01/15/24 09:26	01/16/24 17:43	1
Nitrobenzene	ND		10	4.8	ug/L		01/15/24 09:26	01/16/24 17:43	1
2-Nitrophenol	ND		10	4.7	ug/L		01/15/24 09:26	01/16/24 17:43	1
4-Nitrophenol	ND		10	3.3	ug/L		01/15/24 09:26	01/16/24 17:43	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		01/15/24 09:26	01/16/24 17:43	1

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

Job ID: 400-249620-1

Client Sample ID: ROST4PZE-ROX-011124
Date Collected: 01/11/24 12:15
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249620-5
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		01/15/24 09:26	01/16/24 17:43	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		01/15/24 09:26	01/16/24 17:43	1
Pentachlorophenol	ND		20	12	ug/L		01/15/24 09:26	01/16/24 17:43	1
Phenol	ND		10	4.3	ug/L		01/15/24 09:26	01/16/24 17:43	1
Pyridine	ND	*1	10	10	ug/L		01/15/24 09:26	01/16/24 17:43	1
Quinoline	ND		10	2.4	ug/L		01/15/24 09:26	01/16/24 17:43	1
2,4,5-Trichlorophenol	ND		10	4.1	ug/L		01/15/24 09:26	01/16/24 17:43	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/15/24 09:26	01/16/24 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*21 - 114*	*01/15/24 09:26*	*01/16/24 17:43*	*1*
2-Fluorophenol	*48*		*10 - 105*	*01/15/24 09:26*	*01/16/24 17:43*	*1*
Nitrobenzene-d5	*70*		*16 - 127*	*01/15/24 09:26*	*01/16/24 17:43*	*1*
Phenol-d5	*37*		*10 - 129*	*01/15/24 09:26*	*01/16/24 17:43*	*1*
Terphenyl-d14	*96*		*13 - 150*	*01/15/24 09:26*	*01/16/24 17:43*	*1*
2,4,6-Tribromophenol	*96*		*10 - 150*	*01/15/24 09:26*	*01/16/24 17:43*	*1*

Method: EPA 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		01/17/24 10:31	01/17/24 21:27	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/17/24 10:31	01/17/24 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*289*	*S1+*	*51 - 149*	*01/17/24 10:31*	*01/17/24 21:27*	*1*

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

Job ID: 400-249620-1

Client Sample ID: MW2-ROX-011124
Date Collected: 01/11/24 13:45
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249620-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**26**		25	10	ug/L			01/17/24 19:26	1
Acrolein	ND		20	3.3	ug/L			01/17/24 19:26	1
Acrylonitrile	ND		10	2.8	ug/L			01/17/24 19:26	1
Benzene	**1.4**		1.0	0.50	ug/L			01/17/24 19:26	1
Bromobenzene	ND		1.0	0.54	ug/L			01/17/24 19:26	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/17/24 19:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/17/24 19:26	1
Bromoform	ND		5.0	0.25	ug/L			01/17/24 19:26	1
Bromomethane	ND		1.0	0.98	ug/L			01/17/24 19:26	1
2-Butanone (MEK)	**5.8**	**J**	25	2.6	ug/L			01/17/24 19:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/17/24 19:26	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/17/24 19:26	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/17/24 19:26	1
Chloroethane	ND		1.0	0.76	ug/L			01/17/24 19:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/17/24 19:26	1
Chloroform	ND		1.0	0.90	ug/L			01/17/24 19:26	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/17/24 19:26	1
Chloromethane	ND		1.0	0.90	ug/L			01/17/24 19:26	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/17/24 19:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/17/24 19:26	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/17/24 19:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/17/24 19:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/17/24 19:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/17/24 19:26	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/17/24 19:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/17/24 19:26	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/17/24 19:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 19:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 19:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 19:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 19:26	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/17/24 19:26	1
Ethylbenzene	**35**		1.0	0.50	ug/L			01/17/24 19:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/17/24 19:26	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/17/24 19:26	1
2-Hexanone	ND		25	1.4	ug/L			01/17/24 19:26	1
Isopropylbenzene	**32**		1.0	0.53	ug/L			01/17/24 19:26	1
Methylene bromide	ND		5.0	0.22	ug/L			01/17/24 19:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/17/24 19:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/17/24 19:26	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/17/24 19:26	1
m-Xylene & p-Xylene	**14**		5.0	0.63	ug/L			01/17/24 19:26	1
Naphthalene	**8.4**		5.0	3.0	ug/L			01/17/24 19:26	1
n-Butylbenzene	**2.7**		1.0	0.76	ug/L			01/17/24 19:26	1
N-Propylbenzene	**52**		1.0	0.69	ug/L			01/17/24 19:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/17/24 19:26	1
o-Xylene	**1.7**	**J**	5.0	0.60	ug/L			01/17/24 19:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/17/24 19:26	1
p-Isopropyltoluene	**2.8**		1.0	0.71	ug/L			01/17/24 19:26	1

Client Sample ID: MW2-ROX-011124

Date Collected: 01/11/24 13:45
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249620-6

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**4.4**		1.0	0.70	ug/L			01/17/24 19:26	1
Styrene	ND		1.0	1.0	ug/L			01/17/24 19:26	1
tert-Butylbenzene	**0.64**	**J**	1.0	0.63	ug/L			01/17/24 19:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/17/24 19:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/17/24 19:26	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/17/24 19:26	1
Toluene	**2.4**		1.0	0.90	ug/L			01/17/24 19:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 19:26	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/17/24 19:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/17/24 19:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/17/24 19:26	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/17/24 19:26	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/17/24 19:26	1
Trichloroethene	ND		1.0	0.15	ug/L			01/17/24 19:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/17/24 19:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/17/24 19:26	1
1,2,4-Trimethylbenzene	**5.4**		1.0	0.82	ug/L			01/17/24 19:26	1
1,3,5-Trimethylbenzene	**8.5**		1.0	0.56	ug/L			01/17/24 19:26	1
Vinyl acetate	ND		25	0.93	ug/L			01/17/24 19:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/17/24 19:26	1
Xylenes, Total	**16**		10	1.6	ug/L			01/17/24 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*72 - 130*		*01/17/24 19:26*	*1*
Dibromofluoromethane	*93*		*75 - 126*		*01/17/24 19:26*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*01/17/24 19:26*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.097	ug/L		01/17/24 11:35	01/17/24 20:47	1
Acenaphthylene	ND		0.20	0.043	ug/L		01/17/24 11:35	01/17/24 20:47	1
Anthracene	ND		0.20	0.046	ug/L		01/17/24 11:35	01/17/24 20:47	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		01/17/24 11:35	01/17/24 20:47	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		01/17/24 11:35	01/17/24 20:47	1
Benzo[b]fluoranthene	ND	*+	0.20	0.036	ug/L		01/17/24 11:35	01/17/24 20:47	1
Benzo[g,h,i]perylene	ND		0.20	0.026	ug/L		01/17/24 11:35	01/17/24 20:47	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		01/17/24 11:35	01/17/24 20:47	1
Chrysene	ND		0.20	0.032	ug/L		01/17/24 11:35	01/17/24 20:47	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		01/17/24 11:35	01/17/24 20:47	1
Fluoranthene	ND		0.20	0.033	ug/L		01/17/24 11:35	01/17/24 20:47	1
Fluorene	ND		0.20	0.087	ug/L		01/17/24 11:35	01/17/24 20:47	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		01/17/24 11:35	01/17/24 20:47	1
Phenanthrene	ND		0.20	0.088	ug/L		01/17/24 11:35	01/17/24 20:47	1
Pyrene	ND		0.20	0.038	ug/L		01/17/24 11:35	01/17/24 20:47	1
1-Methylnaphthalene	**6.9**		0.20	0.078	ug/L		01/17/24 11:35	01/17/24 20:47	1
2-Methylnaphthalene	**9.1**		0.20	0.064	ug/L		01/17/24 11:35	01/17/24 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*137*		*18 - 147*	*01/17/24 11:35*	*01/17/24 20:47*	*1*
2-Fluorobiphenyl	*69*		*15 - 128*	*01/17/24 11:35*	*01/17/24 20:47*	*1*

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

Job ID: 400-249620-1

Client Sample ID: MW2-ROX-011124
Date Collected: 01/11/24 13:45
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249620-6
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*82*		*10 - 144*	*01/17/24 11:35*	*01/17/24 20:47*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.8	8.5	ug/L		01/15/24 09:26	01/16/24 18:08	1
Benzenethiol	ND		9.8	9.7	ug/L		01/15/24 09:26	01/16/24 18:08	1
Benzoic acid	ND	*+	29	23	ug/L		01/15/24 09:26	01/16/24 18:08	1
Benzyl alcohol	ND		9.8	7.1	ug/L		01/15/24 09:26	01/16/24 18:08	1
Bis(2-chloroethoxy)methane	ND		9.8	4.5	ug/L		01/15/24 09:26	01/16/24 18:08	1
Bis(2-chloroethyl)ether	ND		9.8	3.8	ug/L		01/15/24 09:26	01/16/24 18:08	1
bis (2-chloroisopropyl) ether	ND		9.8	1.8	ug/L		01/15/24 09:26	01/16/24 18:08	1
Bis(2-ethylhexyl) phthalate	ND		9.8	8.7	ug/L		01/15/24 09:26	01/16/24 18:08	1
4-Bromophenyl phenyl ether	ND		9.8	8.4	ug/L		01/15/24 09:26	01/16/24 18:08	1
Butyl benzyl phthalate	ND		9.8	5.7	ug/L		01/15/24 09:26	01/16/24 18:08	1
4-Chloroaniline	ND		9.8	4.6	ug/L		01/15/24 09:26	01/16/24 18:08	1
4-Chloro-3-methylphenol	ND		9.8	5.2	ug/L		01/15/24 09:26	01/16/24 18:08	1
2-Chloronaphthalene	ND		9.8	3.7	ug/L		01/15/24 09:26	01/16/24 18:08	1
2-Chlorophenol	ND		9.8	4.0	ug/L		01/15/24 09:26	01/16/24 18:08	1
4-Chlorophenyl phenyl ether	ND		9.8	3.6	ug/L		01/15/24 09:26	01/16/24 18:08	1
Dibenz[a,h]acridine	ND		9.8	2.7	ug/L		01/15/24 09:26	01/16/24 18:08	1
Dibenzofuran	ND		9.8	3.9	ug/L		01/15/24 09:26	01/16/24 18:08	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/15/24 09:26	01/16/24 18:08	1
2,4-Dichlorophenol	ND		9.8	4.2	ug/L		01/15/24 09:26	01/16/24 18:08	1
Diethyl phthalate	ND		9.8	4.3	ug/L		01/15/24 09:26	01/16/24 18:08	1
2,4-Dimethylphenol	ND		9.8	5.1	ug/L		01/15/24 09:26	01/16/24 18:08	1
Dimethyl phthalate	ND		9.8	4.1	ug/L		01/15/24 09:26	01/16/24 18:08	1
Di-n-butyl phthalate	ND		9.8	4.5	ug/L		01/15/24 09:26	01/16/24 18:08	1
4,6-Dinitro-ortho-cresol	ND		9.8	9.8	ug/L		01/15/24 09:26	01/16/24 18:08	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		01/15/24 09:26	01/16/24 18:08	1
2,4-Dinitrotoluene	ND		9.8	5.0	ug/L		01/15/24 09:26	01/16/24 18:08	1
2,6-Dinitrotoluene	ND		9.8	3.8	ug/L		01/15/24 09:26	01/16/24 18:08	1
Di-n-octyl phthalate	ND		9.8	5.9	ug/L		01/15/24 09:26	01/16/24 18:08	1
1,4-Dioxane	ND		9.8	4.2	ug/L		01/15/24 09:26	01/16/24 18:08	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	3.2	ug/L		01/15/24 09:26	01/16/24 18:08	1
Hexachlorobenzene	ND		9.8	9.5	ug/L		01/15/24 09:26	01/16/24 18:08	1
Hexachlorocyclopentadiene	ND		20	4.4	ug/L		01/15/24 09:26	01/16/24 18:08	1
Hexachloroethane	ND		9.8	5.1	ug/L		01/15/24 09:26	01/16/24 18:08	1
Indene	ND		9.8	3.5	ug/L		01/15/24 09:26	01/16/24 18:08	1
Isophorone	ND		9.8	5.1	ug/L		01/15/24 09:26	01/16/24 18:08	1
2-Methylphenol	ND		9.8	3.1	ug/L		01/15/24 09:26	01/16/24 18:08	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		01/15/24 09:26	01/16/24 18:08	1
2-Nitroaniline	ND		9.8	4.9	ug/L		01/15/24 09:26	01/16/24 18:08	1
3-Nitroaniline	ND		9.8	4.6	ug/L		01/15/24 09:26	01/16/24 18:08	1
4-Nitroaniline	ND		9.8	4.0	ug/L		01/15/24 09:26	01/16/24 18:08	1
Nitrobenzene	ND		9.8	4.6	ug/L		01/15/24 09:26	01/16/24 18:08	1
2-Nitrophenol	ND		9.8	4.5	ug/L		01/15/24 09:26	01/16/24 18:08	1
4-Nitrophenol	ND		9.8	3.2	ug/L		01/15/24 09:26	01/16/24 18:08	1
N-Nitrosodimethylamine	ND		9.8	2.2	ug/L		01/15/24 09:26	01/16/24 18:08	1

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

Job ID: 400-249620-1

Client Sample ID: MW2-ROX-011124
Date Collected: 01/11/24 13:45
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249620-6
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	2.4	ug/L		01/15/24 09:26	01/16/24 18:08	1
N-Nitrosodiphenylamine	ND		9.8	3.6	ug/L		01/15/24 09:26	01/16/24 18:08	1
Pentachlorophenol	ND		20	12	ug/L		01/15/24 09:26	01/16/24 18:08	1
Phenol	ND		9.8	4.1	ug/L		01/15/24 09:26	01/16/24 18:08	1
Pyridine	ND	*1	9.8	9.8	ug/L		01/15/24 09:26	01/16/24 18:08	1
Quinoline	ND		9.8	2.3	ug/L		01/15/24 09:26	01/16/24 18:08	1
2,4,5-Trichlorophenol	ND		9.8	3.9	ug/L		01/15/24 09:26	01/16/24 18:08	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		01/15/24 09:26	01/16/24 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*59*		*21 - 114*	*01/15/24 09:26*	*01/16/24 18:08*	*1*
2-Fluorophenol	*23*		*10 - 105*	*01/15/24 09:26*	*01/16/24 18:08*	*1*
Nitrobenzene-d5	*49*		*16 - 127*	*01/15/24 09:26*	*01/16/24 18:08*	*1*
Phenol-d5	*21*		*10 - 129*	*01/15/24 09:26*	*01/16/24 18:08*	*1*
Terphenyl-d14	*74*		*13 - 150*	*01/15/24 09:26*	*01/16/24 18:08*	*1*
2,4,6-Tribromophenol	*48*		*10 - 150*	*01/15/24 09:26*	*01/16/24 18:08*	*1*

Method: EPA 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		01/17/24 10:31	01/17/24 21:48	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/17/24 10:31	01/17/24 21:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*51 - 149*	*01/17/24 10:31*	*01/17/24 21:48*	*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, high biased.
*1	LCS/LCSD RPD exceeds control limits.
E	Result exceeded calibration range.
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.
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: 400-249620-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-130)	(75-126)	(64-132)
400-249620-1	TB-TOX-011124-8260-A	110	110	95
400-249620-3	MW12-ROX-011124-EB	107	105	96
400-249620-4	MW12-ROX-011124	109	107	95
400-249620-5	ROST4PZE-ROX-011124	108	93	100
400-249620-6	MW2-ROX-011124	110	93	98
LCS 400-657889/1001	Lab Control Sample	105	92	97
LCS 400-657968/1001	Lab Control Sample	108	95	98
MB 400-657889/5	Method Blank	109	109	97
MB 400-657968/28	Method Blank	110	108	98

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - 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	(21-114)	(10-105)	(16-127)	(10-129)	(13-150)	(10-150)
400-249620-3	MW12-ROX-011124-EB	82	44	66	35	98	86
400-249620-4	MW12-ROX-011124	89	47	72	35	104	78
400-249620-5	ROST4PZE-ROX-011124	80	48	70	37	96	96
400-249620-6	MW2-ROX-011124	59	23	49	21	74	48
LCS 400-657668/2-A	Lab Control Sample	76	49	83	42	94	86
LCS 400-657668/4-A	Lab Control Sample	84	49	67	40	107	79
LCSD 400-657668/3-A	Lab Control Sample Dup	83	54	84	50	100	92
LCSD 400-657668/5-A	Lab Control Sample Dup	83	44	62	38	97	80
MB 400-657668/1-A	Method Blank	90	50	73	38	104	82

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-249620-3	MW12-ROX-011124-EB	155 S1+	97	78
400-249620-4	MW12-ROX-011124	150 S1+	95	78
400-249620-5	ROST4PZE-ROX-011124	118	82	88
400-249620-6	MW2-ROX-011124	137	69	82
LCS 400-657912/2-A	Lab Control Sample	82	84	89
LCSD 400-657912/3-A	Lab Control Sample Dup	86	88	92

Surrogate Summary

Client: AECOM Technical Services Inc. Job ID: 400-249620-1
Project/Site: ROXANA QUARTERLY GW

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
MB 400-657912/1-A	Method Blank	194 S1+	100	73

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-249620-2	TB-TOX-011124-8011-A	96
400-249620-3	MW12-ROX-011124-EB	100
400-249620-4	MW12-ROX-011124	220 S1+
400-249620-5	ROST4PZE-ROX-011124	289 S1+
400-249620-6	MW2-ROX-011124	112
LCS 400-657905/2-A	Lab Control Sample	86 p
LCSD 400-657905/3-A	Lab Control Sample Dup	85 p
MB 400-657905/1-A	Method Blank	86 p

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-249620-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins 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: 400-249620-1

Client Sample ID: TB-TOX-011124-8260-A
Lab Sample ID: 400-249620-1
Date Collected: 01/11/24 12:00
Matrix: Water
Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657968	01/18/24 12:42	BPO	EET PEN

Client Sample ID: TB-TOX-011124-8011-A
Lab Sample ID: 400-249620-2
Date Collected: 01/11/24 12:00
Matrix: Water
Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.5 mL	35 mL	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 20:25	PG	EET PEN

Client Sample ID: MW12-ROX-011124-EB
Lab Sample ID: 400-249620-3
Date Collected: 01/11/24 08:40
Matrix: Water
Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657889	01/17/24 15:16	BPO	EET PEN
Total/NA	Prep	3510C			261.6 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 16:52	VC1	EET PEN
Total/NA	Prep	3510C			260 mL	1 mL	657912	01/17/24 11:35	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657957	01/17/24 19:46	TH	EET PEN
Total/NA	Prep	8011			33.4 mL	35 mL	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 20:45	PG	EET PEN

Client Sample ID: MW12-ROX-011124
Lab Sample ID: 400-249620-4
Date Collected: 01/11/24 09:55
Matrix: Water
Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657889	01/17/24 18:41	BPO	EET PEN
Total/NA	Prep	3510C			258.6 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 17:17	VC1	EET PEN
Total/NA	Prep	3510C			258.2 mL	1 mL	657912	01/17/24 11:35	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657957	01/17/24 20:06	TH	EET PEN
Total/NA	Prep	8011			35.4 mL	35 mL	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 21:07	PG	EET PEN

Client Sample ID: ROST4PZE-ROX-011124
Lab Sample ID: 400-249620-5
Date Collected: 01/11/24 12:15
Matrix: Water
Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657889	01/17/24 19:04	BPO	EET PEN
Total/NA	Prep	3510C			246.8 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 17:43	VC1	EET PEN

Lab Chronicle

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

Job ID: 400-249620-1

Client Sample ID: ROST4PZE-ROX-011124

Lab Sample ID: 400-249620-5

Date Collected: 01/11/24 12:15
Matrix: Water
Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			247 mL	1 mL	657912	01/17/24 11:35	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657957	01/17/24 20:26	TH	EET PEN
Total/NA	Prep	8011			35.7 mL	35 mL	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 21:27	PG	EET PEN

Client Sample ID: MW2-ROX-011124

Lab Sample ID: 400-249620-6

Date Collected: 01/11/24 13:45
Matrix: Water
Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657889	01/17/24 19:26	BPO	EET PEN
Total/NA	Prep	3510C			255.4 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 18:08	VC1	EET PEN
Total/NA	Prep	3510C			256 mL	1 mL	657912	01/17/24 11:35	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657957	01/17/24 20:47	TH	EET PEN
Total/NA	Prep	8011			35.6 mL	35 mL	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 21:48	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-657668/1-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	3510C			250 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 13:03	VC1	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-657889/5

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	8260D		1	5 mL	5 mL	657889	01/17/24 14:08	BPO	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-657905/1-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	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 15:53	PG	EET PEN

Lab Chronicle

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

Job ID: 400-249620-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-657912/1-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	3510C			250 mL	1 mL	657912	01/17/24 11:34	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657957	01/17/24 17:23	TH	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-657968/28

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	8260D		1	5 mL	5 mL	657968	01/18/24 10:26	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657668/2-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	3510C			250 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 13:29	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657668/4-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	3510C			250 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 14:19	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657889/1001

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	8260D		1	5 mL	5 mL	657889	01/17/24 09:48	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657905/2-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	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 16:13	PG	EET PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Job ID: 400-249620-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657912/2-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	3510C			250 mL	1 mL	657912	01/17/24 11:34	STC	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	657957	01/17/24 17:44	TH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657968/1001
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	8260D		1	5 mL	5 mL	657968	01/18/24 09:15	BPO	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657668/3-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	3510C			250 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 13:54	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657668/5-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	3510C			250 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 14:45	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657905/3-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	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 16:34	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657912/3-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	3510C			250 mL	1 mL	657912	01/17/24 11:34	STC	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	657957	01/17/24 18:04	TH	EET PEN

Laboratory References:
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 657889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249620-3	MW12-ROX-011124-EB	Total/NA	Water	8260D	
400-249620-4	MW12-ROX-011124	Total/NA	Water	8260D	
400-249620-5	ROST4PZE-ROX-011124	Total/NA	Water	8260D	
400-249620-6	MW2-ROX-011124	Total/NA	Water	8260D	
MB 400-657889/5	Method Blank	Total/NA	Water	8260D	
LCS 400-657889/1001	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 657968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249620-1	TB-TOX-011124-8260-A	Total/NA	Water	8260D	
MB 400-657968/28	Method Blank	Total/NA	Water	8260D	
LCS 400-657968/1001	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 657668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249620-3	MW12-ROX-011124-EB	Total/NA	Water	3510C	
400-249620-4	MW12-ROX-011124	Total/NA	Water	3510C	
400-249620-5	ROST4PZE-ROX-011124	Total/NA	Water	3510C	
400-249620-6	MW2-ROX-011124	Total/NA	Water	3510C	
MB 400-657668/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-657668/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-657668/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-657668/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-657668/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 657759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249620-3	MW12-ROX-011124-EB	Total/NA	Water	8270E	657668
400-249620-4	MW12-ROX-011124	Total/NA	Water	8270E	657668
400-249620-5	ROST4PZE-ROX-011124	Total/NA	Water	8270E	657668
400-249620-6	MW2-ROX-011124	Total/NA	Water	8270E	657668
MB 400-657668/1-A	Method Blank	Total/NA	Water	8270E	657668
LCS 400-657668/2-A	Lab Control Sample	Total/NA	Water	8270E	657668
LCS 400-657668/4-A	Lab Control Sample	Total/NA	Water	8270E	657668
LCSD 400-657668/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	657668
LCSD 400-657668/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	657668

Prep Batch: 657912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249620-3	MW12-ROX-011124-EB	Total/NA	Water	3510C	
400-249620-4	MW12-ROX-011124	Total/NA	Water	3510C	
400-249620-5	ROST4PZE-ROX-011124	Total/NA	Water	3510C	
400-249620-6	MW2-ROX-011124	Total/NA	Water	3510C	
MB 400-657912/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-657912/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-657912/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

QC Association Summary

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

Job ID: 400-249620-1

GC/MS Semi VOA

Analysis Batch: 657957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249620-3	MW12-ROX-011124-EB	Total/NA	Water	8270E SIM	657912
400-249620-4	MW12-ROX-011124	Total/NA	Water	8270E SIM	657912
400-249620-5	ROST4PZE-ROX-011124	Total/NA	Water	8270E SIM	657912
400-249620-6	MW2-ROX-011124	Total/NA	Water	8270E SIM	657912
MB 400-657912/1-A	Method Blank	Total/NA	Water	8270E SIM	657912
LCS 400-657912/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	657912
LCSD 400-657912/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	657912

GC Semi VOA

Prep Batch: 657905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249620-2	TB-TOX-011124-8011-A	Total/NA	Water	8011	
400-249620-3	MW12-ROX-011124-EB	Total/NA	Water	8011	
400-249620-4	MW12-ROX-011124	Total/NA	Water	8011	
400-249620-5	ROST4PZE-ROX-011124	Total/NA	Water	8011	
400-249620-6	MW2-ROX-011124	Total/NA	Water	8011	
MB 400-657905/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-657905/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-657905/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 657923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249620-2	TB-TOX-011124-8011-A	Total/NA	Water	8011	657905
400-249620-3	MW12-ROX-011124-EB	Total/NA	Water	8011	657905
400-249620-4	MW12-ROX-011124	Total/NA	Water	8011	657905
400-249620-5	ROST4PZE-ROX-011124	Total/NA	Water	8011	657905
400-249620-6	MW2-ROX-011124	Total/NA	Water	8011	657905
MB 400-657905/1-A	Method Blank	Total/NA	Water	8011	657905
LCS 400-657905/2-A	Lab Control Sample	Total/NA	Water	8011	657905
LCSD 400-657905/3-A	Lab Control Sample Dup	Total/NA	Water	8011	657905

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-657889/5
Matrix: Water
Analysis Batch: 657889

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			01/17/24 14:08	1
Acrolein	ND		20	3.3	ug/L			01/17/24 14:08	1
Acrylonitrile	ND		10	2.8	ug/L			01/17/24 14:08	1
Benzene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Bromobenzene	ND		1.0	0.54	ug/L			01/17/24 14:08	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/17/24 14:08	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Bromoform	ND		5.0	0.25	ug/L			01/17/24 14:08	1
Bromomethane	ND		1.0	0.98	ug/L			01/17/24 14:08	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/17/24 14:08	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/17/24 14:08	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/17/24 14:08	1
Chloroethane	ND		1.0	0.76	ug/L			01/17/24 14:08	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/17/24 14:08	1
Chloroform	ND		1.0	0.90	ug/L			01/17/24 14:08	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/17/24 14:08	1
Chloromethane	ND		1.0	0.90	ug/L			01/17/24 14:08	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/17/24 14:08	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/17/24 14:08	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/17/24 14:08	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/17/24 14:08	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/17/24 14:08	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/17/24 14:08	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/17/24 14:08	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/17/24 14:08	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/17/24 14:08	1
2-Hexanone	ND		25	1.4	ug/L			01/17/24 14:08	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/17/24 14:08	1
Methylene bromide	ND		5.0	0.22	ug/L			01/17/24 14:08	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/17/24 14:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/17/24 14:08	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/17/24 14:08	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/17/24 14:08	1
Naphthalene	ND		5.0	3.0	ug/L			01/17/24 14:08	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/17/24 14:08	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/17/24 14:08	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/17/24 14:08	1
o-Xylene	ND		5.0	0.60	ug/L			01/17/24 14:08	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/17/24 14:08	1

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

Lab Sample ID: MB 400-657889/5
Matrix: Water
Analysis Batch: 657889

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			01/17/24 14:08	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/17/24 14:08	1
Styrene	ND		1.0	1.0	ug/L			01/17/24 14:08	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/17/24 14:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/17/24 14:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/17/24 14:08	1
Toluene	ND		1.0	0.90	ug/L			01/17/24 14:08	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/17/24 14:08	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/17/24 14:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/17/24 14:08	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/17/24 14:08	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/17/24 14:08	1
Trichloroethene	ND		1.0	0.15	ug/L			01/17/24 14:08	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/17/24 14:08	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/17/24 14:08	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/17/24 14:08	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/17/24 14:08	1
Vinyl acetate	ND		25	0.93	ug/L			01/17/24 14:08	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Xylenes, Total	ND		10	1.6	ug/L			01/17/24 14:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 130*		*01/17/24 14:08*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*01/17/24 14:08*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*01/17/24 14:08*	*1*

Lab Sample ID: LCS 400-657889/1001
Matrix: Water
Analysis Batch: 657889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	221		ug/L		111	43 - 160
Acrolein	500	604		ug/L		121	38 - 160
Acrylonitrile	500	544		ug/L		109	64 - 142
Benzene	50.0	54.0		ug/L		108	70 - 130
Bromobenzene	50.0	51.3		ug/L		103	70 - 132
Bromochloromethane	50.0	50.4		ug/L		101	70 - 130
Bromodichloromethane	50.0	56.0		ug/L		112	67 - 133
Bromoform	50.0	55.5		ug/L		111	57 - 140
Bromomethane	50.0	36.0		ug/L		72	10 - 160
2-Butanone (MEK)	200	227		ug/L		113	61 - 145
Carbon disulfide	50.0	40.6		ug/L		81	61 - 137
Carbon tetrachloride	50.0	47.5		ug/L		95	61 - 137
Chlorobenzene	50.0	51.0		ug/L		102	70 - 130
Chloroethane	50.0	45.3		ug/L		91	55 - 141
2-Chloroethyl vinyl ether	50.0	76.1		ug/L		152	10 - 160

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

Lab Sample ID: LCS 400-657889/1001
Matrix: Water
Analysis Batch: 657889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	51.4		ug/L		103	69 - 130
1-Chlorohexane	50.0	51.9		ug/L		104	69 - 130
Chloromethane	50.0	45.2		ug/L		90	58 - 137
cis-1,2-Dichloroethene	50.0	52.2		ug/L		104	68 - 130
cis-1,3-Dichloropropene	50.0	58.2		ug/L		116	69 - 132
Dibromochloromethane	50.0	54.2		ug/L		108	67 - 135
1,2-Dichlorobenzene	50.0	50.5		ug/L		101	67 - 130
1,3-Dichlorobenzene	50.0	50.7		ug/L		101	70 - 130
1,4-Dichlorobenzene	50.0	50.3		ug/L		101	70 - 130
Dichlorodifluoromethane	50.0	39.8		ug/L		80	41 - 146
1,1-Dichloroethane	50.0	52.9		ug/L		106	70 - 130
1,2-Dichloroethane	50.0	52.0		ug/L		104	69 - 130
1,1-Dichloroethene	50.0	45.7		ug/L		91	63 - 134
1,2-Dichloropropane	50.0	57.7		ug/L		115	70 - 130
1,3-Dichloropropane	50.0	56.3		ug/L		113	70 - 130
2,2-Dichloropropane	50.0	43.2		ug/L		86	52 - 135
1,1-Dichloropropene	50.0	51.1		ug/L		102	70 - 130
Ethylbenzene	50.0	51.6		ug/L		103	70 - 130
Ethyl methacrylate	50.0	56.0		ug/L		112	68 - 130
Hexachlorobutadiene	50.0	51.6		ug/L		103	53 - 140
2-Hexanone	200	216		ug/L		108	65 - 137
Isopropylbenzene	50.0	50.0		ug/L		100	70 - 130
Methylene bromide	50.0	50.7		ug/L		101	70 - 130
Methylene Chloride	50.0	53.4		ug/L		107	66 - 135
4-Methyl-2-pentanone (MIBK)	200	224		ug/L		112	69 - 138
Methyl tert-butyl ether	50.0	54.3		ug/L		109	66 - 130
m-Xylene & p-Xylene	50.0	50.8		ug/L		102	70 - 130
Naphthalene	50.0	51.2		ug/L		102	47 - 149
n-Butylbenzene	50.0	52.2		ug/L		104	67 - 130
N-Propylbenzene	50.0	51.7		ug/L		103	70 - 130
o-Chlorotoluene	50.0	51.9		ug/L		104	70 - 130
o-Xylene	50.0	52.1		ug/L		104	70 - 130
p-Chlorotoluene	50.0	52.3		ug/L		105	70 - 130
p-Isopropyltoluene	50.0	50.4		ug/L		101	65 - 130
sec-Butylbenzene	50.0	49.9		ug/L		100	66 - 130
Styrene	50.0	52.5		ug/L		105	70 - 130
tert-Butylbenzene	50.0	47.6		ug/L		95	64 - 139
1,1,1,2-Tetrachloroethane	50.0	53.3		ug/L		107	67 - 131
1,1,2,2-Tetrachloroethane	50.0	56.0		ug/L		112	70 - 131
Tetrachloroethene	50.0	49.0		ug/L		98	65 - 130
Toluene	50.0	50.1		ug/L		100	70 - 130
trans-1,2-Dichloroethene	50.0	48.0		ug/L		96	70 - 130
trans-1,3-Dichloropropene	50.0	55.2		ug/L		110	63 - 130
1,2,3-Trichlorobenzene	50.0	53.2		ug/L		106	60 - 138
1,2,4-Trichlorobenzene	50.0	53.0		ug/L		106	60 - 140
1,1,1-Trichloroethane	50.0	47.6		ug/L		95	68 - 130
1,1,2-Trichloroethane	50.0	55.9		ug/L		112	70 - 130
Trichloroethene	50.0	49.2		ug/L		98	70 - 130
Trichlorofluoromethane	50.0	43.6		ug/L		87	65 - 138

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

Lab Sample ID: LCS 400-657889/1001
Matrix: Water
Analysis Batch: 657889

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	51.7		ug/L		103	70 - 130
1,2,4-Trimethylbenzene	50.0	53.4		ug/L		107	70 - 130
1,3,5-Trimethylbenzene	50.0	51.2		ug/L		102	69 - 130
Vinyl acetate	100	130		ug/L		130	26 - 160
Vinyl chloride	50.0	47.3		ug/L		95	59 - 136
Xylenes, Total	100	103		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*72 - 130*
Dibromofluoromethane	*92*		*75 - 126*
Toluene-d8 (Surr)	*97*		*64 - 132*

Lab Sample ID: MB 400-657968/28
Matrix: Water
Analysis Batch: 657968

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			01/18/24 10:26	1
Acrolein	ND		20	3.3	ug/L			01/18/24 10:26	1
Acrylonitrile	ND		10	2.8	ug/L			01/18/24 10:26	1
Benzene	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Bromobenzene	ND		1.0	0.54	ug/L			01/18/24 10:26	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/18/24 10:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Bromoform	ND		5.0	0.25	ug/L			01/18/24 10:26	1
Bromomethane	ND		1.0	0.98	ug/L			01/18/24 10:26	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/18/24 10:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/18/24 10:26	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/18/24 10:26	1
Chloroethane	ND		1.0	0.76	ug/L			01/18/24 10:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/18/24 10:26	1
Chloroform	ND		1.0	0.90	ug/L			01/18/24 10:26	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/18/24 10:26	1
Chloromethane	ND		1.0	0.90	ug/L			01/18/24 10:26	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/18/24 10:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/18/24 10:26	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/18/24 10:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/18/24 10:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/18/24 10:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/18/24 10:26	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/18/24 10:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/18/24 10:26	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/18/24 10:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/18/24 10:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 10:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 10:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 10:26	1

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

Lab Sample ID: MB 400-657968/28
Matrix: Water
Analysis Batch: 657968

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			01/18/24 10:26	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/18/24 10:26	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/18/24 10:26	1
2-Hexanone	ND		25	1.4	ug/L			01/18/24 10:26	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/18/24 10:26	1
Methylene bromide	ND		5.0	0.22	ug/L			01/18/24 10:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/18/24 10:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/18/24 10:26	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/18/24 10:26	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/18/24 10:26	1
Naphthalene	ND		5.0	3.0	ug/L			01/18/24 10:26	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/18/24 10:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/18/24 10:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/18/24 10:26	1
o-Xylene	ND		5.0	0.60	ug/L			01/18/24 10:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/18/24 10:26	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/18/24 10:26	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/18/24 10:26	1
Styrene	ND		1.0	1.0	ug/L			01/18/24 10:26	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/18/24 10:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/18/24 10:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/18/24 10:26	1
Toluene	ND		1.0	0.90	ug/L			01/18/24 10:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/18/24 10:26	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/18/24 10:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/18/24 10:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/18/24 10:26	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/18/24 10:26	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/18/24 10:26	1
Trichloroethene	ND		1.0	0.15	ug/L			01/18/24 10:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/18/24 10:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/18/24 10:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/18/24 10:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/18/24 10:26	1
Vinyl acetate	ND		25	0.93	ug/L			01/18/24 10:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Xylenes, Total	ND		10	1.6	ug/L			01/18/24 10:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*72 - 130*		*01/18/24 10:26*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*01/18/24 10:26*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*01/18/24 10:26*	*1*

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

Lab Sample ID: LCS 400-657968/1001
Matrix: Water
Analysis Batch: 657968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	218		ug/L		109	43 - 160
Acrolein	500	637		ug/L		127	38 - 160
Acrylonitrile	500	535		ug/L		107	64 - 142
Benzene	50.0	58.9		ug/L		118	70 - 130
Bromobenzene	50.0	53.3		ug/L		107	70 - 132
Bromochloromethane	50.0	53.2		ug/L		106	70 - 130
Bromodichloromethane	50.0	58.6		ug/L		117	67 - 133
Bromoform	50.0	53.3		ug/L		107	57 - 140
Bromomethane	50.0	41.2		ug/L		82	10 - 160
2-Butanone (MEK)	200	226		ug/L		113	61 - 145
Carbon disulfide	50.0	47.0		ug/L		94	61 - 137
Carbon tetrachloride	50.0	52.2		ug/L		104	61 - 137
Chlorobenzene	50.0	54.3		ug/L		109	70 - 130
Chloroethane	50.0	55.8		ug/L		112	55 - 141
2-Chloroethyl vinyl ether	50.0	81.1	*+	ug/L		162	10 - 160
Chloroform	50.0	55.7		ug/L		111	69 - 130
1-Chlorohexane	50.0	59.2		ug/L		118	69 - 130
Chloromethane	50.0	48.4		ug/L		97	58 - 137
cis-1,2-Dichloroethene	50.0	55.8		ug/L		112	68 - 130
cis-1,3-Dichloropropene	50.0	61.7		ug/L		123	69 - 132
Dibromochloromethane	50.0	54.4		ug/L		109	67 - 135
1,2-Dichlorobenzene	50.0	51.8		ug/L		104	67 - 130
1,3-Dichlorobenzene	50.0	53.0		ug/L		106	70 - 130
1,4-Dichlorobenzene	50.0	52.7		ug/L		105	70 - 130
Dichlorodifluoromethane	50.0	46.7		ug/L		93	41 - 146
1,1-Dichloroethane	50.0	56.2		ug/L		112	70 - 130
1,2-Dichloroethane	50.0	55.8		ug/L		112	69 - 130
1,1-Dichloroethene	50.0	49.1		ug/L		98	63 - 134
1,2-Dichloropropane	50.0	61.6		ug/L		123	70 - 130
1,3-Dichloropropane	50.0	58.3		ug/L		117	70 - 130
2,2-Dichloropropane	50.0	45.6		ug/L		91	52 - 135
1,1-Dichloropropene	50.0	56.6		ug/L		113	70 - 130
Ethylbenzene	50.0	57.0		ug/L		114	70 - 130
Ethyl methacrylate	50.0	57.6		ug/L		115	68 - 130
Hexachlorobutadiene	50.0	55.3		ug/L		111	53 - 140
2-Hexanone	200	229		ug/L		114	65 - 137
Isopropylbenzene	50.0	54.3		ug/L		109	70 - 130
Methylene bromide	50.0	53.7		ug/L		107	70 - 130
Methylene Chloride	50.0	56.3		ug/L		113	66 - 135
4-Methyl-2-pentanone (MIBK)	200	229		ug/L		115	69 - 138
Methyl tert-butyl ether	50.0	55.7		ug/L		111	66 - 130
m-Xylene & p-Xylene	50.0	56.1		ug/L		112	70 - 130
Naphthalene	50.0	49.7		ug/L		99	47 - 149
n-Butylbenzene	50.0	59.2		ug/L		118	67 - 130
N-Propylbenzene	50.0	56.5		ug/L		113	70 - 130
o-Chlorotoluene	50.0	57.3		ug/L		115	70 - 130
o-Xylene	50.0	56.8		ug/L		114	70 - 130
p-Chlorotoluene	50.0	56.5		ug/L		113	70 - 130

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

Lab Sample ID: LCS 400-657968/1001
Matrix: Water
Analysis Batch: 657968

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	54.4		ug/L		109	65 - 130
sec-Butylbenzene	50.0	54.0		ug/L		108	66 - 130
Styrene	50.0	56.0		ug/L		112	70 - 130
tert-Butylbenzene	50.0	50.1		ug/L		100	64 - 139
1,1,1,2-Tetrachloroethane	50.0	55.4		ug/L		111	67 - 131
1,1,2,2-Tetrachloroethane	50.0	55.5		ug/L		111	70 - 131
Tetrachloroethene	50.0	51.6		ug/L		103	65 - 130
Toluene	50.0	55.1		ug/L		110	70 - 130
trans-1,2-Dichloroethene	50.0	52.5		ug/L		105	70 - 130
trans-1,3-Dichloropropene	50.0	57.5		ug/L		115	63 - 130
1,2,3-Trichlorobenzene	50.0	54.0		ug/L		108	60 - 138
1,2,4-Trichlorobenzene	50.0	55.2		ug/L		110	60 - 140
1,1,1-Trichloroethane	50.0	51.6		ug/L		103	68 - 130
1,1,2-Trichloroethane	50.0	56.8		ug/L		114	70 - 130
Trichloroethene	50.0	53.2		ug/L		106	70 - 130
Trichlorofluoromethane	50.0	49.9		ug/L		100	65 - 138
1,2,3-Trichloropropane	50.0	52.5		ug/L		105	70 - 130
1,2,4-Trimethylbenzene	50.0	58.1		ug/L		116	70 - 130
1,3,5-Trimethylbenzene	50.0	55.4		ug/L		111	69 - 130
Vinyl acetate	100	149		ug/L		149	26 - 160
Vinyl chloride	50.0	53.8		ug/L		108	59 - 136
Xylenes, Total	100	113		ug/L		113	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*108*		*72 - 130*
Dibromofluoromethane	*95*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-657668/1-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657668

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
Benzenethiol	ND		10	9.9	ug/L		01/15/24 09:26	01/16/24 13:03	1
Benzoic acid	ND		30	24	ug/L		01/15/24 09:26	01/16/24 13:03	1
Benzyl alcohol	ND		10	7.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		01/15/24 09:26	01/16/24 13:03	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		01/15/24 09:26	01/16/24 13:03	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Chloroaniline	ND		10	4.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
2-Chloronaphthalene	ND		10	3.8	ug/L		01/15/24 09:26	01/16/24 13:03	1
2-Chlorophenol	ND		10	4.1	ug/L		01/15/24 09:26	01/16/24 13:03	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-657668/1-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657668

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		01/15/24 09:26	01/16/24 13:03	1
Dibenzofuran	ND		10	4.0	ug/L		01/15/24 09:26	01/16/24 13:03	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
Diethyl phthalate	ND		10	4.4	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
Dimethyl phthalate	ND		10	4.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		01/15/24 09:26	01/16/24 13:03	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		01/15/24 09:26	01/16/24 13:03	1
1,4-Dioxane	ND		10	4.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
Hexachlorobenzene	ND		10	9.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		01/15/24 09:26	01/16/24 13:03	1
Hexachloroethane	ND		10	5.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
Indene	ND		10	3.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
Isophorone	ND		10	5.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
2-Methylphenol	ND		10	3.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
2-Nitroaniline	ND		10	5.0	ug/L		01/15/24 09:26	01/16/24 13:03	1
3-Nitroaniline	ND		10	4.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Nitroaniline	ND		10	4.1	ug/L		01/15/24 09:26	01/16/24 13:03	1
Nitrobenzene	ND		10	4.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
2-Nitrophenol	ND		10	4.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Nitrophenol	ND		10	3.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		01/15/24 09:26	01/16/24 13:03	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
Pentachlorophenol	ND		20	12	ug/L		01/15/24 09:26	01/16/24 13:03	1
Phenol	ND		10	4.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
Pyridine	ND		10	10	ug/L		01/15/24 09:26	01/16/24 13:03	1
Quinoline	ND		10	2.4	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/15/24 09:26	01/16/24 13:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*21 - 114*	*01/15/24 09:26*	*01/16/24 13:03*	*1*
2-Fluorophenol	*50*		*10 - 105*	*01/15/24 09:26*	*01/16/24 13:03*	*1*
Nitrobenzene-d5	*73*		*16 - 127*	*01/15/24 09:26*	*01/16/24 13:03*	*1*
Phenol-d5	*38*		*10 - 129*	*01/15/24 09:26*	*01/16/24 13:03*	*1*
Terphenyl-d14	*104*		*13 - 150*	*01/15/24 09:26*	*01/16/24 13:03*	*1*
2,4,6-Tribromophenol	*82*		*10 - 150*	*01/15/24 09:26*	*01/16/24 13:03*	*1*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-657668/2-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657668

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	37.0		ug/L		31	10 - 127
Benzoic acid	120	117		ug/L		98	19 - 126
Benzyl alcohol	120	79.6		ug/L		66	17 - 109
Bis(2-chloroethoxy)methane	120	66.3		ug/L		55	24 - 125
Bis(2-chloroethyl)ether	120	63.7		ug/L		53	10 - 121
bis (2-chloroisopropyl) ether	120	68.9		ug/L		57	14 - 123
Bis(2-ethylhexyl) phthalate	120	97.5		ug/L		81	16 - 150
4-Bromophenyl phenyl ether	120	106		ug/L		88	17 - 150
Butyl benzyl phthalate	120	105		ug/L		87	21 - 150
4-Chloroaniline	120	66.7		ug/L		56	10 - 124
4-Chloro-3-methylphenol	120	85.8		ug/L		72	37 - 131
2-Chloronaphthalene	120	96.3		ug/L		80	24 - 132
2-Chlorophenol	120	77.5		ug/L		65	27 - 124
4-Chlorophenyl phenyl ether	120	102		ug/L		85	27 - 147
Dibenz[a,h]acridine	114	125		ug/L		109	40 - 140
Dibenzofuran	120	94.4		ug/L		79	30 - 135
3,3'-Dichlorobenzidine	160	143		ug/L		89	10 - 150
2,4-Dichlorophenol	120	95.3		ug/L		79	33 - 132
Diethyl phthalate	120	95.9		ug/L		80	37 - 145
2,4-Dimethylphenol	120	114		ug/L		95	38 - 132
Dimethyl phthalate	120	94.0		ug/L		78	32 - 137
Di-n-butyl phthalate	120	107		ug/L		89	27 - 150
4,6-Dinitro-ortho-cresol	240	209		ug/L		87	14 - 150
2,4-Dinitrophenol	240	173		ug/L		72	15 - 150
2,4-Dinitrotoluene	120	95.7		ug/L		80	35 - 136
2,6-Dinitrotoluene	120	96.5		ug/L		80	29 - 140
Di-n-octyl phthalate	120	97.6		ug/L		81	26 - 150
1,4-Dioxane	120	46.4		ug/L		39	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	107		ug/L		89	23 - 138
Hexachlorobenzene	120	111		ug/L		93	10 - 150
Hexachlorocyclopentadiene	120	90.6		ug/L		76	10 - 124
Hexachloroethane	120	76.7		ug/L		64	10 - 127
Indene	120	92.8		ug/L		77	18 - 150
Isophorone	120	80.9		ug/L		67	28 - 127
2-Methylphenol	120	89.1		ug/L		74	34 - 124
3 & 4 Methylphenol	120	83.5		ug/L		70	32 - 122
2-Nitroaniline	120	95.8		ug/L		80	24 - 139
3-Nitroaniline	120	82.6		ug/L		69	10 - 128
4-Nitroaniline	120	82.6		ug/L		69	28 - 118
Nitrobenzene	120	79.3		ug/L		66	29 - 120
2-Nitrophenol	120	93.7		ug/L		78	25 - 148
4-Nitrophenol	240	211		ug/L		88	12 - 129
N-Nitrosodimethylamine	120	102		ug/L		85	10 - 115
N-Nitrosodi-n-propylamine	120	93.8		ug/L		78	24 - 142
N-Nitrosodiphenylamine	119	107		ug/L		90	29 - 138
Pentachlorophenol	240	164		ug/L		68	19 - 150
Phenol	120	51.2		ug/L		43	11 - 95
Pyridine	240	28.2		ug/L		12	10 - 82

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-657668/2-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657668

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Quinoline			114	76.7		ug/L		67	40 - 140		
2,4,5-Trichlorophenol			120	99.3		ug/L		83	30 - 144		
2,4,6-Trichlorophenol			120	98.0		ug/L		82	27 - 147		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*21 - 114*
2-Fluorophenol	*49*		*10 - 105*
Nitrobenzene-d5	*83*		*16 - 127*
Phenol-d5	*42*		*10 - 129*
Terphenyl-d14	*94*		*13 - 150*
2,4,6-Tribromophenol	*86*		*10 - 150*

Lab Sample ID: LCS 400-657668/4-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657668

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	83.7		ug/L		70	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*21 - 114*
2-Fluorophenol	*49*		*10 - 105*
Nitrobenzene-d5	*67*		*16 - 127*
Phenol-d5	*40*		*10 - 129*
Terphenyl-d14	*107*		*13 - 150*
2,4,6-Tribromophenol	*79*		*10 - 150*

Lab Sample ID: LCSD 400-657668/3-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657668

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	61.1	*1	ug/L		51	10 - 127	49	40
Benzoic acid			120	162	*+	ug/L		135	19 - 126	32	40
Benzyl alcohol			120	93.4		ug/L		78	17 - 109	16	40
Bis(2-chloroethoxy)methane			120	70.5		ug/L		59	24 - 125	6	40
Bis(2-chloroethyl)ether			120	61.8		ug/L		51	10 - 121	3	40
bis (2-chloroisopropyl) ether			120	70.4		ug/L		59	14 - 123	2	40
Bis(2-ethylhexyl) phthalate			120	104		ug/L		86	16 - 150	6	40
4-Bromophenyl phenyl ether			120	107		ug/L		89	17 - 150	1	40
Butyl benzyl phthalate			120	107		ug/L		89	21 - 150	2	40
4-Chloroaniline			120	71.7		ug/L		60	10 - 124	7	40
4-Chloro-3-methylphenol			120	93.4		ug/L		78	37 - 131	8	40
2-Chloronaphthalene			120	102		ug/L		85	24 - 132	6	40
2-Chlorophenol			120	87.3		ug/L		73	27 - 124	12	40
4-Chlorophenyl phenyl ether			120	106		ug/L		88	27 - 147	4	40
Dibenz[a,h]acridine			114	131		ug/L		115	40 - 140	5	40
Dibenzofuran			120	101		ug/L		84	30 - 135	7	40

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-657668/3-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657668

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine			160	148		ug/L		93	10 - 150	4	40
2,4-Dichlorophenol			120	101		ug/L		84	33 - 132	6	40
Diethyl phthalate			120	107		ug/L		89	37 - 145	11	40
2,4-Dimethylphenol			120	122		ug/L		102	38 - 132	7	40
Dimethyl phthalate			120	102		ug/L		85	32 - 137	8	40
Di-n-butyl phthalate			120	113		ug/L		95	27 - 150	6	40
4,6-Dinitro-ortho-cresol			240	225		ug/L		94	14 - 150	7	40
2,4-Dinitrophenol			240	194		ug/L		81	15 - 150	12	40
2,4-Dinitrotoluene			120	99.3		ug/L		83	35 - 136	4	40
2,6-Dinitrotoluene			120	96.9		ug/L		81	29 - 140	0	40
Di-n-octyl phthalate			120	103		ug/L		86	26 - 150	5	40
1,4-Dioxane			120	50.9		ug/L		42	10 - 87	9	40
1,2-Diphenylhydrazine (as Azobenzene)			120	109		ug/L		91	23 - 138	2	40
Hexachlorobenzene			120	117		ug/L		98	10 - 150	5	40
Hexachlorocyclopentadiene			120	101		ug/L		85	10 - 124	11	40
Hexachloroethane			120	82.6		ug/L		69	10 - 127	7	40
Indene			120	98.5		ug/L		82	18 - 150	6	40
Isophorone			120	83.4		ug/L		69	28 - 127	3	40
2-Methylphenol			120	94.9		ug/L		79	34 - 124	6	40
3 & 4 Methylphenol			120	90.2		ug/L		75	32 - 122	8	40
2-Nitroaniline			120	97.4		ug/L		81	24 - 139	2	40
3-Nitroaniline			120	91.3		ug/L		76	10 - 128	10	40
4-Nitroaniline			120	94.3		ug/L		79	28 - 118	13	40
Nitrobenzene			120	84.4		ug/L		70	29 - 120	6	40
2-Nitrophenol			120	100		ug/L		84	25 - 148	7	40
4-Nitrophenol			240	227		ug/L		94	12 - 129	7	40
N-Nitrosodimethylamine			120	115		ug/L		96	10 - 115	12	40
N-Nitrosodi-n-propylamine			120	102		ug/L		85	24 - 142	8	40
N-Nitrosodiphenylamine			119	113		ug/L		95	29 - 138	6	40
Pentachlorophenol			240	178		ug/L		74	19 - 150	8	40
Phenol			120	58.8		ug/L		49	11 - 95	14	40
Pyridine			240	46.5	*1	ug/L		19	10 - 82	49	40
Quinoline			114	97.9		ug/L		86	40 - 140	24	40
2,4,5-Trichlorophenol			120	104		ug/L		87	30 - 144	5	40
2,4,6-Trichlorophenol			120	102		ug/L		85	27 - 147	4	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*21 - 114*
2-Fluorophenol	*54*		*10 - 105*
Nitrobenzene-d5	*84*		*16 - 127*
Phenol-d5	*50*		*10 - 129*
Terphenyl-d14	*100*		*13 - 150*
2,4,6-Tribromophenol	*92*		*10 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-657668/5-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657668

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	72.3		ug/L		60	40 - 140	15	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*21 - 114*
2-Fluorophenol	*44*		*10 - 105*
Nitrobenzene-d5	*62*		*16 - 127*
Phenol-d5	*38*		*10 - 129*
Terphenyl-d14	*97*		*13 - 150*
2,4,6-Tribromophenol	*80*		*10 - 150*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-657912/1-A
Matrix: Water
Analysis Batch: 657957

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		01/17/24 11:34	01/17/24 17:23	1
Acenaphthylene	ND		0.20	0.044	ug/L		01/17/24 11:34	01/17/24 17:23	1
Anthracene	ND		0.20	0.047	ug/L		01/17/24 11:34	01/17/24 17:23	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		01/17/24 11:34	01/17/24 17:23	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		01/17/24 11:34	01/17/24 17:23	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		01/17/24 11:34	01/17/24 17:23	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/17/24 11:34	01/17/24 17:23	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		01/17/24 11:34	01/17/24 17:23	1
Chrysene	ND		0.20	0.033	ug/L		01/17/24 11:34	01/17/24 17:23	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		01/17/24 11:34	01/17/24 17:23	1
Fluoranthene	ND		0.20	0.034	ug/L		01/17/24 11:34	01/17/24 17:23	1
Fluorene	ND		0.20	0.089	ug/L		01/17/24 11:34	01/17/24 17:23	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		01/17/24 11:34	01/17/24 17:23	1
Phenanthrene	ND		0.20	0.090	ug/L		01/17/24 11:34	01/17/24 17:23	1
Pyrene	ND		0.20	0.039	ug/L		01/17/24 11:34	01/17/24 17:23	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		01/17/24 11:34	01/17/24 17:23	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		01/17/24 11:34	01/17/24 17:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*194*	*S1+*	*18 - 147*	*01/17/24 11:34*	*01/17/24 17:23*	*1*
2-Fluorobiphenyl	*100*		*15 - 128*	*01/17/24 11:34*	*01/17/24 17:23*	*1*
Nitrobenzene-d5	*73*		*10 - 144*	*01/17/24 11:34*	*01/17/24 17:23*	*1*

Lab Sample ID: LCS 400-657912/2-A
Matrix: Water
Analysis Batch: 657957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657912

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acenaphthene			120	118		ug/L		98	40 - 140		
Acenaphthylene			120	110		ug/L		92	40 - 140		
Anthracene			120	100	E	ug/L		83	40 - 140		

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 400-657912/2-A
Matrix: Water
Analysis Batch: 657957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657912

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzo[a]anthracene			120	133		ug/L		111	40 - 140		
Benzo[a]pyrene			120	122		ug/L		102	40 - 140		
Benzo[b]fluoranthene			120	164		ug/L		137	40 - 140		
Benzo[g,h,i]perylene			120	113		ug/L		94	40 - 140		
Benzo[k]fluoranthene			120	117		ug/L		97	40 - 140		
Chrysene			120	108		ug/L		90	40 - 140		
Dibenz(a,h)anthracene			120	134		ug/L		111	40 - 140		
Fluoranthene			120	97.6	E	ug/L		81	40 - 140		
Fluorene			120	123		ug/L		102	40 - 140		
Indeno[1,2,3-cd]pyrene			120	136		ug/L		113	40 - 140		
Phenanthrene			120	117		ug/L		97	40 - 140		
Pyrene			120	112		ug/L		93	40 - 140		
1-Methylnaphthalene			120	111		ug/L		92	40 - 140		
2-Methylnaphthalene			120	115		ug/L		96	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*82*		*18 - 147*
2-Fluorobiphenyl	*84*		*15 - 128*
Nitrobenzene-d5	*89*		*10 - 144*

Lab Sample ID: LCSD 400-657912/3-A
Matrix: Water
Analysis Batch: 657957

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657912

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	122		ug/L		102	40 - 140	4	40
Acenaphthylene			120	116		ug/L		96	40 - 140	5	40
Anthracene			120	103	E	ug/L		86	40 - 140	3	40
Benzo[a]anthracene			120	141		ug/L		117	40 - 140	6	40
Benzo[a]pyrene			120	130		ug/L		108	40 - 140	6	40
Benzo[b]fluoranthene			120	171	*+	ug/L		143	40 - 140	4	40
Benzo[g,h,i]perylene			120	125		ug/L		104	40 - 140	9	40
Benzo[k]fluoranthene			120	125		ug/L		104	40 - 140	6	40
Chrysene			120	115		ug/L		96	40 - 140	6	40
Dibenz(a,h)anthracene			120	144		ug/L		120	40 - 140	8	40
Fluoranthene			120	101	E	ug/L		84	40 - 140	3	40
Fluorene			120	128		ug/L		107	40 - 140	4	40
Indeno[1,2,3-cd]pyrene			120	146		ug/L		122	40 - 140	7	40
Phenanthrene			120	122		ug/L		102	40 - 140	4	40
Pyrene			120	118		ug/L		98	40 - 140	5	40
1-Methylnaphthalene			120	114		ug/L		95	40 - 140	3	40
2-Methylnaphthalene			120	117		ug/L		98	40 - 140	2	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*86*		*18 - 147*
2-Fluorobiphenyl	*88*		*15 - 128*
Nitrobenzene-d5	*92*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-657905/1-A
Matrix: Water
Analysis Batch: 657923

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657905

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		01/17/24 10:31	01/17/24 15:53	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/17/24 10:31	01/17/24 15:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*	*p*	*51 - 149*	*01/17/24 10:31*	*01/17/24 15:53*	*1*

Lab Sample ID: LCS 400-657905/2-A
Matrix: Water
Analysis Batch: 657923

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657905

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0986		ug/L		98	60 - 140		
1,2-Dibromoethane			0.100	0.0926		ug/L		92	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*86*	*p*	*51 - 149*

Lab Sample ID: LCSD 400-657905/3-A
Matrix: Water
Analysis Batch: 657923

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657905

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0963		ug/L		96	60 - 140	2	30
1,2-Dibromoethane			0.100	0.0915		ug/L		91	60 - 140	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*85*	*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
Melissa Remiger	25278	DATE: 1/11/2024
PO #	**GSAP Project ID**	PAGE: 2 of 2
60721927 3.1.2	USPC/00114/R/02	

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS: Street and City	State	AECOM Project / Task Number:
AECOM		900 South Central Ave; ROXANA	IL	Roxana Quarterly GW 60721927 3.1.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location):	PHONE NO.:	E-MAIL:	AECOM Other ID:
Melissa Remiger - please see special instructions	314-802-1207	melissa.remiger@aecom.com	

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

SAMPLER NAME(S) (Print): C. McDavid, T. Jenkins

LAB USE ONLY

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

*** Please include "J" values on Reports.**
*** Please provide sample receipt upon login.**
*** Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com**

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 3.1.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°
0.8
1.0 IR10

Container PID Readings

400-249620 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 8270 SIMS
	TB-ROX-011124-8260-A	1/11/2024	0000	Water	2					2	X			
	TB-ROX-011124-8011-A	1/11/2024	0000	Water	2					2		X		
	MW12-ROX-011124-EB	1/11/2024	0840	Water	6			2		8	X	X	X	X
	MW12-ROX-011124	1/11/2024	0955	Water	6			2		8	X	X	X	X
	ROST4PZE-ROX-011124	1/11/2024	1215	Water	6			2		8	X	X	X	X
	MW2-ROX-011124	1/11/2024	1345	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: See page 1	1/11/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
		1.12.24	9:31
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: See page 1

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-249620-1

Login Number: 249620
List Number: 1
Creator: Roberts, Alexis J

List Source: Eurofins 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	0.8°C, 1.0°C IR10
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: 400-249620-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Roxana Groundwater Quarterly – 1st Quarter 2024 Data Review

Laboratory SDG: 400-249621-1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 2/28/2024

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

Sample Identification	Sample Identification
TB-ROX-011124-8260-BP	TB-ROX-011124-8011-BP
MW23-ROX-011124	--

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 that 2-chloroethyl vinyl ether, benzo[b]fluoranthene, and several SVOC LCS/LCSD recoveries, and/or SVOC LCS/LCSD RPDs, were outside evaluation criteria. The surrogate recovery for terphenyl-d_{14} was outside criteria in a PAH method blank. 2-Chloroethyl vinyl ether MS/MSD recoveries were outside evaluation criteria in sample MW23-ROX-011124. The continuing calibration verification (CCV) for several analytes were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (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 400-657968/1001	VOCs	2-Chloroethyl vinyl ether	**162**	NA	10-160
LCS/LCSD 400-657668/2-A/3-A	SVOCs	Aniline	31/51	**49**	10-127/40
LCS/LCSD 400-657668/2-A/3-A	SVOCs	Benzoic acid	98/**135**	32	19-126/40
LCS/LCSD 400-657668/2-A/3-A	SVOCs	Pyridine	12/19	**49**	10-82/40
LCS/LCSD 400-657912/2-A/3-A	PAHs	Benzo[b]fluoranthene	137/**143**	4	40-140/40

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 LCS/LCSD 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?

Yes

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MB 400-657912/1-A	PAHs	Terphenyl-d_{14}	**194**	18-147

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, although not requested, sample MW23-ROX-011124 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
MW23-ROX-011124 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	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 2-chloroethyl vinyl ether due to the acid reactive nature of 2-chloroethyl vinyl ether.

Sample ID	Parameter	Analyte	Qualification
MW23-ROX-011124	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 (CCV) for several analytes were outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW23-ROX-011124	SVOCs	Pyridine	**UJ**
MW23-ROX-011124	SVOCs	Bis(2-chloroethyl) ether	**UJ**
MW23-ROX-011124	SVOCs	Bis(2-chloroethoxy) methane	**UJ**
MW23-ROX-011124	PAHs	Anthracene	**UJ**
MW23-ROX-011124	PAHs	Fluoranthene	**UJ**

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 1/19/2024 12:37:35 PM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-249621-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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Authorized for release by
Leah Klingensmith, Senior Project Manager
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(615)301-5038

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Job Narrative
400-249621-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 1/12/2024 9:31 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 0.8°C and 1.0°C

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-657889 recovered above the upper control limit for 2-Chloroethyl vinyl ether, Acrolein and Vinyl acetate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following sample was received preserved with hydrochloric acid: TB-ROX-011124-8260-BP (400-249621-1). 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 8260D: The laboratory control sample (LCS) for analytical batch 400-657968 recovered outside control limits for the following analytes: 2-Chloroethyl vinyl ether. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-657968 recovered above the upper control limit for 1,2-Dichloropropane, 2-Chloroethyl vinyl ether, Acrolein, cis-1,3-Dichloropropene and Vinyl acetate. 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 400-657968/1).

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-657968 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260D: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-657968 because the recoveries were below the reporting limit due to the acidic nature of the parent sample..

Method 8260D: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following sample was received preserved with hydrochloric acid: MW23-ROX-011124 (400-249621-3). 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 8270E: The initial calibration verification (ICV) analyzed in batch 400-653222 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-657759 recovered above the upper control limit for N-Nitrosodimethylamine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Job ID: 400-249621-1 (Continued) Eurofins Pensacola

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-657759 recovered outside acceptance criteria, low biased, for Bis(2-chloroethoxy)methane, Bis(2-chloroethyl)ether and Pyridine. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-657668 and analytical batch 400-657759 recovered outside control limits for the following analytes: Aniline and Pyridine.

Method 8270E: The laboratory control sample duplicate (LCSD) for preparation batch 400-657668 and analytical batch 400-657759 recovered outside control limits for the following analytes: Benzoic acid. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 8270E_SIM: 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: (MB 400-657912/1-A). These results have been reported and qualified.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-657957 recovered outside acceptance criteria, low biased, for Anthracene and Fluoranthene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E_SIM: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-657912 and analytical batch 400-657957 recovered outside control limits for the following analytes: Benzo[b]fluoranthene. 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 Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

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

Job ID: 400-249621-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-249621-1	TB-ROX-011124-8260-BP	Water	01/11/24 12:00	01/12/24 09:31
400-249621-2	TB-ROX-011124-8011-BP	Water	01/11/24 12:00	01/12/24 09:31
400-249621-3	MW23-ROX-011124	Water	01/11/24 11:00	01/12/24 09:31

Detection Summary

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

Job ID: 400-249621-1

Client Sample ID: TB-ROX-011124-8260-BP — Lab Sample ID: 400-249621-1

No Detections.

Client Sample ID: TB-ROX-011124-8011-BP — Lab Sample ID: 400-249621-2

No Detections.

Client Sample ID: MW23-ROX-011124 — Lab Sample ID: 400-249621-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.32	J	1.0	0.20	ug/L	1		8260D	Total/NA
Methyl tert-butyl ether	0.95	J	1.0	0.22	ug/L	1		8260D	Total/NA
Acenaphthylene	0.14	J	0.20	0.043	ug/L	1		8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-249621-1

Client Sample ID: TB-ROX-011124-8260-BP
Date Collected: 01/11/24 12:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249621-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/17/24 15:39	1
Acrolein	ND		20	3.3	ug/L			01/17/24 15:39	1
Acrylonitrile	ND		10	2.8	ug/L			01/17/24 15:39	1
Benzene	ND		1.0	0.50	ug/L			01/17/24 15:39	1
Bromobenzene	ND		1.0	0.54	ug/L			01/17/24 15:39	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/17/24 15:39	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/17/24 15:39	1
Bromoform	ND		5.0	0.25	ug/L			01/17/24 15:39	1
Bromomethane	ND		1.0	0.98	ug/L			01/17/24 15:39	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/17/24 15:39	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/17/24 15:39	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/17/24 15:39	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/17/24 15:39	1
Chloroethane	ND		1.0	0.76	ug/L			01/17/24 15:39	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/17/24 15:39	1
Chloroform	ND		1.0	0.90	ug/L			01/17/24 15:39	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/17/24 15:39	1
Chloromethane	ND		1.0	0.90	ug/L			01/17/24 15:39	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/17/24 15:39	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/17/24 15:39	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/17/24 15:39	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/17/24 15:39	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/17/24 15:39	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/17/24 15:39	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/17/24 15:39	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/17/24 15:39	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/17/24 15:39	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 15:39	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 15:39	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 15:39	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 15:39	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/17/24 15:39	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/17/24 15:39	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/17/24 15:39	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/17/24 15:39	1
2-Hexanone	ND		25	1.4	ug/L			01/17/24 15:39	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/17/24 15:39	1
Methylene bromide	ND		5.0	0.22	ug/L			01/17/24 15:39	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/17/24 15:39	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/17/24 15:39	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/17/24 15:39	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/17/24 15:39	1
Naphthalene	ND		5.0	3.0	ug/L			01/17/24 15:39	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/17/24 15:39	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/17/24 15:39	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/17/24 15:39	1
o-Xylene	ND		5.0	0.60	ug/L			01/17/24 15:39	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/17/24 15:39	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/17/24 15:39	1

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

Job ID: 400-249621-1

Client Sample ID: TB-ROX-011124-8260-BP
Date Collected: 01/11/24 12:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249621-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/17/24 15:39	1
Styrene	ND		1.0	1.0	ug/L			01/17/24 15:39	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/17/24 15:39	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/17/24 15:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/17/24 15:39	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/17/24 15:39	1
Toluene	ND		1.0	0.90	ug/L			01/17/24 15:39	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 15:39	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/17/24 15:39	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/17/24 15:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/17/24 15:39	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/17/24 15:39	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/17/24 15:39	1
Trichloroethene	ND		1.0	0.15	ug/L			01/17/24 15:39	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/17/24 15:39	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/17/24 15:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/17/24 15:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/17/24 15:39	1
Vinyl acetate	ND		25	0.93	ug/L			01/17/24 15:39	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/17/24 15:39	1
Xylenes, Total	ND		10	1.6	ug/L			01/17/24 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*72 - 130*		*01/17/24 15:39*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*01/17/24 15:39*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*01/17/24 15:39*	*1*

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

Job ID: 400-249621-1

Client Sample ID: TB-ROX-011124-8011-BP
Date Collected: 01/11/24 12:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249621-2
Matrix: Water

Method: EPA 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		01/17/24 10:31	01/17/24 22:09	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/17/24 10:31	01/17/24 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*51 - 149*	*01/17/24 10:31*	*01/17/24 22:09*	*1*

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

Job ID: 400-249621-1

Client Sample ID: MW23-ROX-011124
Date Collected: 01/11/24 11:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249621-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/18/24 11:11	1
Acrolein	ND		20	3.3	ug/L			01/18/24 11:11	1
Acrylonitrile	ND		10	2.8	ug/L			01/18/24 11:11	1
Benzene	ND		1.0	0.50	ug/L			01/18/24 11:11	1
Bromobenzene	ND		1.0	0.54	ug/L			01/18/24 11:11	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/18/24 11:11	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/18/24 11:11	1
Bromoform	ND		5.0	0.25	ug/L			01/18/24 11:11	1
Bromomethane	ND		1.0	0.98	ug/L			01/18/24 11:11	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/18/24 11:11	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/18/24 11:11	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/18/24 11:11	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/18/24 11:11	1
Chloroethane	ND		1.0	0.76	ug/L			01/18/24 11:11	1
2-Chloroethyl vinyl ether	ND	*+ F1	5.0	2.0	ug/L			01/18/24 11:11	1
Chloroform	ND		1.0	0.90	ug/L			01/18/24 11:11	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/18/24 11:11	1
Chloromethane	ND		1.0	0.90	ug/L			01/18/24 11:11	1
cis-1,2-Dichloroethene	**0.32**	**J**	1.0	0.20	ug/L			01/18/24 11:11	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/18/24 11:11	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/18/24 11:11	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/18/24 11:11	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/18/24 11:11	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/18/24 11:11	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/18/24 11:11	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/18/24 11:11	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/18/24 11:11	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/18/24 11:11	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 11:11	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 11:11	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 11:11	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/18/24 11:11	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/18/24 11:11	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/18/24 11:11	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/18/24 11:11	1
2-Hexanone	ND		25	1.4	ug/L			01/18/24 11:11	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/18/24 11:11	1
Methylene bromide	ND		5.0	0.22	ug/L			01/18/24 11:11	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/18/24 11:11	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/18/24 11:11	1
Methyl tert-butyl ether	**0.95**	**J**	1.0	0.22	ug/L			01/18/24 11:11	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/18/24 11:11	1
Naphthalene	ND		5.0	3.0	ug/L			01/18/24 11:11	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/18/24 11:11	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/18/24 11:11	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/18/24 11:11	1
o-Xylene	ND		5.0	0.60	ug/L			01/18/24 11:11	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/18/24 11:11	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/18/24 11:11	1

Client Sample ID: MW23-ROX-011124
Date Collected: 01/11/24 11:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249621-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/18/24 11:11	1
Styrene	ND		1.0	1.0	ug/L			01/18/24 11:11	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/18/24 11:11	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/18/24 11:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/18/24 11:11	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/18/24 11:11	1
Toluene	ND		1.0	0.90	ug/L			01/18/24 11:11	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/18/24 11:11	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/18/24 11:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/18/24 11:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/18/24 11:11	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/18/24 11:11	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/18/24 11:11	1
Trichloroethene	ND		1.0	0.15	ug/L			01/18/24 11:11	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/18/24 11:11	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/18/24 11:11	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/18/24 11:11	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/18/24 11:11	1
Vinyl acetate	ND		25	0.93	ug/L			01/18/24 11:11	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/18/24 11:11	1
Xylenes, Total	ND		10	1.6	ug/L			01/18/24 11:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*72 - 130*		*01/18/24 11:11*	*1*
Dibromofluoromethane	*110*		*75 - 126*		*01/18/24 11:11*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*01/18/24 11:11*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.098	ug/L		01/17/24 11:35	01/17/24 21:07	1
Acenaphthylene	**0.14**	**J**	0.20	0.043	ug/L		01/17/24 11:35	01/17/24 21:07	1
Anthracene	ND		0.20	0.046	ug/L		01/17/24 11:35	01/17/24 21:07	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		01/17/24 11:35	01/17/24 21:07	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		01/17/24 11:35	01/17/24 21:07	1
Benzo[b]fluoranthene	ND	*+	0.20	0.037	ug/L		01/17/24 11:35	01/17/24 21:07	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/17/24 11:35	01/17/24 21:07	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		01/17/24 11:35	01/17/24 21:07	1
Chrysene	ND		0.20	0.033	ug/L		01/17/24 11:35	01/17/24 21:07	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		01/17/24 11:35	01/17/24 21:07	1
Fluoranthene	ND		0.20	0.034	ug/L		01/17/24 11:35	01/17/24 21:07	1
Fluorene	ND		0.20	0.088	ug/L		01/17/24 11:35	01/17/24 21:07	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		01/17/24 11:35	01/17/24 21:07	1
Phenanthrene	ND		0.20	0.089	ug/L		01/17/24 11:35	01/17/24 21:07	1
Pyrene	ND		0.20	0.039	ug/L		01/17/24 11:35	01/17/24 21:07	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		01/17/24 11:35	01/17/24 21:07	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		01/17/24 11:35	01/17/24 21:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*136*		*18 - 147*	*01/17/24 11:35*	*01/17/24 21:07*	*1*
2-Fluorobiphenyl	*92*		*15 - 128*	*01/17/24 11:35*	*01/17/24 21:07*	*1*

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

Job ID: 400-249621-1

Client Sample ID: MW23-ROX-011124
Date Collected: 01/11/24 11:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249621-3
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*81*		*10 - 144*	*01/17/24 11:35*	*01/17/24 21:07*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.5	8.3	ug/L		01/15/24 09:26	01/16/24 18:34	1
Benzenethiol	ND		9.5	9.4	ug/L		01/15/24 09:26	01/16/24 18:34	1
Benzoic acid	ND	*+	29	23	ug/L		01/15/24 09:26	01/16/24 18:34	1
Benzyl alcohol	ND		9.5	7.0	ug/L		01/15/24 09:26	01/16/24 18:34	1
Bis(2-chloroethoxy)methane	ND		9.5	4.4	ug/L		01/15/24 09:26	01/16/24 18:34	1
Bis(2-chloroethyl)ether	ND		9.5	3.7	ug/L		01/15/24 09:26	01/16/24 18:34	1
bis (2-chloroisopropyl) ether	ND		9.5	1.7	ug/L		01/15/24 09:26	01/16/24 18:34	1
Bis(2-ethylhexyl) phthalate	ND		9.5	8.5	ug/L		01/15/24 09:26	01/16/24 18:34	1
4-Bromophenyl phenyl ether	ND		9.5	8.2	ug/L		01/15/24 09:26	01/16/24 18:34	1
Butyl benzyl phthalate	ND		9.5	5.5	ug/L		01/15/24 09:26	01/16/24 18:34	1
4-Chloroaniline	ND		9.5	4.5	ug/L		01/15/24 09:26	01/16/24 18:34	1
4-Chloro-3-methylphenol	ND		9.5	5.0	ug/L		01/15/24 09:26	01/16/24 18:34	1
2-Chloronaphthalene	ND		9.5	3.6	ug/L		01/15/24 09:26	01/16/24 18:34	1
2-Chlorophenol	ND		9.5	3.9	ug/L		01/15/24 09:26	01/16/24 18:34	1
4-Chlorophenyl phenyl ether	ND		9.5	3.5	ug/L		01/15/24 09:26	01/16/24 18:34	1
Dibenz[a,h]acridine	ND		9.5	2.7	ug/L		01/15/24 09:26	01/16/24 18:34	1
Dibenzofuran	ND		9.5	3.8	ug/L		01/15/24 09:26	01/16/24 18:34	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		01/15/24 09:26	01/16/24 18:34	1
2,4-Dichlorophenol	ND		9.5	4.1	ug/L		01/15/24 09:26	01/16/24 18:34	1
Diethyl phthalate	ND		9.5	4.2	ug/L		01/15/24 09:26	01/16/24 18:34	1
2,4-Dimethylphenol	ND		9.5	5.0	ug/L		01/15/24 09:26	01/16/24 18:34	1
Dimethyl phthalate	ND		9.5	4.0	ug/L		01/15/24 09:26	01/16/24 18:34	1
Di-n-butyl phthalate	ND		9.5	4.4	ug/L		01/15/24 09:26	01/16/24 18:34	1
4,6-Dinitro-ortho-cresol	ND		9.5	9.5	ug/L		01/15/24 09:26	01/16/24 18:34	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		01/15/24 09:26	01/16/24 18:34	1
2,4-Dinitrotoluene	ND		9.5	4.9	ug/L		01/15/24 09:26	01/16/24 18:34	1
2,6-Dinitrotoluene	ND		9.5	3.7	ug/L		01/15/24 09:26	01/16/24 18:34	1
Di-n-octyl phthalate	ND		9.5	5.7	ug/L		01/15/24 09:26	01/16/24 18:34	1
1,4-Dioxane	ND		9.5	4.1	ug/L		01/15/24 09:26	01/16/24 18:34	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	3.1	ug/L		01/15/24 09:26	01/16/24 18:34	1
Hexachlorobenzene	ND		9.5	9.2	ug/L		01/15/24 09:26	01/16/24 18:34	1
Hexachlorocyclopentadiene	ND		19	4.3	ug/L		01/15/24 09:26	01/16/24 18:34	1
Hexachloroethane	ND		9.5	5.0	ug/L		01/15/24 09:26	01/16/24 18:34	1
Indene	ND		9.5	3.4	ug/L		01/15/24 09:26	01/16/24 18:34	1
Isophorone	ND		9.5	5.0	ug/L		01/15/24 09:26	01/16/24 18:34	1
2-Methylphenol	ND		9.5	3.0	ug/L		01/15/24 09:26	01/16/24 18:34	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		01/15/24 09:26	01/16/24 18:34	1
2-Nitroaniline	ND		9.5	4.8	ug/L		01/15/24 09:26	01/16/24 18:34	1
3-Nitroaniline	ND		9.5	4.5	ug/L		01/15/24 09:26	01/16/24 18:34	1
4-Nitroaniline	ND		9.5	3.9	ug/L		01/15/24 09:26	01/16/24 18:34	1
Nitrobenzene	ND		9.5	4.5	ug/L		01/15/24 09:26	01/16/24 18:34	1
2-Nitrophenol	ND		9.5	4.4	ug/L		01/15/24 09:26	01/16/24 18:34	1
4-Nitrophenol	ND		9.5	3.1	ug/L		01/15/24 09:26	01/16/24 18:34	1
N-Nitrosodimethylamine	ND		9.5	2.1	ug/L		01/15/24 09:26	01/16/24 18:34	1

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

Job ID: 400-249621-1

Client Sample ID: MW23-ROX-011124
Date Collected: 01/11/24 11:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249621-3
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	2.4	ug/L		01/15/24 09:26	01/16/24 18:34	1
N-Nitrosodiphenylamine	ND		9.5	3.5	ug/L		01/15/24 09:26	01/16/24 18:34	1
Pentachlorophenol	ND		19	11	ug/L		01/15/24 09:26	01/16/24 18:34	1
Phenol	ND		9.5	4.0	ug/L		01/15/24 09:26	01/16/24 18:34	1
Pyridine	ND	*1	9.5	9.5	ug/L		01/15/24 09:26	01/16/24 18:34	1
Quinoline	ND		9.5	2.3	ug/L		01/15/24 09:26	01/16/24 18:34	1
2,4,5-Trichlorophenol	ND		9.5	3.8	ug/L		01/15/24 09:26	01/16/24 18:34	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/15/24 09:26	01/16/24 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*21 - 114*	*01/15/24 09:26*	*01/16/24 18:34*	*1*
2-Fluorophenol	*29*		*10 - 105*	*01/15/24 09:26*	*01/16/24 18:34*	*1*
Nitrobenzene-d5	*51*		*16 - 127*	*01/15/24 09:26*	*01/16/24 18:34*	*1*
Phenol-d5	*24*		*10 - 129*	*01/15/24 09:26*	*01/16/24 18:34*	*1*
Terphenyl-d14	*75*		*13 - 150*	*01/15/24 09:26*	*01/16/24 18:34*	*1*
2,4,6-Tribromophenol	*63*		*10 - 150*	*01/15/24 09:26*	*01/16/24 18:34*	*1*

Method: EPA 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		01/17/24 10:31	01/17/24 22:30	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/17/24 10:31	01/17/24 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*51 - 149*	*01/17/24 10:31*	*01/17/24 22:30*	*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.
*1	LCS/LCSD RPD exceeds control limits.
E	Result exceeded calibration range.
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: 400-249621-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-130)	(75-126)	(64-132)
400-249621-1	TB-ROX-011124-8260-BP	108	106	96
400-249621-3	MW23-ROX-011124	113	110	96
400-249621-3 MS	MW23-ROX-011124	109	94	98
400-249621-3 MSD	MW23-ROX-011124	109	93	98
LCS 400-657889/1001	Lab Control Sample	105	92	97
LCS 400-657968/1001	Lab Control Sample	108	95	98
MB 400-657889/5	Method Blank	109	109	97
MB 400-657968/28	Method Blank	110	108	98

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - 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	(21-114)	(10-105)	(16-127)	(10-129)	(13-150)	(10-150)
400-249621-3	MW23-ROX-011124	62	29	51	24	75	63
LCS 400-657668/2-A	Lab Control Sample	76	49	83	42	94	86
LCS 400-657668/4-A	Lab Control Sample	84	49	67	40	107	79
LCSD 400-657668/3-A	Lab Control Sample Dup	83	54	84	50	100	92
LCSD 400-657668/5-A	Lab Control Sample Dup	83	44	62	38	97	80
MB 400-657668/1-A	Method Blank	90	50	73	38	104	82

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-249621-3	MW23-ROX-011124	136	92	81
LCS 400-657912/2-A	Lab Control Sample	82	84	89
LCSD 400-657912/3-A	Lab Control Sample Dup	86	88	92
MB 400-657912/1-A	Method Blank	194 S1+	100	73

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Surrogate Summary

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

Job ID: 400-249621-1

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-249621-2	TB-ROX-011124-8011-BP	109
400-249621-3	MW23-ROX-011124	93
LCS 400-657905/2-A	Lab Control Sample	86 p
LCSD 400-657905/3-A	Lab Control Sample Dup	85 p
MB 400-657905/1-A	Method Blank	86 p

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-249621-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins 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: 400-249621-1

Client Sample ID: TB-ROX-011124-8260-BP
Lab Sample ID: 400-249621-1
Date Collected: 01/11/24 12:00
Matrix: Water
Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657889	01/17/24 15:39	BPO	EET PEN

Client Sample ID: TB-ROX-011124-8011-BP
Lab Sample ID: 400-249621-2
Date Collected: 01/11/24 12:00
Matrix: Water
Date Received: 01/12/24 09:31

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	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 22:09	PG	EET PEN

Client Sample ID: MW23-ROX-011124
Lab Sample ID: 400-249621-3
Date Collected: 01/11/24 11:00
Matrix: Water
Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657968	01/18/24 11:11	BPO	EET PEN
Total/NA	Prep	3510C			262.4 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 18:34	VC1	EET PEN
Total/NA	Prep	3510C			253 mL	1 mL	657912	01/17/24 11:35	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657957	01/17/24 21:07	TH	EET PEN
Total/NA	Prep	8011			35.3 mL	35 mL	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 22:30	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-657668/1-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	3510C			250 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 13:03	VC1	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-657889/5
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	8260D		1	5 mL	5 mL	657889	01/17/24 14:08	BPO	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-657905/1-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	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 15:53	PG	EET PEN

Lab Chronicle

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

Job ID: 400-249621-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-657912/1-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	3510C			250 mL	1 mL	657912	01/17/24 11:34	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657957	01/17/24 17:23	TH	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-657968/28

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	8260D		1	5 mL	5 mL	657968	01/18/24 10:26	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657668/2-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	3510C			250 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 13:29	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657668/4-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	3510C			250 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 14:19	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657889/1001

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	8260D		1	5 mL	5 mL	657889	01/17/24 09:48	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657905/2-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	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 16:13	PG	EET PEN

Lab Chronicle

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

Job ID: 400-249621-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657912/2-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	3510C			250 mL	1 mL	657912	01/17/24 11:34	STC	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	657957	01/17/24 17:44	TH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657968/1001
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	8260D		1	5 mL	5 mL	657968	01/18/24 09:15	BPO	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657668/3-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	3510C			250 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 13:54	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657668/5-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	3510C			250 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 14:45	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657905/3-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	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 16:34	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657912/3-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	3510C			250 mL	1 mL	657912	01/17/24 11:34	STC	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	657957	01/17/24 18:04	TH	EET PEN

Lab Chronicle

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

Job ID: 400-249621-1

Client Sample ID: MW23-ROX-011124
Date Collected: 01/11/24 11:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249621-3 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	8260D		1	5 mL	5 mL	657968	01/18/24 11:34	BPO	EET PEN

Client Sample ID: MW23-ROX-011124
Date Collected: 01/11/24 11:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249621-3 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	8260D		1	5 mL	5 mL	657968	01/18/24 11:56	BPO	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 657889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249621-1	TB-ROX-011124-8260-BP	Total/NA	Water	8260D	
MB 400-657889/5	Method Blank	Total/NA	Water	8260D	
LCS 400-657889/1001	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 657968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249621-3	MW23-ROX-011124	Total/NA	Water	8260D	
MB 400-657968/28	Method Blank	Total/NA	Water	8260D	
LCS 400-657968/1001	Lab Control Sample	Total/NA	Water	8260D	
400-249621-3 MS	MW23-ROX-011124	Total/NA	Water	8260D	
400-249621-3 MSD	MW23-ROX-011124	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 657668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249621-3	MW23-ROX-011124	Total/NA	Water	3510C	
MB 400-657668/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-657668/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-657668/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-657668/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-657668/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 657759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249621-3	MW23-ROX-011124	Total/NA	Water	8270E	657668
MB 400-657668/1-A	Method Blank	Total/NA	Water	8270E	657668
LCS 400-657668/2-A	Lab Control Sample	Total/NA	Water	8270E	657668
LCS 400-657668/4-A	Lab Control Sample	Total/NA	Water	8270E	657668
LCSD 400-657668/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	657668
LCSD 400-657668/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	657668

Prep Batch: 657912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249621-3	MW23-ROX-011124	Total/NA	Water	3510C	
MB 400-657912/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-657912/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-657912/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 657957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249621-3	MW23-ROX-011124	Total/NA	Water	8270E SIM	657912
MB 400-657912/1-A	Method Blank	Total/NA	Water	8270E SIM	657912
LCS 400-657912/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	657912
LCSD 400-657912/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	657912

GC Semi VOA

Prep Batch: 657905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249621-2	TB-ROX-011124-8011-BP	Total/NA	Water	8011	
400-249621-3	MW23-ROX-011124	Total/NA	Water	8011	

GC Semi VOA (Continued)

Prep Batch: 657905 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-657905/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-657905/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-657905/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 657923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249621-2	TB-ROX-011124-8011-BP	Total/NA	Water	8011	657905
400-249621-3	MW23-ROX-011124	Total/NA	Water	8011	657905
MB 400-657905/1-A	Method Blank	Total/NA	Water	8011	657905
LCS 400-657905/2-A	Lab Control Sample	Total/NA	Water	8011	657905
LCSD 400-657905/3-A	Lab Control Sample Dup	Total/NA	Water	8011	657905

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-657889/5
Matrix: Water
Analysis Batch: 657889

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			01/17/24 14:08	1
Acrolein	ND		20	3.3	ug/L			01/17/24 14:08	1
Acrylonitrile	ND		10	2.8	ug/L			01/17/24 14:08	1
Benzene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Bromobenzene	ND		1.0	0.54	ug/L			01/17/24 14:08	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/17/24 14:08	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Bromoform	ND		5.0	0.25	ug/L			01/17/24 14:08	1
Bromomethane	ND		1.0	0.98	ug/L			01/17/24 14:08	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/17/24 14:08	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/17/24 14:08	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/17/24 14:08	1
Chloroethane	ND		1.0	0.76	ug/L			01/17/24 14:08	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/17/24 14:08	1
Chloroform	ND		1.0	0.90	ug/L			01/17/24 14:08	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/17/24 14:08	1
Chloromethane	ND		1.0	0.90	ug/L			01/17/24 14:08	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/17/24 14:08	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/17/24 14:08	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/17/24 14:08	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/17/24 14:08	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/17/24 14:08	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/17/24 14:08	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/17/24 14:08	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/17/24 14:08	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/17/24 14:08	1
2-Hexanone	ND		25	1.4	ug/L			01/17/24 14:08	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/17/24 14:08	1
Methylene bromide	ND		5.0	0.22	ug/L			01/17/24 14:08	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/17/24 14:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/17/24 14:08	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/17/24 14:08	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/17/24 14:08	1
Naphthalene	ND		5.0	3.0	ug/L			01/17/24 14:08	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/17/24 14:08	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/17/24 14:08	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/17/24 14:08	1
o-Xylene	ND		5.0	0.60	ug/L			01/17/24 14:08	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/17/24 14:08	1

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

Lab Sample ID: MB 400-657889/5
Matrix: Water
Analysis Batch: 657889

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			01/17/24 14:08	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/17/24 14:08	1
Styrene	ND		1.0	1.0	ug/L			01/17/24 14:08	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/17/24 14:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/17/24 14:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/17/24 14:08	1
Toluene	ND		1.0	0.90	ug/L			01/17/24 14:08	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/17/24 14:08	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/17/24 14:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/17/24 14:08	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/17/24 14:08	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/17/24 14:08	1
Trichloroethene	ND		1.0	0.15	ug/L			01/17/24 14:08	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/17/24 14:08	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/17/24 14:08	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/17/24 14:08	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/17/24 14:08	1
Vinyl acetate	ND		25	0.93	ug/L			01/17/24 14:08	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Xylenes, Total	ND		10	1.6	ug/L			01/17/24 14:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 130*		*01/17/24 14:08*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*01/17/24 14:08*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*01/17/24 14:08*	*1*

Lab Sample ID: LCS 400-657889/1001
Matrix: Water
Analysis Batch: 657889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	221		ug/L		111	43 - 160
Acrolein	500	604		ug/L		121	38 - 160
Acrylonitrile	500	544		ug/L		109	64 - 142
Benzene	50.0	54.0		ug/L		108	70 - 130
Bromobenzene	50.0	51.3		ug/L		103	70 - 132
Bromochloromethane	50.0	50.4		ug/L		101	70 - 130
Bromodichloromethane	50.0	56.0		ug/L		112	67 - 133
Bromoform	50.0	55.5		ug/L		111	57 - 140
Bromomethane	50.0	36.0		ug/L		72	10 - 160
2-Butanone (MEK)	200	227		ug/L		113	61 - 145
Carbon disulfide	50.0	40.6		ug/L		81	61 - 137
Carbon tetrachloride	50.0	47.5		ug/L		95	61 - 137
Chlorobenzene	50.0	51.0		ug/L		102	70 - 130
Chloroethane	50.0	45.3		ug/L		91	55 - 141
2-Chloroethyl vinyl ether	50.0	76.1		ug/L		152	10 - 160

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

Lab Sample ID: LCS 400-657889/1001
Matrix: Water
Analysis Batch: 657889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	51.4		ug/L		103	69 - 130
1-Chlorohexane	50.0	51.9		ug/L		104	69 - 130
Chloromethane	50.0	45.2		ug/L		90	58 - 137
cis-1,2-Dichloroethene	50.0	52.2		ug/L		104	68 - 130
cis-1,3-Dichloropropene	50.0	58.2		ug/L		116	69 - 132
Dibromochloromethane	50.0	54.2		ug/L		108	67 - 135
1,2-Dichlorobenzene	50.0	50.5		ug/L		101	67 - 130
1,3-Dichlorobenzene	50.0	50.7		ug/L		101	70 - 130
1,4-Dichlorobenzene	50.0	50.3		ug/L		101	70 - 130
Dichlorodifluoromethane	50.0	39.8		ug/L		80	41 - 146
1,1-Dichloroethane	50.0	52.9		ug/L		106	70 - 130
1,2-Dichloroethane	50.0	52.0		ug/L		104	69 - 130
1,1-Dichloroethene	50.0	45.7		ug/L		91	63 - 134
1,2-Dichloropropane	50.0	57.7		ug/L		115	70 - 130
1,3-Dichloropropane	50.0	56.3		ug/L		113	70 - 130
2,2-Dichloropropane	50.0	43.2		ug/L		86	52 - 135
1,1-Dichloropropene	50.0	51.1		ug/L		102	70 - 130
Ethylbenzene	50.0	51.6		ug/L		103	70 - 130
Ethyl methacrylate	50.0	56.0		ug/L		112	68 - 130
Hexachlorobutadiene	50.0	51.6		ug/L		103	53 - 140
2-Hexanone	200	216		ug/L		108	65 - 137
Isopropylbenzene	50.0	50.0		ug/L		100	70 - 130
Methylene bromide	50.0	50.7		ug/L		101	70 - 130
Methylene Chloride	50.0	53.4		ug/L		107	66 - 135
4-Methyl-2-pentanone (MIBK)	200	224		ug/L		112	69 - 138
Methyl tert-butyl ether	50.0	54.3		ug/L		109	66 - 130
m-Xylene & p-Xylene	50.0	50.8		ug/L		102	70 - 130
Naphthalene	50.0	51.2		ug/L		102	47 - 149
n-Butylbenzene	50.0	52.2		ug/L		104	67 - 130
N-Propylbenzene	50.0	51.7		ug/L		103	70 - 130
o-Chlorotoluene	50.0	51.9		ug/L		104	70 - 130
o-Xylene	50.0	52.1		ug/L		104	70 - 130
p-Chlorotoluene	50.0	52.3		ug/L		105	70 - 130
p-Isopropyltoluene	50.0	50.4		ug/L		101	65 - 130
sec-Butylbenzene	50.0	49.9		ug/L		100	66 - 130
Styrene	50.0	52.5		ug/L		105	70 - 130
tert-Butylbenzene	50.0	47.6		ug/L		95	64 - 139
1,1,1,2-Tetrachloroethane	50.0	53.3		ug/L		107	67 - 131
1,1,2,2-Tetrachloroethane	50.0	56.0		ug/L		112	70 - 131
Tetrachloroethene	50.0	49.0		ug/L		98	65 - 130
Toluene	50.0	50.1		ug/L		100	70 - 130
trans-1,2-Dichloroethene	50.0	48.0		ug/L		96	70 - 130
trans-1,3-Dichloropropene	50.0	55.2		ug/L		110	63 - 130
1,2,3-Trichlorobenzene	50.0	53.2		ug/L		106	60 - 138
1,2,4-Trichlorobenzene	50.0	53.0		ug/L		106	60 - 140
1,1,1-Trichloroethane	50.0	47.6		ug/L		95	68 - 130
1,1,2-Trichloroethane	50.0	55.9		ug/L		112	70 - 130
Trichloroethene	50.0	49.2		ug/L		98	70 - 130
Trichlorofluoromethane	50.0	43.6		ug/L		87	65 - 138

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

Lab Sample ID: LCS 400-657889/1001
Matrix: Water
Analysis Batch: 657889

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	51.7		ug/L		103	70 - 130
1,2,4-Trimethylbenzene	50.0	53.4		ug/L		107	70 - 130
1,3,5-Trimethylbenzene	50.0	51.2		ug/L		102	69 - 130
Vinyl acetate	100	130		ug/L		130	26 - 160
Vinyl chloride	50.0	47.3		ug/L		95	59 - 136
Xylenes, Total	100	103		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*72 - 130*
Dibromofluoromethane	*92*		*75 - 126*
Toluene-d8 (Surr)	*97*		*64 - 132*

Lab Sample ID: MB 400-657968/28
Matrix: Water
Analysis Batch: 657968

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			01/18/24 10:26	1
Acrolein	ND		20	3.3	ug/L			01/18/24 10:26	1
Acrylonitrile	ND		10	2.8	ug/L			01/18/24 10:26	1
Benzene	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Bromobenzene	ND		1.0	0.54	ug/L			01/18/24 10:26	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/18/24 10:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Bromoform	ND		5.0	0.25	ug/L			01/18/24 10:26	1
Bromomethane	ND		1.0	0.98	ug/L			01/18/24 10:26	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/18/24 10:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/18/24 10:26	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/18/24 10:26	1
Chloroethane	ND		1.0	0.76	ug/L			01/18/24 10:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/18/24 10:26	1
Chloroform	ND		1.0	0.90	ug/L			01/18/24 10:26	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/18/24 10:26	1
Chloromethane	ND		1.0	0.90	ug/L			01/18/24 10:26	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/18/24 10:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/18/24 10:26	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/18/24 10:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/18/24 10:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/18/24 10:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/18/24 10:26	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/18/24 10:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/18/24 10:26	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/18/24 10:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/18/24 10:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 10:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 10:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 10:26	1

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

Lab Sample ID: MB 400-657968/28
Matrix: Water
Analysis Batch: 657968

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			01/18/24 10:26	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/18/24 10:26	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/18/24 10:26	1
2-Hexanone	ND		25	1.4	ug/L			01/18/24 10:26	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/18/24 10:26	1
Methylene bromide	ND		5.0	0.22	ug/L			01/18/24 10:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/18/24 10:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/18/24 10:26	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/18/24 10:26	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/18/24 10:26	1
Naphthalene	ND		5.0	3.0	ug/L			01/18/24 10:26	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/18/24 10:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/18/24 10:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/18/24 10:26	1
o-Xylene	ND		5.0	0.60	ug/L			01/18/24 10:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/18/24 10:26	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/18/24 10:26	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/18/24 10:26	1
Styrene	ND		1.0	1.0	ug/L			01/18/24 10:26	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/18/24 10:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/18/24 10:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/18/24 10:26	1
Toluene	ND		1.0	0.90	ug/L			01/18/24 10:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/18/24 10:26	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/18/24 10:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/18/24 10:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/18/24 10:26	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/18/24 10:26	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/18/24 10:26	1
Trichloroethene	ND		1.0	0.15	ug/L			01/18/24 10:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/18/24 10:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/18/24 10:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/18/24 10:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/18/24 10:26	1
Vinyl acetate	ND		25	0.93	ug/L			01/18/24 10:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Xylenes, Total	ND		10	1.6	ug/L			01/18/24 10:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*72 - 130*		*01/18/24 10:26*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*01/18/24 10:26*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*01/18/24 10:26*	*1*

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

Lab Sample ID: LCS 400-657968/1001
Matrix: Water
Analysis Batch: 657968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	218		ug/L		109	43 - 160
Acrolein	500	637		ug/L		127	38 - 160
Acrylonitrile	500	535		ug/L		107	64 - 142
Benzene	50.0	58.9		ug/L		118	70 - 130
Bromobenzene	50.0	53.3		ug/L		107	70 - 132
Bromochloromethane	50.0	53.2		ug/L		106	70 - 130
Bromodichloromethane	50.0	58.6		ug/L		117	67 - 133
Bromoform	50.0	53.3		ug/L		107	57 - 140
Bromomethane	50.0	41.2		ug/L		82	10 - 160
2-Butanone (MEK)	200	226		ug/L		113	61 - 145
Carbon disulfide	50.0	47.0		ug/L		94	61 - 137
Carbon tetrachloride	50.0	52.2		ug/L		104	61 - 137
Chlorobenzene	50.0	54.3		ug/L		109	70 - 130
Chloroethane	50.0	55.8		ug/L		112	55 - 141
2-Chloroethyl vinyl ether	50.0	81.1	*+	ug/L		162	10 - 160
Chloroform	50.0	55.7		ug/L		111	69 - 130
1-Chlorohexane	50.0	59.2		ug/L		118	69 - 130
Chloromethane	50.0	48.4		ug/L		97	58 - 137
cis-1,2-Dichloroethene	50.0	55.8		ug/L		112	68 - 130
cis-1,3-Dichloropropene	50.0	61.7		ug/L		123	69 - 132
Dibromochloromethane	50.0	54.4		ug/L		109	67 - 135
1,2-Dichlorobenzene	50.0	51.8		ug/L		104	67 - 130
1,3-Dichlorobenzene	50.0	53.0		ug/L		106	70 - 130
1,4-Dichlorobenzene	50.0	52.7		ug/L		105	70 - 130
Dichlorodifluoromethane	50.0	46.7		ug/L		93	41 - 146
1,1-Dichloroethane	50.0	56.2		ug/L		112	70 - 130
1,2-Dichloroethane	50.0	55.8		ug/L		112	69 - 130
1,1-Dichloroethene	50.0	49.1		ug/L		98	63 - 134
1,2-Dichloropropane	50.0	61.6		ug/L		123	70 - 130
1,3-Dichloropropane	50.0	58.3		ug/L		117	70 - 130
2,2-Dichloropropane	50.0	45.6		ug/L		91	52 - 135
1,1-Dichloropropene	50.0	56.6		ug/L		113	70 - 130
Ethylbenzene	50.0	57.0		ug/L		114	70 - 130
Ethyl methacrylate	50.0	57.6		ug/L		115	68 - 130
Hexachlorobutadiene	50.0	55.3		ug/L		111	53 - 140
2-Hexanone	200	229		ug/L		114	65 - 137
Isopropylbenzene	50.0	54.3		ug/L		109	70 - 130
Methylene bromide	50.0	53.7		ug/L		107	70 - 130
Methylene Chloride	50.0	56.3		ug/L		113	66 - 135
4-Methyl-2-pentanone (MIBK)	200	229		ug/L		115	69 - 138
Methyl tert-butyl ether	50.0	55.7		ug/L		111	66 - 130
m-Xylene & p-Xylene	50.0	56.1		ug/L		112	70 - 130
Naphthalene	50.0	49.7		ug/L		99	47 - 149
n-Butylbenzene	50.0	59.2		ug/L		118	67 - 130
N-Propylbenzene	50.0	56.5		ug/L		113	70 - 130
o-Chlorotoluene	50.0	57.3		ug/L		115	70 - 130
o-Xylene	50.0	56.8		ug/L		114	70 - 130
p-Chlorotoluene	50.0	56.5		ug/L		113	70 - 130

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

Lab Sample ID: LCS 400-657968/1001
Matrix: Water
Analysis Batch: 657968

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	54.4		ug/L		109	65 - 130
sec-Butylbenzene	50.0	54.0		ug/L		108	66 - 130
Styrene	50.0	56.0		ug/L		112	70 - 130
tert-Butylbenzene	50.0	50.1		ug/L		100	64 - 139
1,1,1,2-Tetrachloroethane	50.0	55.4		ug/L		111	67 - 131
1,1,2,2-Tetrachloroethane	50.0	55.5		ug/L		111	70 - 131
Tetrachloroethene	50.0	51.6		ug/L		103	65 - 130
Toluene	50.0	55.1		ug/L		110	70 - 130
trans-1,2-Dichloroethene	50.0	52.5		ug/L		105	70 - 130
trans-1,3-Dichloropropene	50.0	57.5		ug/L		115	63 - 130
1,2,3-Trichlorobenzene	50.0	54.0		ug/L		108	60 - 138
1,2,4-Trichlorobenzene	50.0	55.2		ug/L		110	60 - 140
1,1,1-Trichloroethane	50.0	51.6		ug/L		103	68 - 130
1,1,2-Trichloroethane	50.0	56.8		ug/L		114	70 - 130
Trichloroethene	50.0	53.2		ug/L		106	70 - 130
Trichlorofluoromethane	50.0	49.9		ug/L		100	65 - 138
1,2,3-Trichloropropane	50.0	52.5		ug/L		105	70 - 130
1,2,4-Trimethylbenzene	50.0	58.1		ug/L		116	70 - 130
1,3,5-Trimethylbenzene	50.0	55.4		ug/L		111	69 - 130
Vinyl acetate	100	149		ug/L		149	26 - 160
Vinyl chloride	50.0	53.8		ug/L		108	59 - 136
Xylenes, Total	100	113		ug/L		113	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*108*		*72 - 130*
Dibromofluoromethane	*95*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Lab Sample ID: 400-249621-3 MS
Matrix: Water
Analysis Batch: 657968

Client Sample ID: MW23-ROX-011124
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND		200	103		ug/L		51	43 - 150
Acrolein	ND		500	560		ug/L		112	38 - 150
Acrylonitrile	ND		500	601		ug/L		120	62 - 149
Benzene	ND		50.0	55.7		ug/L		111	56 - 142
Bromobenzene	ND		50.0	51.4		ug/L		103	59 - 136
Bromochloromethane	ND		50.0	52.8		ug/L		106	64 - 140
Bromodichloromethane	ND		50.0	56.6		ug/L		113	59 - 143
Bromoform	ND		50.0	53.1		ug/L		106	50 - 140
Bromomethane	ND		50.0	27.9		ug/L		56	10 - 150
2-Butanone (MEK)	ND		200	149		ug/L		74	55 - 150
Carbon disulfide	ND		50.0	45.2		ug/L		90	48 - 150
Carbon tetrachloride	ND		50.0	49.0		ug/L		98	55 - 145
Chlorobenzene	ND		50.0	50.3		ug/L		101	64 - 130
Chloroethane	ND		50.0	36.8		ug/L		74	50 - 150
2-Chloroethyl vinyl ether	ND	*+ F1	50.0	ND	F1	ug/L		0	10 - 150

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

Lab Sample ID: 400-249621-3 MS
Matrix: Water
Analysis Batch: 657968

Client Sample ID: MW23-ROX-011124
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	ND		50.0	54.6		ug/L		109	60 - 141
1-Chlorohexane	ND		50.0	52.6		ug/L		105	56 - 136
Chloromethane	ND		50.0	42.3		ug/L		85	49 - 148
cis-1,2-Dichloroethene	0.32	J	50.0	55.4		ug/L		110	59 - 143
cis-1,3-Dichloropropene	ND		50.0	57.9		ug/L		116	57 - 140
Dibromochloromethane	ND		50.0	54.0		ug/L		108	56 - 143
1,2-Dichlorobenzene	ND		50.0	50.1		ug/L		100	52 - 137
1,3-Dichlorobenzene	ND		50.0	50.2		ug/L		100	54 - 135
1,4-Dichlorobenzene	ND		50.0	50.0		ug/L		100	53 - 135
Dichlorodifluoromethane	ND		50.0	35.0		ug/L		70	16 - 150
1,1-Dichloroethane	ND		50.0	55.3		ug/L		111	61 - 144
1,2-Dichloroethane	ND		50.0	55.9		ug/L		112	60 - 141
1,1-Dichloroethene	ND		50.0	48.7		ug/L		97	54 - 147
1,2-Dichloropropane	ND		50.0	59.4		ug/L		119	66 - 137
1,3-Dichloropropane	ND		50.0	61.3		ug/L		123	66 - 133
2,2-Dichloropropane	ND		50.0	43.9		ug/L		88	42 - 144
1,1-Dichloropropene	ND		50.0	54.4		ug/L		109	65 - 136
Ethylbenzene	ND		50.0	53.3		ug/L		107	58 - 131
Ethyl methacrylate	ND		50.0	60.2		ug/L		120	64 - 130
Hexachlorobutadiene	ND		50.0	48.1		ug/L		96	31 - 149
2-Hexanone	ND		200	182		ug/L		91	65 - 140
Isopropylbenzene	ND		50.0	49.9		ug/L		100	56 - 133
Methylene bromide	ND		50.0	54.7		ug/L		109	63 - 138
Methylene Chloride	ND		50.0	55.1		ug/L		110	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	234		ug/L		117	63 - 146
Methyl tert-butyl ether	0.95	J	50.0	58.3		ug/L		115	59 - 137
m-Xylene & p-Xylene	ND		50.0	52.0		ug/L		104	57 - 130
Naphthalene	ND		50.0	49.9		ug/L		100	25 - 150
n-Butylbenzene	ND		50.0	51.6		ug/L		103	41 - 142
N-Propylbenzene	ND		50.0	52.4		ug/L		105	51 - 138
o-Chlorotoluene	ND		50.0	52.6		ug/L		105	53 - 134
o-Xylene	ND		50.0	53.3		ug/L		107	61 - 130
p-Chlorotoluene	ND		50.0	52.7		ug/L		105	54 - 133
p-Isopropyltoluene	ND		50.0	49.7		ug/L		99	48 - 139
sec-Butylbenzene	ND		50.0	50.0		ug/L		100	50 - 138
Styrene	ND		50.0	52.7		ug/L		105	58 - 131
tert-Butylbenzene	ND		50.0	47.7		ug/L		95	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	50.3		ug/L		101	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	59.2		ug/L		118	66 - 135
Tetrachloroethene	ND		50.0	46.1		ug/L		92	52 - 133
Toluene	ND		50.0	52.0		ug/L		104	65 - 130
trans-1,2-Dichloroethene	ND		50.0	51.1		ug/L		102	61 - 143
trans-1,3-Dichloropropene	ND		50.0	57.4		ug/L		115	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	46.2		ug/L		92	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	44.5		ug/L		89	39 - 148
1,1,1-Trichloroethane	ND		50.0	49.5		ug/L		99	57 - 142
1,1,2-Trichloroethane	ND		50.0	60.0		ug/L		120	66 - 131
Trichloroethene	ND		50.0	50.1		ug/L		100	64 - 136
Trichlorofluoromethane	ND		50.0	38.9		ug/L		78	54 - 150

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

Lab Sample ID: 400-249621-3 MS
Matrix: Water
Analysis Batch: 657968

Client Sample ID: MW23-ROX-011124
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	ND		50.0	56.9		ug/L		114	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	52.9		ug/L		106	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	51.2		ug/L		102	52 - 135
Vinyl acetate	ND		100	116		ug/L		116	26 - 150
Vinyl chloride	ND		50.0	42.8		ug/L		86	46 - 150
Xylenes, Total	ND		100	105		ug/L		105	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*109*		*72 - 130*
Dibromofluoromethane	*94*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Lab Sample ID: 400-249621-3 MSD
Matrix: Water
Analysis Batch: 657968

Client Sample ID: MW23-ROX-011124
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	101		ug/L		50	43 - 150	2	30
Acrolein	ND		500	539		ug/L		108	38 - 150	4	31
Acrylonitrile	ND		500	585		ug/L		117	62 - 149	3	30
Benzene	ND		50.0	52.4		ug/L		105	56 - 142	6	30
Bromobenzene	ND		50.0	47.8		ug/L		96	59 - 136	7	30
Bromochloromethane	ND		50.0	49.7		ug/L		99	64 - 140	6	30
Bromodichloromethane	ND		50.0	52.1		ug/L		104	59 - 143	8	30
Bromoform	ND		50.0	49.6		ug/L		99	50 - 140	7	30
Bromomethane	ND		50.0	26.9		ug/L		54	10 - 150	4	50
2-Butanone (MEK)	ND		200	143		ug/L		72	55 - 150	4	30
Carbon disulfide	ND		50.0	42.4		ug/L		85	48 - 150	7	30
Carbon tetrachloride	ND		50.0	44.6		ug/L		89	55 - 145	9	30
Chlorobenzene	ND		50.0	47.0		ug/L		94	64 - 130	7	30
Chloroethane	ND		50.0	34.0		ug/L		68	50 - 150	8	30
2-Chloroethyl vinyl ether	ND	*+ F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	51.0		ug/L		102	60 - 141	7	30
1-Chlorohexane	ND		50.0	48.2		ug/L		96	56 - 136	9	30
Chloromethane	ND		50.0	40.1		ug/L		80	49 - 148	5	31
cis-1,2-Dichloroethene	0.32	J	50.0	52.6		ug/L		105	59 - 143	5	30
cis-1,3-Dichloropropene	ND		50.0	55.0		ug/L		110	57 - 140	5	30
Dibromochloromethane	ND		50.0	50.7		ug/L		101	56 - 143	6	30
1,2-Dichlorobenzene	ND		50.0	46.0		ug/L		92	52 - 137	9	30
1,3-Dichlorobenzene	ND		50.0	45.7		ug/L		91	54 - 135	9	30
1,4-Dichlorobenzene	ND		50.0	45.0		ug/L		90	53 - 135	10	30
Dichlorodifluoromethane	ND		50.0	32.0		ug/L		64	16 - 150	9	31
1,1-Dichloroethane	ND		50.0	52.1		ug/L		104	61 - 144	6	30
1,2-Dichloroethane	ND		50.0	52.7		ug/L		105	60 - 141	6	30
1,1-Dichloroethene	ND		50.0	45.7		ug/L		91	54 - 147	6	30
1,2-Dichloropropane	ND		50.0	56.2		ug/L		112	66 - 137	5	30
1,3-Dichloropropane	ND		50.0	57.7		ug/L		115	66 - 133	6	30
2,2-Dichloropropane	ND		50.0	42.5		ug/L		85	42 - 144	3	31

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

Lab Sample ID: 400-249621-3 MSD
Matrix: Water
Analysis Batch: 657968

Client Sample ID: MW23-ROX-011124
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloropropene	ND		50.0	50.5		ug/L		101	65 - 136	8	30
Ethylbenzene	ND		50.0	48.7		ug/L		97	58 - 131	9	30
Ethyl methacrylate	ND		50.0	58.1		ug/L		116	64 - 130	4	30
Hexachlorobutadiene	ND		50.0	42.5		ug/L		85	31 - 149	12	36
2-Hexanone	ND		200	180		ug/L		90	65 - 140	1	30
Isopropylbenzene	ND		50.0	45.9		ug/L		92	56 - 133	9	30
Methylene bromide	ND		50.0	51.5		ug/L		103	63 - 138	6	30
Methylene Chloride	ND		50.0	51.8		ug/L		104	60 - 146	6	32
4-Methyl-2-pentanone (MIBK)	ND		200	229		ug/L		115	63 - 146	2	30
Methyl tert-butyl ether	0.95	J	50.0	56.1		ug/L		110	59 - 137	4	30
m-Xylene & p-Xylene	ND		50.0	47.9		ug/L		96	57 - 130	8	30
Naphthalene	ND		50.0	47.9		ug/L		96	25 - 150	4	30
n-Butylbenzene	ND		50.0	45.1		ug/L		90	41 - 142	13	31
N-Propylbenzene	ND		50.0	47.4		ug/L		95	51 - 138	10	30
o-Chlorotoluene	ND		50.0	48.3		ug/L		97	53 - 134	9	30
o-Xylene	ND		50.0	49.4		ug/L		99	61 - 130	8	30
p-Chlorotoluene	ND		50.0	48.3		ug/L		97	54 - 133	9	30
p-Isopropyltoluene	ND		50.0	44.1		ug/L		88	48 - 139	12	30
sec-Butylbenzene	ND		50.0	44.9		ug/L		90	50 - 138	11	30
Styrene	ND		50.0	48.4		ug/L		97	58 - 131	8	30
tert-Butylbenzene	ND		50.0	43.4		ug/L		87	54 - 146	9	30
1,1,1,2-Tetrachloroethane	ND		50.0	46.5		ug/L		93	59 - 137	8	30
1,1,2,2-Tetrachloroethane	ND		50.0	56.1		ug/L		112	66 - 135	5	30
Tetrachloroethene	ND		50.0	43.3		ug/L		87	52 - 133	6	30
Toluene	ND		50.0	48.7		ug/L		97	65 - 130	7	30
trans-1,2-Dichloroethene	ND		50.0	47.6		ug/L		95	61 - 143	7	30
trans-1,3-Dichloropropene	ND		50.0	54.2		ug/L		108	53 - 133	6	30
1,2,3-Trichlorobenzene	ND		50.0	43.1		ug/L		86	43 - 145	7	30
1,2,4-Trichlorobenzene	ND		50.0	41.3		ug/L		83	39 - 148	7	30
1,1,1-Trichloroethane	ND		50.0	46.7		ug/L		93	57 - 142	6	30
1,1,2-Trichloroethane	ND		50.0	57.6		ug/L		115	66 - 131	4	30
Trichloroethene	ND		50.0	46.6		ug/L		93	64 - 136	7	30
Trichlorofluoromethane	ND		50.0	35.4		ug/L		71	54 - 150	10	30
1,2,3-Trichloropropane	ND		50.0	53.9		ug/L		108	65 - 133	5	30
1,2,4-Trimethylbenzene	ND		50.0	47.8		ug/L		96	50 - 139	10	30
1,3,5-Trimethylbenzene	ND		50.0	46.7		ug/L		93	52 - 135	9	30
Vinyl acetate	ND		100	114		ug/L		114	26 - 150	2	33
Vinyl chloride	ND		50.0	40.1		ug/L		80	46 - 150	7	30
Xylenes, Total	ND		100	97.3		ug/L		97	59 - 130	8	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*109*		*72 - 130*
Dibromofluoromethane	*93*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-657668/1-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657668

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
Benzenethiol	ND		10	9.9	ug/L		01/15/24 09:26	01/16/24 13:03	1
Benzoic acid	ND		30	24	ug/L		01/15/24 09:26	01/16/24 13:03	1
Benzyl alcohol	ND		10	7.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		01/15/24 09:26	01/16/24 13:03	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		01/15/24 09:26	01/16/24 13:03	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Chloroaniline	ND		10	4.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
2-Chloronaphthalene	ND		10	3.8	ug/L		01/15/24 09:26	01/16/24 13:03	1
2-Chlorophenol	ND		10	4.1	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		01/15/24 09:26	01/16/24 13:03	1
Dibenzofuran	ND		10	4.0	ug/L		01/15/24 09:26	01/16/24 13:03	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
Diethyl phthalate	ND		10	4.4	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
Dimethyl phthalate	ND		10	4.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		01/15/24 09:26	01/16/24 13:03	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		01/15/24 09:26	01/16/24 13:03	1
1,4-Dioxane	ND		10	4.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
Hexachlorobenzene	ND		10	9.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		01/15/24 09:26	01/16/24 13:03	1
Hexachloroethane	ND		10	5.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
Indene	ND		10	3.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
Isophorone	ND		10	5.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
2-Methylphenol	ND		10	3.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
2-Nitroaniline	ND		10	5.0	ug/L		01/15/24 09:26	01/16/24 13:03	1
3-Nitroaniline	ND		10	4.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Nitroaniline	ND		10	4.1	ug/L		01/15/24 09:26	01/16/24 13:03	1
Nitrobenzene	ND		10	4.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
2-Nitrophenol	ND		10	4.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Nitrophenol	ND		10	3.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		01/15/24 09:26	01/16/24 13:03	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
Pentachlorophenol	ND		20	12	ug/L		01/15/24 09:26	01/16/24 13:03	1
Phenol	ND		10	4.2	ug/L		01/15/24 09:26	01/16/24 13:03	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-657668/1-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657668

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	ND		10	10	ug/L		01/15/24 09:26	01/16/24 13:03	1
Quinoline	ND		10	2.4	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/15/24 09:26	01/16/24 13:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*21 - 114*	*01/15/24 09:26*	*01/16/24 13:03*	*1*
2-Fluorophenol	*50*		*10 - 105*	*01/15/24 09:26*	*01/16/24 13:03*	*1*
Nitrobenzene-d5	*73*		*16 - 127*	*01/15/24 09:26*	*01/16/24 13:03*	*1*
Phenol-d5	*38*		*10 - 129*	*01/15/24 09:26*	*01/16/24 13:03*	*1*
Terphenyl-d14	*104*		*13 - 150*	*01/15/24 09:26*	*01/16/24 13:03*	*1*
2,4,6-Tribromophenol	*82*		*10 - 150*	*01/15/24 09:26*	*01/16/24 13:03*	*1*

Lab Sample ID: LCS 400-657668/2-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657668

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	37.0		ug/L		31	10 - 127
Benzoic acid	120	117		ug/L		98	19 - 126
Benzyl alcohol	120	79.6		ug/L		66	17 - 109
Bis(2-chloroethoxy)methane	120	66.3		ug/L		55	24 - 125
Bis(2-chloroethyl)ether	120	63.7		ug/L		53	10 - 121
bis (2-chloroisopropyl) ether	120	68.9		ug/L		57	14 - 123
Bis(2-ethylhexyl) phthalate	120	97.5		ug/L		81	16 - 150
4-Bromophenyl phenyl ether	120	106		ug/L		88	17 - 150
Butyl benzyl phthalate	120	105		ug/L		87	21 - 150
4-Chloroaniline	120	66.7		ug/L		56	10 - 124
4-Chloro-3-methylphenol	120	85.8		ug/L		72	37 - 131
2-Chloronaphthalene	120	96.3		ug/L		80	24 - 132
2-Chlorophenol	120	77.5		ug/L		65	27 - 124
4-Chlorophenyl phenyl ether	120	102		ug/L		85	27 - 147
Dibenz[a,h]acridine	114	125		ug/L		109	40 - 140
Dibenzofuran	120	94.4		ug/L		79	30 - 135
3,3'-Dichlorobenzidine	160	143		ug/L		89	10 - 150
2,4-Dichlorophenol	120	95.3		ug/L		79	33 - 132
Diethyl phthalate	120	95.9		ug/L		80	37 - 145
2,4-Dimethylphenol	120	114		ug/L		95	38 - 132
Dimethyl phthalate	120	94.0		ug/L		78	32 - 137
Di-n-butyl phthalate	120	107		ug/L		89	27 - 150
4,6-Dinitro-ortho-cresol	240	209		ug/L		87	14 - 150
2,4-Dinitrophenol	240	173		ug/L		72	15 - 150
2,4-Dinitrotoluene	120	95.7		ug/L		80	35 - 136
2,6-Dinitrotoluene	120	96.5		ug/L		80	29 - 140
Di-n-octyl phthalate	120	97.6		ug/L		81	26 - 150
1,4-Dioxane	120	46.4		ug/L		39	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	107		ug/L		89	23 - 138
Hexachlorobenzene	120	111		ug/L		93	10 - 150

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-657668/2-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657668

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorocyclopentadiene	120	90.6		ug/L		76	10 - 124
Hexachloroethane	120	76.7		ug/L		64	10 - 127
Indene	120	92.8		ug/L		77	18 - 150
Isophorone	120	80.9		ug/L		67	28 - 127
2-Methylphenol	120	89.1		ug/L		74	34 - 124
3 & 4 Methylphenol	120	83.5		ug/L		70	32 - 122
2-Nitroaniline	120	95.8		ug/L		80	24 - 139
3-Nitroaniline	120	82.6		ug/L		69	10 - 128
4-Nitroaniline	120	82.6		ug/L		69	28 - 118
Nitrobenzene	120	79.3		ug/L		66	29 - 120
2-Nitrophenol	120	93.7		ug/L		78	25 - 148
4-Nitrophenol	240	211		ug/L		88	12 - 129
N-Nitrosodimethylamine	120	102		ug/L		85	10 - 115
N-Nitrosodi-n-propylamine	120	93.8		ug/L		78	24 - 142
N-Nitrosodiphenylamine	119	107		ug/L		90	29 - 138
Pentachlorophenol	240	164		ug/L		68	19 - 150
Phenol	120	51.2		ug/L		43	11 - 95
Pyridine	240	28.2		ug/L		12	10 - 82
Quinoline	114	76.7		ug/L		67	40 - 140
2,4,5-Trichlorophenol	120	99.3		ug/L		83	30 - 144
2,4,6-Trichlorophenol	120	98.0		ug/L		82	27 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*21 - 114*
2-Fluorophenol	*49*		*10 - 105*
Nitrobenzene-d5	*83*		*16 - 127*
Phenol-d5	*42*		*10 - 129*
Terphenyl-d14	*94*		*13 - 150*
2,4,6-Tribromophenol	*86*		*10 - 150*

Lab Sample ID: LCS 400-657668/4-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657668

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	83.7		ug/L		70	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*21 - 114*
2-Fluorophenol	*49*		*10 - 105*
Nitrobenzene-d5	*67*		*16 - 127*
Phenol-d5	*40*		*10 - 129*
Terphenyl-d14	*107*		*13 - 150*
2,4,6-Tribromophenol	*79*		*10 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-657668/3-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657668

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	61.1	*1	ug/L		51	10 - 127	49	40
Benzoic acid			120	162	*+	ug/L		135	19 - 126	32	40
Benzyl alcohol			120	93.4		ug/L		78	17 - 109	16	40
Bis(2-chloroethoxy)methane			120	70.5		ug/L		59	24 - 125	6	40
Bis(2-chloroethyl)ether			120	61.8		ug/L		51	10 - 121	3	40
bis (2-chloroisopropyl) ether			120	70.4		ug/L		59	14 - 123	2	40
Bis(2-ethylhexyl) phthalate			120	104		ug/L		86	16 - 150	6	40
4-Bromophenyl phenyl ether			120	107		ug/L		89	17 - 150	1	40
Butyl benzyl phthalate			120	107		ug/L		89	21 - 150	2	40
4-Chloroaniline			120	71.7		ug/L		60	10 - 124	7	40
4-Chloro-3-methylphenol			120	93.4		ug/L		78	37 - 131	8	40
2-Chloronaphthalene			120	102		ug/L		85	24 - 132	6	40
2-Chlorophenol			120	87.3		ug/L		73	27 - 124	12	40
4-Chlorophenyl phenyl ether			120	106		ug/L		88	27 - 147	4	40
Dibenz[a,h]acridine			114	131		ug/L		115	40 - 140	5	40
Dibenzofuran			120	101		ug/L		84	30 - 135	7	40
3,3'-Dichlorobenzidine			160	148		ug/L		93	10 - 150	4	40
2,4-Dichlorophenol			120	101		ug/L		84	33 - 132	6	40
Diethyl phthalate			120	107		ug/L		89	37 - 145	11	40
2,4-Dimethylphenol			120	122		ug/L		102	38 - 132	7	40
Dimethyl phthalate			120	102		ug/L		85	32 - 137	8	40
Di-n-butyl phthalate			120	113		ug/L		95	27 - 150	6	40
4,6-Dinitro-ortho-cresol			240	225		ug/L		94	14 - 150	7	40
2,4-Dinitrophenol			240	194		ug/L		81	15 - 150	12	40
2,4-Dinitrotoluene			120	99.3		ug/L		83	35 - 136	4	40
2,6-Dinitrotoluene			120	96.9		ug/L		81	29 - 140	0	40
Di-n-octyl phthalate			120	103		ug/L		86	26 - 150	5	40
1,4-Dioxane			120	50.9		ug/L		42	10 - 87	9	40
1,2-Diphenylhydrazine (as Azobenzene)			120	109		ug/L		91	23 - 138	2	40
Hexachlorobenzene			120	117		ug/L		98	10 - 150	5	40
Hexachlorocyclopentadiene			120	101		ug/L		85	10 - 124	11	40
Hexachloroethane			120	82.6		ug/L		69	10 - 127	7	40
Indene			120	98.5		ug/L		82	18 - 150	6	40
Isophorone			120	83.4		ug/L		69	28 - 127	3	40
2-Methylphenol			120	94.9		ug/L		79	34 - 124	6	40
3 & 4 Methylphenol			120	90.2		ug/L		75	32 - 122	8	40
2-Nitroaniline			120	97.4		ug/L		81	24 - 139	2	40
3-Nitroaniline			120	91.3		ug/L		76	10 - 128	10	40
4-Nitroaniline			120	94.3		ug/L		79	28 - 118	13	40
Nitrobenzene			120	84.4		ug/L		70	29 - 120	6	40
2-Nitrophenol			120	100		ug/L		84	25 - 148	7	40
4-Nitrophenol			240	227		ug/L		94	12 - 129	7	40
N-Nitrosodimethylamine			120	115		ug/L		96	10 - 115	12	40
N-Nitrosodi-n-propylamine			120	102		ug/L		85	24 - 142	8	40
N-Nitrosodiphenylamine			119	113		ug/L		95	29 - 138	6	40
Pentachlorophenol			240	178		ug/L		74	19 - 150	8	40
Phenol			120	58.8		ug/L		49	11 - 95	14	40
Pyridine			240	46.5	*1	ug/L		19	10 - 82	49	40

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-657668/3-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657668

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Quinoline			114	97.9		ug/L		86	40 - 140	24	40
2,4,5-Trichlorophenol			120	104		ug/L		87	30 - 144	5	40
2,4,6-Trichlorophenol			120	102		ug/L		85	27 - 147	4	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*21 - 114*
2-Fluorophenol	*54*		*10 - 105*
Nitrobenzene-d5	*84*		*16 - 127*
Phenol-d5	*50*		*10 - 129*
Terphenyl-d14	*100*		*13 - 150*
2,4,6-Tribromophenol	*92*		*10 - 150*

Lab Sample ID: LCSD 400-657668/5-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657668

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	72.3		ug/L		60	40 - 140	15	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*21 - 114*
2-Fluorophenol	*44*		*10 - 105*
Nitrobenzene-d5	*62*		*16 - 127*
Phenol-d5	*38*		*10 - 129*
Terphenyl-d14	*97*		*13 - 150*
2,4,6-Tribromophenol	*80*		*10 - 150*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-657912/1-A
Matrix: Water
Analysis Batch: 657957

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		01/17/24 11:34	01/17/24 17:23	1
Acenaphthylene	ND		0.20	0.044	ug/L		01/17/24 11:34	01/17/24 17:23	1
Anthracene	ND		0.20	0.047	ug/L		01/17/24 11:34	01/17/24 17:23	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		01/17/24 11:34	01/17/24 17:23	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		01/17/24 11:34	01/17/24 17:23	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		01/17/24 11:34	01/17/24 17:23	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/17/24 11:34	01/17/24 17:23	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		01/17/24 11:34	01/17/24 17:23	1
Chrysene	ND		0.20	0.033	ug/L		01/17/24 11:34	01/17/24 17:23	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		01/17/24 11:34	01/17/24 17:23	1
Fluoranthene	ND		0.20	0.034	ug/L		01/17/24 11:34	01/17/24 17:23	1
Fluorene	ND		0.20	0.089	ug/L		01/17/24 11:34	01/17/24 17:23	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		01/17/24 11:34	01/17/24 17:23	1
Phenanthrene	ND		0.20	0.090	ug/L		01/17/24 11:34	01/17/24 17:23	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 400-657912/1-A
Matrix: Water
Analysis Batch: 657957

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		0.20	0.039	ug/L		01/17/24 11:34	01/17/24 17:23	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		01/17/24 11:34	01/17/24 17:23	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		01/17/24 11:34	01/17/24 17:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*194*	*S1+*	*18 - 147*	*01/17/24 11:34*	*01/17/24 17:23*	*1*
2-Fluorobiphenyl	*100*		*15 - 128*	*01/17/24 11:34*	*01/17/24 17:23*	*1*
Nitrobenzene-d5	*73*		*10 - 144*	*01/17/24 11:34*	*01/17/24 17:23*	*1*

Lab Sample ID: LCS 400-657912/2-A
Matrix: Water
Analysis Batch: 657957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657912

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	118		ug/L		98	40 - 140
Acenaphthylene	120	110		ug/L		92	40 - 140
Anthracene	120	100	E	ug/L		83	40 - 140
Benzo[a]anthracene	120	133		ug/L		111	40 - 140
Benzo[a]pyrene	120	122		ug/L		102	40 - 140
Benzo[b]fluoranthene	120	164		ug/L		137	40 - 140
Benzo[g,h,i]perylene	120	113		ug/L		94	40 - 140
Benzo[k]fluoranthene	120	117		ug/L		97	40 - 140
Chrysene	120	108		ug/L		90	40 - 140
Dibenz(a,h)anthracene	120	134		ug/L		111	40 - 140
Fluoranthene	120	97.6	E	ug/L		81	40 - 140
Fluorene	120	123		ug/L		102	40 - 140
Indeno[1,2,3-cd]pyrene	120	136		ug/L		113	40 - 140
Phenanthrene	120	117		ug/L		97	40 - 140
Pyrene	120	112		ug/L		93	40 - 140
1-Methylnaphthalene	120	111		ug/L		92	40 - 140
2-Methylnaphthalene	120	115		ug/L		96	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*82*		*18 - 147*
2-Fluorobiphenyl	*84*		*15 - 128*
Nitrobenzene-d5	*89*		*10 - 144*

Lab Sample ID: LCSD 400-657912/3-A
Matrix: Water
Analysis Batch: 657957

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657912

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	120	122		ug/L		102	40 - 140	4	40
Acenaphthylene	120	116		ug/L		96	40 - 140	5	40
Anthracene	120	103	E	ug/L		86	40 - 140	3	40
Benzo[a]anthracene	120	141		ug/L		117	40 - 140	6	40
Benzo[a]pyrene	120	130		ug/L		108	40 - 140	6	40
Benzo[b]fluoranthene	120	171	*+	ug/L		143	40 - 140	4	40

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 400-657912/3-A
Matrix: Water
Analysis Batch: 657957

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657912

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[g,h,i]perylene			120	125		ug/L		104	40 - 140	9	40
Benzo[k]fluoranthene			120	125		ug/L		104	40 - 140	6	40
Chrysene			120	115		ug/L		96	40 - 140	6	40
Dibenz(a,h)anthracene			120	144		ug/L		120	40 - 140	8	40
Fluoranthene			120	101	E	ug/L		84	40 - 140	3	40
Fluorene			120	128		ug/L		107	40 - 140	4	40
Indeno[1,2,3-cd]pyrene			120	146		ug/L		122	40 - 140	7	40
Phenanthrene			120	122		ug/L		102	40 - 140	4	40
Pyrene			120	118		ug/L		98	40 - 140	5	40
1-Methylnaphthalene			120	114		ug/L		95	40 - 140	3	40
2-Methylnaphthalene			120	117		ug/L		98	40 - 140	2	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*86*		*18 - 147*
2-Fluorobiphenyl	*88*		*15 - 128*
Nitrobenzene-d5	*92*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-657905/1-A
Matrix: Water
Analysis Batch: 657923

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657905

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		01/17/24 10:31	01/17/24 15:53	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/17/24 10:31	01/17/24 15:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*	*p*	*51 - 149*	*01/17/24 10:31*	*01/17/24 15:53*	*1*

Lab Sample ID: LCS 400-657905/2-A
Matrix: Water
Analysis Batch: 657923

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657905

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane			0.101	0.0986		ug/L		98	60 - 140
1,2-Dibromoethane			0.100	0.0926		ug/L		92	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*86*	*p*	*51 - 149*

Lab Sample ID: LCSD 400-657905/3-A
Matrix: Water
Analysis Batch: 657923

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657905

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0963		ug/L		96	60 - 140	2	30
1,2-Dibromoethane			0.100	0.0915		ug/L		91	60 - 140	1	30

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-657905/3-A
Matrix: Water
Analysis Batch: 657923

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657905

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	85	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
Melissa Remiger	25278	DATE: 1/11/2024
PO #	**GSAP Project ID**	PAGE: 1 of 1
60721927 3.1.2	USPC/00114/R/02	

SAMPLING COMPANY:	LOG CODE:
AECOM	

SITE ADDRESS: Street and City	State	AECOM Project / Task Number:
900 South Central Ave; ROXANA	IL	Roxana Quarterly GW 60721927 3.1.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location):	PHONE NO.:	E-MAIL:	AECOM Other ID:
Melissa Remiger - please see special instructions	314-802-1207	melissa.remiger@aecom.com	

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@aecom.com

SAMPLER NAME(S) (Print): C. McDavid, T. Jenkins

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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

*** Please include "J" values on Reports.**
*** Please provide sample receipt upon login.**
*** Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com**

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 3.1.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°
0.8
1.0 IR10

Container PID Readings or Laboratory Notes:

400-249621 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 8270 SIMS
	TB-ROX-011124-8260-BP	1/11/2024	0000	Water	2					2	X			
	TB-ROX-011124-8011-BP	1/11/2024	0000	Water	2					2		X		
	MW23-ROX-011124	1/11/2024	1100	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 6339 6598 2667 ; 6339 6598 2689	1/11/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
		1.12.24	9:31
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: 1599821, 1599820, 1599822, 1599823

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-249621-1

Login Number: 249621
List Number: 1
Creator: Roberts, Alexis J

List Source: Eurofins 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	0.8°C IR10, 1.0°C IR10
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: 400-249621-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Roxana Groundwater Quarterly – 1st Quarter 2024 Data Review

Laboratory SDG: 400-249625-1

Data Reviewer: Andrei Niculau

Peer Reviewer: Cheyana Cokley

Date Reviewed: 2/29/2024

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

Sample Identification	Sample Identification
TB-ROX-011024-8260-B	TB-ROX-011024-8260-A
TB-ROX-011024-8011-B	TB-ROX-011024-8011-A
P56-ROX-011024	MW13-ROX-011024
P93D-ROX-011024	P114R-ROX-011024
P93A-ROX-011024	--

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 that 2-chloroethyl vinyl ether, benzo[b]fluoranthene, and several SVOC LCS/LCSD recoveries, and/or SVOC LCS/LCSD RPDs, were outside evaluation criteria. The PAH surrogate recovery for terphenyl-d_{14} in sample P93A-ROX-011024 and a method blank was outside criteria. The continuing calibration verification (CCV) for several analytes were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (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 400-657968/1001	VOCs	2-Chloroethyl vinyl ether	**162**	NA	10-160
LCS/LCSD 400-657668/2-A/3-A	SVOCs	Aniline	31/51	**49**	10-127/40
LCS/LCSD 400-657668/2-A/3-A	SVOCs	Benzoic acid	98/**135**	32	19-126/40
LCS/LCSD 400-657668/2-A/3-A	SVOCs	Pyridine	12/19	**49**	10-82/40
LCS/LCSD 400-657912/2-A/3-A	PAHs	Benzo[b]fluoranthene	137/**143**	4	40-140/40

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 LCS/LCSD 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 (%)
P93A-ROX-011024	PAHs	Terphenyl-d_{14}	**170**	18-147
MB 400-657912/1-A	PAHs	Terphenyl-d_{14}	**194**	18-147

Qualifications due to surrogate recoveries were not required if only one of three base/neutral 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?

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 (CCV) for pyridine, bis(2-chloroethyl) ether, bis(2-chloroethoxy) methane, anthracene, and fluoranthene were outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
P56-ROX-011024	SVOCs	Pyridine	**UJ**
P93D-ROX-011024	SVOCs	Pyridine	**UJ**
P93A-ROX-011024	SVOCs	Pyridine	**UJ**
MW13-ROX-011024	SVOCs	Pyridine	**UJ**
P114R-ROX-011024	SVOCs	Pyridine	**UJ**
P56-ROX-011024	SVOCs	bis(2-Chloroethyl) ether	**UJ**
P93D-ROX-011024	SVOCs	bis(2-Chloroethyl) ether	**UJ**
P93A-ROX-011024	SVOCs	bis(2-Chloroethyl) ether	**UJ**
MW13-ROX-011024	SVOCs	bis(2-Chloroethyl) ether	**UJ**
P114R-ROX-011024	SVOCs	bis(2-Chloroethyl) ether	**UJ**
P56-ROX-011024	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
P93D-ROX-011024	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
P93A-ROX-011024	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
MW13-ROX-011024	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
P114R-ROX-011024	SVOCs	bis(2-Chloroethoxy) methane	**UJ**
P56-ROX-011024	PAHs	Anthracene	**J**
P93D-ROX-011024	PAHs	Anthracene	**UJ**
P93A-ROX-011024	PAHs	Anthracene	**UJ**
MW13-ROX-011024	PAHs	Anthracene	**UJ**
P114R-ROX-011024	PAHs	Anthracene	**UJ**
P56-ROX-011024	PAHs	Fluoranthene	**UJ**
P93D-ROX-011024	PAHs	Fluoranthene	**UJ**
P93A-ROX-011024	PAHs	Fluoranthene	**UJ**
MW13-ROX-011024	PAHs	Fluoranthene	**UJ**
P114R-ROX-011024	PAHs	Fluoranthene	**J**

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 1/22/2024 8:18:08 AM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-249625-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



Generated
1/22/2024 8:18:08 AM

Authorized for release by
Leah Klingensmith, Senior Project Manager
Leah.Klingensmith@et.eurofinsus.com
(615)301-5038

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Job Narrative
400-249625-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 1/12/2024 9:31 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 time was 5.4°C

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-657889 recovered above the upper control limit for 2-Chloroethyl vinyl ether, Acrolein and Vinyl acetate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260D: 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-011024-8260-B (400-249625-1), P93D-ROX-011024 (400-249625-4), P93A-ROX-011024 (400-249625-5) and TB-ROX-011024-8260-A (400-249625-6). 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 8260D: The laboratory control sample (LCS) for analytical batch 400-657968 recovered outside control limits for the following analytes: 2-Chloroethyl vinyl ether. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-657968 recovered above the upper control limit for 1,2-Dichloropropane, 2-Chloroethyl vinyl ether, Acrolein, cis-1,3-Dichloropropene and Vinyl acetate. 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 400-657968/1).

Method 8260D: 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: P56-ROX-011024 (400-249625-3), MW13-ROX-011024 (400-249625-8) and P114R-ROX-011024 (400-249625-9). 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 8270E: The initial calibration verification (ICV) analyzed in batch 400-653222 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-657759 recovered above the upper control limit for N-Nitrosodimethylamine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-657759 recovered outside acceptance criteria, low biased, for Bis(2-chloroethoxy)methane, Bis(2-chloroethyl)ether and Pyridine. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Job ID: 400-249625-1 (Continued) Eurofins Pensacola

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-657668 and analytical batch 400-657759 recovered outside control limits for the following analytes: Aniline and Pyridine.

Method 8270E: The laboratory control sample duplicate (LCSD) for preparation batch 400-657668 and analytical batch 400-657759 recovered outside control limits for the following analytes: Benzoic acid. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 8270E_SIM: 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: P93A-ROX-011024 (400-249625-5) and (MB 400-657912/1-A). These results have been reported and qualified.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-657957 recovered outside acceptance criteria, low biased, for Anthracene and Fluoranthene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E_SIM: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-657912 and analytical batch 400-657957 recovered outside control limits for the following analytes: Benzo[b]fluoranthene. 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 Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

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

Job ID: 400-249625-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-249625-1	TB-ROX-011024-8260-B	Water	01/10/24 00:00	01/12/24 09:31
400-249625-2	TB-ROX-011024-8011-B	Water	01/10/24 00:00	01/12/24 09:31
400-249625-3	P56-ROX-011024	Water	01/10/24 09:35	01/12/24 09:31
400-249625-4	P93D-ROX-011024	Water	01/10/24 10:50	01/12/24 09:31
400-249625-5	P93A-ROX-011024	Water	01/10/24 11:30	01/12/24 09:31
400-249625-6	TB-ROX-011024-8260-A	Water	01/10/24 00:00	01/12/24 09:31
400-249625-7	TB-ROX-011024-8011-A	Water	01/10/24 00:00	01/12/24 09:31
400-249625-8	MW13-ROX-011024	Water	01/10/24 09:50	01/12/24 09:31
400-249625-9	P114R-ROX-011024	Water	01/10/24 12:50	01/12/24 09:31

Detection Summary

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

Job ID: 400-249625-1

Client Sample ID: TB-ROX-011024-8260-B — Lab Sample ID: 400-249625-1

No Detections.

Client Sample ID: TB-ROX-011024-8011-B — Lab Sample ID: 400-249625-2

No Detections.

Client Sample ID: P56-ROX-011024 — Lab Sample ID: 400-249625-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.94	J	1.0	0.50	ug/L	1		8260D	Total/NA
Isopropylbenzene	15		1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	2.5	J	5.0	0.63	ug/L	1		8260D	Total/NA
N-Propylbenzene	17		1.0	0.69	ug/L	1		8260D	Total/NA
p-Isopropyltoluene	0.84	J	1.0	0.71	ug/L	1		8260D	Total/NA
sec-Butylbenzene	2.4		1.0	0.70	ug/L	1		8260D	Total/NA
Xylenes, Total	2.5	J	10	1.6	ug/L	1		8260D	Total/NA
Acenaphthene	0.67		0.19	0.093	ug/L	1		8270E SIM	Total/NA
Anthracene	0.11	J	0.19	0.044	ug/L	1		8270E SIM	Total/NA
Fluorene	0.34		0.19	0.083	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.52		0.19	0.084	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	6.8		0.19	0.075	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	4.8		0.19	0.062	ug/L	1		8270E SIM	Total/NA

Client Sample ID: P93D-ROX-011024 — Lab Sample ID: 400-249625-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.47	J	1.0	0.22	ug/L	1		8260D	Total/NA
Acenaphthylene	0.16	J	0.19	0.041	ug/L	1		8270E SIM	Total/NA

Client Sample ID: P93A-ROX-011024 — Lab Sample ID: 400-249625-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	55		1.0	0.50	ug/L	1		8260D	Total/NA
tert-Butylbenzene	2.3		1.0	0.63	ug/L	1		8260D	Total/NA
Acenaphthylene	0.13	J	0.19	0.042	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	0.075	J	0.19	0.075	ug/L	1		8270E SIM	Total/NA

Client Sample ID: TB-ROX-011024-8260-A — Lab Sample ID: 400-249625-6

No Detections.

Client Sample ID: TB-ROX-011024-8011-A — Lab Sample ID: 400-249625-7

No Detections.

Client Sample ID: MW13-ROX-011024 — Lab Sample ID: 400-249625-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.53	J	1.0	0.22	ug/L	1		8260D	Total/NA
Acenaphthene	0.24		0.20	0.098	ug/L	1		8270E SIM	Total/NA
Acenaphthylene	0.38		0.20	0.043	ug/L	1		8270E SIM	Total/NA

Client Sample ID: P114R-ROX-011024 — Lab Sample ID: 400-249625-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.8		1.0	0.22	ug/L	1		8260D	Total/NA
Acenaphthene	0.76		0.20	0.098	ug/L	1		8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: P114R-ROX-011024 (Continued)

Lab Sample ID: 400-249625-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.26		0.20	0.044	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.065	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	0.22		0.20	0.079	ug/L	1		8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-249625-1

Client Sample ID: TB-ROX-011024-8260-B
Date Collected: 01/10/24 00:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/17/24 16:01	1
Acrolein	ND		20	3.3	ug/L			01/17/24 16:01	1
Acrylonitrile	ND		10	2.8	ug/L			01/17/24 16:01	1
Benzene	ND		1.0	0.50	ug/L			01/17/24 16:01	1
Bromobenzene	ND		1.0	0.54	ug/L			01/17/24 16:01	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/17/24 16:01	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/17/24 16:01	1
Bromoform	ND		5.0	0.25	ug/L			01/17/24 16:01	1
Bromomethane	ND		1.0	0.98	ug/L			01/17/24 16:01	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/17/24 16:01	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/17/24 16:01	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/17/24 16:01	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/17/24 16:01	1
Chloroethane	ND		1.0	0.76	ug/L			01/17/24 16:01	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/17/24 16:01	1
Chloroform	ND		1.0	0.90	ug/L			01/17/24 16:01	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/17/24 16:01	1
Chloromethane	ND		1.0	0.90	ug/L			01/17/24 16:01	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/17/24 16:01	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/17/24 16:01	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/17/24 16:01	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/17/24 16:01	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/17/24 16:01	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/17/24 16:01	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/17/24 16:01	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/17/24 16:01	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/17/24 16:01	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 16:01	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 16:01	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 16:01	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 16:01	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/17/24 16:01	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/17/24 16:01	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/17/24 16:01	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/17/24 16:01	1
2-Hexanone	ND		25	1.4	ug/L			01/17/24 16:01	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/17/24 16:01	1
Methylene bromide	ND		5.0	0.22	ug/L			01/17/24 16:01	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/17/24 16:01	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/17/24 16:01	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/17/24 16:01	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/17/24 16:01	1
Naphthalene	ND		5.0	3.0	ug/L			01/17/24 16:01	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/17/24 16:01	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/17/24 16:01	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/17/24 16:01	1
o-Xylene	ND		5.0	0.60	ug/L			01/17/24 16:01	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/17/24 16:01	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/17/24 16:01	1

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

Job ID: 400-249625-1

Client Sample ID: TB-ROX-011024-8260-B
Date Collected: 01/10/24 00:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/17/24 16:01	1
Styrene	ND		1.0	1.0	ug/L			01/17/24 16:01	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/17/24 16:01	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/17/24 16:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/17/24 16:01	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/17/24 16:01	1
Toluene	ND		1.0	0.90	ug/L			01/17/24 16:01	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 16:01	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/17/24 16:01	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/17/24 16:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/17/24 16:01	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/17/24 16:01	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/17/24 16:01	1
Trichloroethene	ND		1.0	0.15	ug/L			01/17/24 16:01	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/17/24 16:01	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/17/24 16:01	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/17/24 16:01	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/17/24 16:01	1
Vinyl acetate	ND		25	0.93	ug/L			01/17/24 16:01	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/17/24 16:01	1
Xylenes, Total	ND		10	1.6	ug/L			01/17/24 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*72 - 130*		*01/17/24 16:01*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*01/17/24 16:01*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*01/17/24 16:01*	*1*

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

Job ID: 400-249625-1

Client Sample ID: TB-ROX-011024-8011-B
Date Collected: 01/10/24 00:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-2
Matrix: Water

Method: EPA 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		01/17/24 10:31	01/17/24 22:51	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/17/24 10:31	01/17/24 22:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*140*		*51 - 149*	*01/17/24 10:31*	*01/17/24 22:51*	*1*

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

Job ID: 400-249625-1

Client Sample ID: P56-ROX-011024
Date Collected: 01/10/24 09:35
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/18/24 13:05	1
Acrolein	ND		20	3.3	ug/L			01/18/24 13:05	1
Acrylonitrile	ND		10	2.8	ug/L			01/18/24 13:05	1
Benzene	ND		1.0	0.50	ug/L			01/18/24 13:05	1
Bromobenzene	ND		1.0	0.54	ug/L			01/18/24 13:05	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/18/24 13:05	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/18/24 13:05	1
Bromoform	ND		5.0	0.25	ug/L			01/18/24 13:05	1
Bromomethane	ND		1.0	0.98	ug/L			01/18/24 13:05	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/18/24 13:05	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/18/24 13:05	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/18/24 13:05	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/18/24 13:05	1
Chloroethane	ND		1.0	0.76	ug/L			01/18/24 13:05	1
2-Chloroethyl vinyl ether	ND	*+	5.0	2.0	ug/L			01/18/24 13:05	1
Chloroform	ND		1.0	0.90	ug/L			01/18/24 13:05	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/18/24 13:05	1
Chloromethane	ND		1.0	0.90	ug/L			01/18/24 13:05	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/18/24 13:05	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/18/24 13:05	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/18/24 13:05	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/18/24 13:05	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/18/24 13:05	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/18/24 13:05	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/18/24 13:05	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/18/24 13:05	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/18/24 13:05	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/18/24 13:05	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 13:05	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 13:05	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 13:05	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/18/24 13:05	1
Ethylbenzene	**0.94**	**J**	1.0	0.50	ug/L			01/18/24 13:05	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/18/24 13:05	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/18/24 13:05	1
2-Hexanone	ND		25	1.4	ug/L			01/18/24 13:05	1
Isopropylbenzene	**15**		1.0	0.53	ug/L			01/18/24 13:05	1
Methylene bromide	ND		5.0	0.22	ug/L			01/18/24 13:05	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/18/24 13:05	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/18/24 13:05	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/18/24 13:05	1
m-Xylene & p-Xylene	**2.5**	**J**	5.0	0.63	ug/L			01/18/24 13:05	1
Naphthalene	ND		5.0	3.0	ug/L			01/18/24 13:05	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/18/24 13:05	1
N-Propylbenzene	**17**		1.0	0.69	ug/L			01/18/24 13:05	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/18/24 13:05	1
o-Xylene	ND		5.0	0.60	ug/L			01/18/24 13:05	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/18/24 13:05	1
p-Isopropyltoluene	**0.84**	**J**	1.0	0.71	ug/L			01/18/24 13:05	1

Client Sample ID: P56-ROX-011024

Date Collected: 01/10/24 09:35
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-3

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**2.4**		1.0	0.70	ug/L			01/18/24 13:05	1
Styrene	ND		1.0	1.0	ug/L			01/18/24 13:05	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/18/24 13:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/18/24 13:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/18/24 13:05	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/18/24 13:05	1
Toluene	ND		1.0	0.90	ug/L			01/18/24 13:05	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/18/24 13:05	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/18/24 13:05	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/18/24 13:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/18/24 13:05	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/18/24 13:05	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/18/24 13:05	1
Trichloroethene	ND		1.0	0.15	ug/L			01/18/24 13:05	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/18/24 13:05	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/18/24 13:05	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/18/24 13:05	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/18/24 13:05	1
Vinyl acetate	ND		25	0.93	ug/L			01/18/24 13:05	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/18/24 13:05	1
Xylenes, Total	**2.5**	**J**	10	1.6	ug/L			01/18/24 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*72 - 130*		*01/18/24 13:05*	*1*
Dibromofluoromethane	*93*		*75 - 126*		*01/18/24 13:05*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*01/18/24 13:05*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.67**		0.19	0.093	ug/L		01/17/24 11:35	01/17/24 21:27	1
Acenaphthylene	ND		0.19	0.041	ug/L		01/17/24 11:35	01/17/24 21:27	1
Anthracene	**0.11**	**J**	0.19	0.044	ug/L		01/17/24 11:35	01/17/24 21:27	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		01/17/24 11:35	01/17/24 21:27	1
Benzo[a]pyrene	ND		0.19	0.060	ug/L		01/17/24 11:35	01/17/24 21:27	1
Benzo[b]fluoranthene	ND	*+	0.19	0.035	ug/L		01/17/24 11:35	01/17/24 21:27	1
Benzo[g,h,i]perylene	ND		0.19	0.025	ug/L		01/17/24 11:35	01/17/24 21:27	1
Benzo[k]fluoranthene	ND		0.19	0.058	ug/L		01/17/24 11:35	01/17/24 21:27	1
Chrysene	ND		0.19	0.031	ug/L		01/17/24 11:35	01/17/24 21:27	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		01/17/24 11:35	01/17/24 21:27	1
Fluoranthene	ND		0.19	0.032	ug/L		01/17/24 11:35	01/17/24 21:27	1
Fluorene	**0.34**		0.19	0.083	ug/L		01/17/24 11:35	01/17/24 21:27	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		01/17/24 11:35	01/17/24 21:27	1
Phenanthrene	**0.52**		0.19	0.084	ug/L		01/17/24 11:35	01/17/24 21:27	1
Pyrene	ND		0.19	0.036	ug/L		01/17/24 11:35	01/17/24 21:27	1
1-Methylnaphthalene	**6.8**		0.19	0.075	ug/L		01/17/24 11:35	01/17/24 21:27	1
2-Methylnaphthalene	**4.8**		0.19	0.062	ug/L		01/17/24 11:35	01/17/24 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*143*		*18 - 147*	*01/17/24 11:35*	*01/17/24 21:27*	*1*
2-Fluorobiphenyl	*75*		*15 - 128*	*01/17/24 11:35*	*01/17/24 21:27*	*1*

Client Sample ID: P56-ROX-011024
Date Collected: 01/10/24 09:35
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-3
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*80*		*10 - 144*	*01/17/24 11:35*	*01/17/24 21:27*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.5	8.3	ug/L		01/15/24 09:26	01/16/24 18:59	1
Benzenethiol	ND		9.5	9.4	ug/L		01/15/24 09:26	01/16/24 18:59	1
Benzoic acid	ND	*+	28	23	ug/L		01/15/24 09:26	01/16/24 18:59	1
Benzyl alcohol	ND		9.5	6.9	ug/L		01/15/24 09:26	01/16/24 18:59	1
Bis(2-chloroethoxy)methane	ND		9.5	4.4	ug/L		01/15/24 09:26	01/16/24 18:59	1
Bis(2-chloroethyl)ether	ND		9.5	3.7	ug/L		01/15/24 09:26	01/16/24 18:59	1
bis (2-chloroisopropyl) ether	ND		9.5	1.7	ug/L		01/15/24 09:26	01/16/24 18:59	1
Bis(2-ethylhexyl) phthalate	ND		9.5	8.4	ug/L		01/15/24 09:26	01/16/24 18:59	1
4-Bromophenyl phenyl ether	ND		9.5	8.2	ug/L		01/15/24 09:26	01/16/24 18:59	1
Butyl benzyl phthalate	ND		9.5	5.5	ug/L		01/15/24 09:26	01/16/24 18:59	1
4-Chloroaniline	ND		9.5	4.5	ug/L		01/15/24 09:26	01/16/24 18:59	1
4-Chloro-3-methylphenol	ND		9.5	5.0	ug/L		01/15/24 09:26	01/16/24 18:59	1
2-Chloronaphthalene	ND		9.5	3.6	ug/L		01/15/24 09:26	01/16/24 18:59	1
2-Chlorophenol	ND		9.5	3.9	ug/L		01/15/24 09:26	01/16/24 18:59	1
4-Chlorophenyl phenyl ether	ND		9.5	3.5	ug/L		01/15/24 09:26	01/16/24 18:59	1
Dibenz[a,h]acridine	ND		9.5	2.7	ug/L		01/15/24 09:26	01/16/24 18:59	1
Dibenzofuran	ND		9.5	3.8	ug/L		01/15/24 09:26	01/16/24 18:59	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		01/15/24 09:26	01/16/24 18:59	1
2,4-Dichlorophenol	ND		9.5	4.1	ug/L		01/15/24 09:26	01/16/24 18:59	1
Diethyl phthalate	ND		9.5	4.2	ug/L		01/15/24 09:26	01/16/24 18:59	1
2,4-Dimethylphenol	ND		9.5	4.9	ug/L		01/15/24 09:26	01/16/24 18:59	1
Dimethyl phthalate	ND		9.5	4.0	ug/L		01/15/24 09:26	01/16/24 18:59	1
Di-n-butyl phthalate	ND		9.5	4.4	ug/L		01/15/24 09:26	01/16/24 18:59	1
4,6-Dinitro-ortho-cresol	ND		9.5	9.5	ug/L		01/15/24 09:26	01/16/24 18:59	1
2,4-Dinitrophenol	ND		28	4.4	ug/L		01/15/24 09:26	01/16/24 18:59	1
2,4-Dinitrotoluene	ND		9.5	4.8	ug/L		01/15/24 09:26	01/16/24 18:59	1
2,6-Dinitrotoluene	ND		9.5	3.7	ug/L		01/15/24 09:26	01/16/24 18:59	1
Di-n-octyl phthalate	ND		9.5	5.7	ug/L		01/15/24 09:26	01/16/24 18:59	1
1,4-Dioxane	ND		9.5	4.1	ug/L		01/15/24 09:26	01/16/24 18:59	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	3.1	ug/L		01/15/24 09:26	01/16/24 18:59	1
Hexachlorobenzene	ND		9.5	9.2	ug/L		01/15/24 09:26	01/16/24 18:59	1
Hexachlorocyclopentadiene	ND		19	4.3	ug/L		01/15/24 09:26	01/16/24 18:59	1
Hexachloroethane	ND		9.5	4.9	ug/L		01/15/24 09:26	01/16/24 18:59	1
Indene	ND		9.5	3.4	ug/L		01/15/24 09:26	01/16/24 18:59	1
Isophorone	ND		9.5	4.9	ug/L		01/15/24 09:26	01/16/24 18:59	1
2-Methylphenol	ND		9.5	3.0	ug/L		01/15/24 09:26	01/16/24 18:59	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		01/15/24 09:26	01/16/24 18:59	1
2-Nitroaniline	ND		9.5	4.7	ug/L		01/15/24 09:26	01/16/24 18:59	1
3-Nitroaniline	ND		9.5	4.5	ug/L		01/15/24 09:26	01/16/24 18:59	1
4-Nitroaniline	ND		9.5	3.9	ug/L		01/15/24 09:26	01/16/24 18:59	1
Nitrobenzene	ND		9.5	4.5	ug/L		01/15/24 09:26	01/16/24 18:59	1
2-Nitrophenol	ND		9.5	4.4	ug/L		01/15/24 09:26	01/16/24 18:59	1
4-Nitrophenol	ND		9.5	3.1	ug/L		01/15/24 09:26	01/16/24 18:59	1
N-Nitrosodimethylamine	ND		9.5	2.1	ug/L		01/15/24 09:26	01/16/24 18:59	1

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

Job ID: 400-249625-1

Client Sample ID: P56-ROX-011024
Date Collected: 01/10/24 09:35
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-3
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	2.4	ug/L		01/15/24 09:26	01/16/24 18:59	1
N-Nitrosodiphenylamine	ND		9.5	3.5	ug/L		01/15/24 09:26	01/16/24 18:59	1
Pentachlorophenol	ND		19	11	ug/L		01/15/24 09:26	01/16/24 18:59	1
Phenol	ND		9.5	4.0	ug/L		01/15/24 09:26	01/16/24 18:59	1
Pyridine	ND	*1	9.5	9.5	ug/L		01/15/24 09:26	01/16/24 18:59	1
Quinoline	ND		9.5	2.3	ug/L		01/15/24 09:26	01/16/24 18:59	1
2,4,5-Trichlorophenol	ND		9.5	3.8	ug/L		01/15/24 09:26	01/16/24 18:59	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/15/24 09:26	01/16/24 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*21 - 114*	*01/15/24 09:26*	*01/16/24 18:59*	*1*
2-Fluorophenol	*11*		*10 - 105*	*01/15/24 09:26*	*01/16/24 18:59*	*1*
Nitrobenzene-d5	*66*		*16 - 127*	*01/15/24 09:26*	*01/16/24 18:59*	*1*
Phenol-d5	*17*		*10 - 129*	*01/15/24 09:26*	*01/16/24 18:59*	*1*
Terphenyl-d14	*94*		*13 - 150*	*01/15/24 09:26*	*01/16/24 18:59*	*1*
2,4,6-Tribromophenol	*23*		*10 - 150*	*01/15/24 09:26*	*01/16/24 18:59*	*1*

Method: EPA 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	0.016	ug/L		01/17/24 10:31	01/17/24 23:32	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		01/17/24 10:31	01/17/24 23:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*51 - 149*	*01/17/24 10:31*	*01/17/24 23:32*	*1*

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

Job ID: 400-249625-1

Client Sample ID: P93D-ROX-011024
Date Collected: 01/10/24 10:50
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/17/24 19:49	1
Acrolein	ND		20	3.3	ug/L			01/17/24 19:49	1
Acrylonitrile	ND		10	2.8	ug/L			01/17/24 19:49	1
Benzene	ND		1.0	0.50	ug/L			01/17/24 19:49	1
Bromobenzene	ND		1.0	0.54	ug/L			01/17/24 19:49	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/17/24 19:49	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/17/24 19:49	1
Bromoform	ND		5.0	0.25	ug/L			01/17/24 19:49	1
Bromomethane	ND		1.0	0.98	ug/L			01/17/24 19:49	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/17/24 19:49	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/17/24 19:49	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/17/24 19:49	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/17/24 19:49	1
Chloroethane	ND		1.0	0.76	ug/L			01/17/24 19:49	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/17/24 19:49	1
Chloroform	ND		1.0	0.90	ug/L			01/17/24 19:49	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/17/24 19:49	1
Chloromethane	ND		1.0	0.90	ug/L			01/17/24 19:49	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/17/24 19:49	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/17/24 19:49	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/17/24 19:49	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/17/24 19:49	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/17/24 19:49	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/17/24 19:49	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/17/24 19:49	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/17/24 19:49	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/17/24 19:49	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 19:49	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 19:49	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 19:49	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 19:49	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/17/24 19:49	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/17/24 19:49	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/17/24 19:49	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/17/24 19:49	1
2-Hexanone	ND		25	1.4	ug/L			01/17/24 19:49	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/17/24 19:49	1
Methylene bromide	ND		5.0	0.22	ug/L			01/17/24 19:49	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/17/24 19:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/17/24 19:49	1
Methyl tert-butyl ether	**0.47**	**J**	1.0	0.22	ug/L			01/17/24 19:49	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/17/24 19:49	1
Naphthalene	ND		5.0	3.0	ug/L			01/17/24 19:49	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/17/24 19:49	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/17/24 19:49	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/17/24 19:49	1
o-Xylene	ND		5.0	0.60	ug/L			01/17/24 19:49	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/17/24 19:49	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/17/24 19:49	1

Client Sample ID: P93D-ROX-011024
Date Collected: 01/10/24 10:50
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/17/24 19:49	1
Styrene	ND		1.0	1.0	ug/L			01/17/24 19:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/17/24 19:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/17/24 19:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/17/24 19:49	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/17/24 19:49	1
Toluene	ND		1.0	0.90	ug/L			01/17/24 19:49	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 19:49	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/17/24 19:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/17/24 19:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/17/24 19:49	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/17/24 19:49	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/17/24 19:49	1
Trichloroethene	ND		1.0	0.15	ug/L			01/17/24 19:49	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/17/24 19:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/17/24 19:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/17/24 19:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/17/24 19:49	1
Vinyl acetate	ND		25	0.93	ug/L			01/17/24 19:49	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/17/24 19:49	1
Xylenes, Total	ND		10	1.6	ug/L			01/17/24 19:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*72 - 130*		*01/17/24 19:49*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*01/17/24 19:49*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*01/17/24 19:49*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.093	ug/L		01/17/24 11:35	01/17/24 21:48	1
Acenaphthylene	**0.16**	**J**	0.19	0.041	ug/L		01/17/24 11:35	01/17/24 21:48	1
Anthracene	ND		0.19	0.044	ug/L		01/17/24 11:35	01/17/24 21:48	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		01/17/24 11:35	01/17/24 21:48	1
Benzo[a]pyrene	ND		0.19	0.060	ug/L		01/17/24 11:35	01/17/24 21:48	1
Benzo[b]fluoranthene	ND	*+	0.19	0.035	ug/L		01/17/24 11:35	01/17/24 21:48	1
Benzo[g,h,i]perylene	ND		0.19	0.025	ug/L		01/17/24 11:35	01/17/24 21:48	1
Benzo[k]fluoranthene	ND		0.19	0.058	ug/L		01/17/24 11:35	01/17/24 21:48	1
Chrysene	ND		0.19	0.031	ug/L		01/17/24 11:35	01/17/24 21:48	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		01/17/24 11:35	01/17/24 21:48	1
Fluoranthene	ND		0.19	0.032	ug/L		01/17/24 11:35	01/17/24 21:48	1
Fluorene	ND		0.19	0.084	ug/L		01/17/24 11:35	01/17/24 21:48	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		01/17/24 11:35	01/17/24 21:48	1
Phenanthrene	ND		0.19	0.085	ug/L		01/17/24 11:35	01/17/24 21:48	1
Pyrene	ND		0.19	0.037	ug/L		01/17/24 11:35	01/17/24 21:48	1
1-Methylnaphthalene	ND		0.19	0.075	ug/L		01/17/24 11:35	01/17/24 21:48	1
2-Methylnaphthalene	ND		0.19	0.062	ug/L		01/17/24 11:35	01/17/24 21:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*145*		*18 - 147*	*01/17/24 11:35*	*01/17/24 21:48*	*1*
2-Fluorobiphenyl	*91*		*15 - 128*	*01/17/24 11:35*	*01/17/24 21:48*	*1*

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

Job ID: 400-249625-1

Client Sample ID: P93D-ROX-011024
Date Collected: 01/10/24 10:50
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-4
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*77*		*10 - 144*	*01/17/24 11:35*	*01/17/24 21:48*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.5	8.3	ug/L		01/15/24 09:26	01/16/24 19:25	1
Benzenethiol	ND		9.5	9.4	ug/L		01/15/24 09:26	01/16/24 19:25	1
Benzoic acid	ND	*+	29	23	ug/L		01/15/24 09:26	01/16/24 19:25	1
Benzyl alcohol	ND		9.5	7.0	ug/L		01/15/24 09:26	01/16/24 19:25	1
Bis(2-chloroethoxy)methane	ND		9.5	4.4	ug/L		01/15/24 09:26	01/16/24 19:25	1
Bis(2-chloroethyl)ether	ND		9.5	3.7	ug/L		01/15/24 09:26	01/16/24 19:25	1
bis (2-chloroisopropyl) ether	ND		9.5	1.7	ug/L		01/15/24 09:26	01/16/24 19:25	1
Bis(2-ethylhexyl) phthalate	ND		9.5	8.5	ug/L		01/15/24 09:26	01/16/24 19:25	1
4-Bromophenyl phenyl ether	ND		9.5	8.2	ug/L		01/15/24 09:26	01/16/24 19:25	1
Butyl benzyl phthalate	ND		9.5	5.5	ug/L		01/15/24 09:26	01/16/24 19:25	1
4-Chloroaniline	ND		9.5	4.5	ug/L		01/15/24 09:26	01/16/24 19:25	1
4-Chloro-3-methylphenol	ND		9.5	5.1	ug/L		01/15/24 09:26	01/16/24 19:25	1
2-Chloronaphthalene	ND		9.5	3.6	ug/L		01/15/24 09:26	01/16/24 19:25	1
2-Chlorophenol	ND		9.5	3.9	ug/L		01/15/24 09:26	01/16/24 19:25	1
4-Chlorophenyl phenyl ether	ND		9.5	3.5	ug/L		01/15/24 09:26	01/16/24 19:25	1
Dibenz[a,h]acridine	ND		9.5	2.7	ug/L		01/15/24 09:26	01/16/24 19:25	1
Dibenzofuran	ND		9.5	3.8	ug/L		01/15/24 09:26	01/16/24 19:25	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		01/15/24 09:26	01/16/24 19:25	1
2,4-Dichlorophenol	ND		9.5	4.1	ug/L		01/15/24 09:26	01/16/24 19:25	1
Diethyl phthalate	ND		9.5	4.2	ug/L		01/15/24 09:26	01/16/24 19:25	1
2,4-Dimethylphenol	ND		9.5	5.0	ug/L		01/15/24 09:26	01/16/24 19:25	1
Dimethyl phthalate	ND		9.5	4.0	ug/L		01/15/24 09:26	01/16/24 19:25	1
Di-n-butyl phthalate	ND		9.5	4.4	ug/L		01/15/24 09:26	01/16/24 19:25	1
4,6-Dinitro-ortho-cresol	ND		9.5	9.5	ug/L		01/15/24 09:26	01/16/24 19:25	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		01/15/24 09:26	01/16/24 19:25	1
2,4-Dinitrotoluene	ND		9.5	4.9	ug/L		01/15/24 09:26	01/16/24 19:25	1
2,6-Dinitrotoluene	ND		9.5	3.7	ug/L		01/15/24 09:26	01/16/24 19:25	1
Di-n-octyl phthalate	ND		9.5	5.7	ug/L		01/15/24 09:26	01/16/24 19:25	1
1,4-Dioxane	ND		9.5	4.1	ug/L		01/15/24 09:26	01/16/24 19:25	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	3.1	ug/L		01/15/24 09:26	01/16/24 19:25	1
Hexachlorobenzene	ND		9.5	9.3	ug/L		01/15/24 09:26	01/16/24 19:25	1
Hexachlorocyclopentadiene	ND		19	4.3	ug/L		01/15/24 09:26	01/16/24 19:25	1
Hexachloroethane	ND		9.5	5.0	ug/L		01/15/24 09:26	01/16/24 19:25	1
Indene	ND		9.5	3.4	ug/L		01/15/24 09:26	01/16/24 19:25	1
Isophorone	ND		9.5	5.0	ug/L		01/15/24 09:26	01/16/24 19:25	1
2-Methylphenol	ND		9.5	3.1	ug/L		01/15/24 09:26	01/16/24 19:25	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		01/15/24 09:26	01/16/24 19:25	1
2-Nitroaniline	ND		9.5	4.8	ug/L		01/15/24 09:26	01/16/24 19:25	1
3-Nitroaniline	ND		9.5	4.5	ug/L		01/15/24 09:26	01/16/24 19:25	1
4-Nitroaniline	ND		9.5	3.9	ug/L		01/15/24 09:26	01/16/24 19:25	1
Nitrobenzene	ND		9.5	4.5	ug/L		01/15/24 09:26	01/16/24 19:25	1
2-Nitrophenol	ND		9.5	4.4	ug/L		01/15/24 09:26	01/16/24 19:25	1
4-Nitrophenol	ND		9.5	3.1	ug/L		01/15/24 09:26	01/16/24 19:25	1
N-Nitrosodimethylamine	ND		9.5	2.1	ug/L		01/15/24 09:26	01/16/24 19:25	1

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

Job ID: 400-249625-1

Client Sample ID: P93D-ROX-011024
Date Collected: 01/10/24 10:50
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-4
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	2.4	ug/L		01/15/24 09:26	01/16/24 19:25	1
N-Nitrosodiphenylamine	ND		9.5	3.5	ug/L		01/15/24 09:26	01/16/24 19:25	1
Pentachlorophenol	ND		19	11	ug/L		01/15/24 09:26	01/16/24 19:25	1
Phenol	ND		9.5	4.0	ug/L		01/15/24 09:26	01/16/24 19:25	1
Pyridine	ND	*1	9.5	9.5	ug/L		01/15/24 09:26	01/16/24 19:25	1
Quinoline	ND		9.5	2.3	ug/L		01/15/24 09:26	01/16/24 19:25	1
2,4,5-Trichlorophenol	ND		9.5	3.8	ug/L		01/15/24 09:26	01/16/24 19:25	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/15/24 09:26	01/16/24 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*21 - 114*	*01/15/24 09:26*	*01/16/24 19:25*	*1*
2-Fluorophenol	*41*		*10 - 105*	*01/15/24 09:26*	*01/16/24 19:25*	*1*
Nitrobenzene-d5	*61*		*16 - 127*	*01/15/24 09:26*	*01/16/24 19:25*	*1*
Phenol-d5	*32*		*10 - 129*	*01/15/24 09:26*	*01/16/24 19:25*	*1*
Terphenyl-d14	*90*		*13 - 150*	*01/15/24 09:26*	*01/16/24 19:25*	*1*
2,4,6-Tribromophenol	*84*		*10 - 150*	*01/15/24 09:26*	*01/16/24 19:25*	*1*

Method: EPA 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		01/17/24 10:31	01/17/24 23:53	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		01/17/24 10:31	01/17/24 23:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*51 - 149*	*01/17/24 10:31*	*01/17/24 23:53*	*1*

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

Job ID: 400-249625-1

Client Sample ID: P93A-ROX-011024
Date Collected: 01/10/24 11:30
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/17/24 20:12	1
Acrolein	ND		20	3.3	ug/L			01/17/24 20:12	1
Acrylonitrile	ND		10	2.8	ug/L			01/17/24 20:12	1
Benzene	**55**		1.0	0.50	ug/L			01/17/24 20:12	1
Bromobenzene	ND		1.0	0.54	ug/L			01/17/24 20:12	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/17/24 20:12	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/17/24 20:12	1
Bromoform	ND		5.0	0.25	ug/L			01/17/24 20:12	1
Bromomethane	ND		1.0	0.98	ug/L			01/17/24 20:12	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/17/24 20:12	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/17/24 20:12	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/17/24 20:12	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/17/24 20:12	1
Chloroethane	ND		1.0	0.76	ug/L			01/17/24 20:12	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/17/24 20:12	1
Chloroform	ND		1.0	0.90	ug/L			01/17/24 20:12	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/17/24 20:12	1
Chloromethane	ND		1.0	0.90	ug/L			01/17/24 20:12	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/17/24 20:12	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/17/24 20:12	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/17/24 20:12	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/17/24 20:12	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/17/24 20:12	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/17/24 20:12	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/17/24 20:12	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/17/24 20:12	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/17/24 20:12	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 20:12	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 20:12	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 20:12	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 20:12	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/17/24 20:12	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/17/24 20:12	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/17/24 20:12	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/17/24 20:12	1
2-Hexanone	ND		25	1.4	ug/L			01/17/24 20:12	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/17/24 20:12	1
Methylene bromide	ND		5.0	0.22	ug/L			01/17/24 20:12	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/17/24 20:12	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/17/24 20:12	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/17/24 20:12	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/17/24 20:12	1
Naphthalene	ND		5.0	3.0	ug/L			01/17/24 20:12	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/17/24 20:12	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/17/24 20:12	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/17/24 20:12	1
o-Xylene	ND		5.0	0.60	ug/L			01/17/24 20:12	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/17/24 20:12	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/17/24 20:12	1

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

Job ID: 400-249625-1

Client Sample ID: P93A-ROX-011024

Date Collected: 01/10/24 11:30
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-5

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/17/24 20:12	1
Styrene	ND		1.0	1.0	ug/L			01/17/24 20:12	1
tert-Butylbenzene	**2.3**		1.0	0.63	ug/L			01/17/24 20:12	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/17/24 20:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/17/24 20:12	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/17/24 20:12	1
Toluene	ND		1.0	0.90	ug/L			01/17/24 20:12	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 20:12	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/17/24 20:12	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/17/24 20:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/17/24 20:12	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/17/24 20:12	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/17/24 20:12	1
Trichloroethene	ND		1.0	0.15	ug/L			01/17/24 20:12	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/17/24 20:12	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/17/24 20:12	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/17/24 20:12	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/17/24 20:12	1
Vinyl acetate	ND		25	0.93	ug/L			01/17/24 20:12	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/17/24 20:12	1
Xylenes, Total	ND		10	1.6	ug/L			01/17/24 20:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 130*		*01/17/24 20:12*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/17/24 20:12*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*01/17/24 20:12*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.093	ug/L		01/17/24 11:35	01/17/24 22:08	1
Acenaphthylene	**0.13**	**J**	0.19	0.042	ug/L		01/17/24 11:35	01/17/24 22:08	1
Anthracene	ND		0.19	0.044	ug/L		01/17/24 11:35	01/17/24 22:08	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		01/17/24 11:35	01/17/24 22:08	1
Benzo[a]pyrene	ND		0.19	0.060	ug/L		01/17/24 11:35	01/17/24 22:08	1
Benzo[b]fluoranthene	ND	*+	0.19	0.035	ug/L		01/17/24 11:35	01/17/24 22:08	1
Benzo[g,h,i]perylene	ND		0.19	0.025	ug/L		01/17/24 11:35	01/17/24 22:08	1
Benzo[k]fluoranthene	ND		0.19	0.058	ug/L		01/17/24 11:35	01/17/24 22:08	1
Chrysene	ND		0.19	0.031	ug/L		01/17/24 11:35	01/17/24 22:08	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		01/17/24 11:35	01/17/24 22:08	1
Fluoranthene	ND		0.19	0.032	ug/L		01/17/24 11:35	01/17/24 22:08	1
Fluorene	ND		0.19	0.084	ug/L		01/17/24 11:35	01/17/24 22:08	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		01/17/24 11:35	01/17/24 22:08	1
Phenanthrene	ND		0.19	0.085	ug/L		01/17/24 11:35	01/17/24 22:08	1
Pyrene	ND		0.19	0.037	ug/L		01/17/24 11:35	01/17/24 22:08	1
1-Methylnaphthalene	**0.075**	**J**	0.19	0.075	ug/L		01/17/24 11:35	01/17/24 22:08	1
2-Methylnaphthalene	ND		0.19	0.062	ug/L		01/17/24 11:35	01/17/24 22:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*170*	*S1+*	*18 - 147*	*01/17/24 11:35*	*01/17/24 22:08*	*1*
2-Fluorobiphenyl	*91*		*15 - 128*	*01/17/24 11:35*	*01/17/24 22:08*	*1*

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

Job ID: 400-249625-1

Client Sample ID: P93A-ROX-011024
Date Collected: 01/10/24 11:30
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-5
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*77*		*10 - 144*	*01/17/24 11:35*	*01/17/24 22:08*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.4	8.2	ug/L		01/15/24 09:26	01/16/24 19:50	1
Benzenethiol	ND		9.4	9.3	ug/L		01/15/24 09:26	01/16/24 19:50	1
Benzoic acid	ND	*+	28	23	ug/L		01/15/24 09:26	01/16/24 19:50	1
Benzyl alcohol	ND		9.4	6.9	ug/L		01/15/24 09:26	01/16/24 19:50	1
Bis(2-chloroethoxy)methane	ND		9.4	4.3	ug/L		01/15/24 09:26	01/16/24 19:50	1
Bis(2-chloroethyl)ether	ND		9.4	3.7	ug/L		01/15/24 09:26	01/16/24 19:50	1
bis (2-chloroisopropyl) ether	ND		9.4	1.7	ug/L		01/15/24 09:26	01/16/24 19:50	1
Bis(2-ethylhexyl) phthalate	ND		9.4	8.4	ug/L		01/15/24 09:26	01/16/24 19:50	1
4-Bromophenyl phenyl ether	ND		9.4	8.1	ug/L		01/15/24 09:26	01/16/24 19:50	1
Butyl benzyl phthalate	ND		9.4	5.5	ug/L		01/15/24 09:26	01/16/24 19:50	1
4-Chloroaniline	ND		9.4	4.4	ug/L		01/15/24 09:26	01/16/24 19:50	1
4-Chloro-3-methylphenol	ND		9.4	5.0	ug/L		01/15/24 09:26	01/16/24 19:50	1
2-Chloronaphthalene	ND		9.4	3.6	ug/L		01/15/24 09:26	01/16/24 19:50	1
2-Chlorophenol	ND		9.4	3.9	ug/L		01/15/24 09:26	01/16/24 19:50	1
4-Chlorophenyl phenyl ether	ND		9.4	3.5	ug/L		01/15/24 09:26	01/16/24 19:50	1
Dibenz[a,h]acridine	ND		9.4	2.6	ug/L		01/15/24 09:26	01/16/24 19:50	1
Dibenzofuran	ND		9.4	3.8	ug/L		01/15/24 09:26	01/16/24 19:50	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		01/15/24 09:26	01/16/24 19:50	1
2,4-Dichlorophenol	ND		9.4	4.1	ug/L		01/15/24 09:26	01/16/24 19:50	1
Diethyl phthalate	ND		9.4	4.1	ug/L		01/15/24 09:26	01/16/24 19:50	1
2,4-Dimethylphenol	ND		9.4	4.9	ug/L		01/15/24 09:26	01/16/24 19:50	1
Dimethyl phthalate	ND		9.4	4.0	ug/L		01/15/24 09:26	01/16/24 19:50	1
Di-n-butyl phthalate	ND		9.4	4.3	ug/L		01/15/24 09:26	01/16/24 19:50	1
4,6-Dinitro-ortho-cresol	ND		9.4	9.4	ug/L		01/15/24 09:26	01/16/24 19:50	1
2,4-Dinitrophenol	ND		28	4.3	ug/L		01/15/24 09:26	01/16/24 19:50	1
2,4-Dinitrotoluene	ND		9.4	4.8	ug/L		01/15/24 09:26	01/16/24 19:50	1
2,6-Dinitrotoluene	ND		9.4	3.7	ug/L		01/15/24 09:26	01/16/24 19:50	1
Di-n-octyl phthalate	ND		9.4	5.7	ug/L		01/15/24 09:26	01/16/24 19:50	1
1,4-Dioxane	ND		9.4	4.1	ug/L		01/15/24 09:26	01/16/24 19:50	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	3.1	ug/L		01/15/24 09:26	01/16/24 19:50	1
Hexachlorobenzene	ND		9.4	9.1	ug/L		01/15/24 09:26	01/16/24 19:50	1
Hexachlorocyclopentadiene	ND		19	4.2	ug/L		01/15/24 09:26	01/16/24 19:50	1
Hexachloroethane	ND		9.4	4.9	ug/L		01/15/24 09:26	01/16/24 19:50	1
Indene	ND		9.4	3.4	ug/L		01/15/24 09:26	01/16/24 19:50	1
Isophorone	ND		9.4	4.9	ug/L		01/15/24 09:26	01/16/24 19:50	1
2-Methylphenol	ND		9.4	3.0	ug/L		01/15/24 09:26	01/16/24 19:50	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		01/15/24 09:26	01/16/24 19:50	1
2-Nitroaniline	ND		9.4	4.7	ug/L		01/15/24 09:26	01/16/24 19:50	1
3-Nitroaniline	ND		9.4	4.4	ug/L		01/15/24 09:26	01/16/24 19:50	1
4-Nitroaniline	ND		9.4	3.9	ug/L		01/15/24 09:26	01/16/24 19:50	1
Nitrobenzene	ND		9.4	4.4	ug/L		01/15/24 09:26	01/16/24 19:50	1
2-Nitrophenol	ND		9.4	4.3	ug/L		01/15/24 09:26	01/16/24 19:50	1
4-Nitrophenol	ND		9.4	3.1	ug/L		01/15/24 09:26	01/16/24 19:50	1
N-Nitrosodimethylamine	ND		9.4	2.1	ug/L		01/15/24 09:26	01/16/24 19:50	1

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

Job ID: 400-249625-1

Client Sample ID: P93A-ROX-011024
Date Collected: 01/10/24 11:30
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-5
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.4	2.4	ug/L		01/15/24 09:26	01/16/24 19:50	1
N-Nitrosodiphenylamine	ND		9.4	3.5	ug/L		01/15/24 09:26	01/16/24 19:50	1
Pentachlorophenol	ND		19	11	ug/L		01/15/24 09:26	01/16/24 19:50	1
Phenol	ND		9.4	4.0	ug/L		01/15/24 09:26	01/16/24 19:50	1
Pyridine	ND	*1	9.4	9.4	ug/L		01/15/24 09:26	01/16/24 19:50	1
Quinoline	ND		9.4	2.3	ug/L		01/15/24 09:26	01/16/24 19:50	1
2,4,5-Trichlorophenol	ND		9.4	3.8	ug/L		01/15/24 09:26	01/16/24 19:50	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		01/15/24 09:26	01/16/24 19:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*21 - 114*	*01/15/24 09:26*	*01/16/24 19:50*	*1*
2-Fluorophenol	*48*		*10 - 105*	*01/15/24 09:26*	*01/16/24 19:50*	*1*
Nitrobenzene-d5	*66*		*16 - 127*	*01/15/24 09:26*	*01/16/24 19:50*	*1*
Phenol-d5	*34*		*10 - 129*	*01/15/24 09:26*	*01/16/24 19:50*	*1*
Terphenyl-d14	*95*		*13 - 150*	*01/15/24 09:26*	*01/16/24 19:50*	*1*
2,4,6-Tribromophenol	*89*		*10 - 150*	*01/15/24 09:26*	*01/16/24 19:50*	*1*

Method: EPA 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	0.016	ug/L		01/17/24 10:31	01/18/24 00:14	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		01/17/24 10:31	01/18/24 00:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*124*		*51 - 149*	*01/17/24 10:31*	*01/18/24 00:14*	*1*

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

Job ID: 400-249625-1

Client Sample ID: TB-ROX-011024-8260-A
Date Collected: 01/10/24 00:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/17/24 16:24	1
Acrolein	ND		20	3.3	ug/L			01/17/24 16:24	1
Acrylonitrile	ND		10	2.8	ug/L			01/17/24 16:24	1
Benzene	ND		1.0	0.50	ug/L			01/17/24 16:24	1
Bromobenzene	ND		1.0	0.54	ug/L			01/17/24 16:24	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/17/24 16:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/17/24 16:24	1
Bromoform	ND		5.0	0.25	ug/L			01/17/24 16:24	1
Bromomethane	ND		1.0	0.98	ug/L			01/17/24 16:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/17/24 16:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/17/24 16:24	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/17/24 16:24	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/17/24 16:24	1
Chloroethane	ND		1.0	0.76	ug/L			01/17/24 16:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/17/24 16:24	1
Chloroform	ND		1.0	0.90	ug/L			01/17/24 16:24	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/17/24 16:24	1
Chloromethane	ND		1.0	0.90	ug/L			01/17/24 16:24	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/17/24 16:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/17/24 16:24	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/17/24 16:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/17/24 16:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/17/24 16:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/17/24 16:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/17/24 16:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/17/24 16:24	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/17/24 16:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 16:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 16:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 16:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 16:24	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/17/24 16:24	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/17/24 16:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/17/24 16:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/17/24 16:24	1
2-Hexanone	ND		25	1.4	ug/L			01/17/24 16:24	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/17/24 16:24	1
Methylene bromide	ND		5.0	0.22	ug/L			01/17/24 16:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/17/24 16:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/17/24 16:24	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/17/24 16:24	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/17/24 16:24	1
Naphthalene	ND		5.0	3.0	ug/L			01/17/24 16:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/17/24 16:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/17/24 16:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/17/24 16:24	1
o-Xylene	ND		5.0	0.60	ug/L			01/17/24 16:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/17/24 16:24	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/17/24 16:24	1

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

Job ID: 400-249625-1

Client Sample ID: TB-ROX-011024-8260-A
Date Collected: 01/10/24 00:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/17/24 16:24	1
Styrene	ND		1.0	1.0	ug/L			01/17/24 16:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/17/24 16:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/17/24 16:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/17/24 16:24	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/17/24 16:24	1
Toluene	ND		1.0	0.90	ug/L			01/17/24 16:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 16:24	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/17/24 16:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/17/24 16:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/17/24 16:24	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/17/24 16:24	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/17/24 16:24	1
Trichloroethene	ND		1.0	0.15	ug/L			01/17/24 16:24	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/17/24 16:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/17/24 16:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/17/24 16:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/17/24 16:24	1
Vinyl acetate	ND		25	0.93	ug/L			01/17/24 16:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/17/24 16:24	1
Xylenes, Total	ND		10	1.6	ug/L			01/17/24 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 130*		*01/17/24 16:24*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*01/17/24 16:24*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*01/17/24 16:24*	*1*

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

Job ID: 400-249625-1

Client Sample ID: TB-ROX-011024-8011-A
Date Collected: 01/10/24 00:00
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-7
Matrix: Water

Method: EPA 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		01/18/24 11:45	01/18/24 17:20	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		01/18/24 11:45	01/18/24 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*	*p*	*51 - 149*	*01/18/24 11:45*	*01/18/24 17:20*	*1*

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

Job ID: 400-249625-1

Client Sample ID: MW13-ROX-011024
Date Collected: 01/10/24 09:50
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-8
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/18/24 13:27	1
Acrolein	ND		20	3.3	ug/L			01/18/24 13:27	1
Acrylonitrile	ND		10	2.8	ug/L			01/18/24 13:27	1
Benzene	ND		1.0	0.50	ug/L			01/18/24 13:27	1
Bromobenzene	ND		1.0	0.54	ug/L			01/18/24 13:27	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/18/24 13:27	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/18/24 13:27	1
Bromoform	ND		5.0	0.25	ug/L			01/18/24 13:27	1
Bromomethane	ND		1.0	0.98	ug/L			01/18/24 13:27	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/18/24 13:27	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/18/24 13:27	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/18/24 13:27	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/18/24 13:27	1
Chloroethane	ND		1.0	0.76	ug/L			01/18/24 13:27	1
2-Chloroethyl vinyl ether	ND	*+	5.0	2.0	ug/L			01/18/24 13:27	1
Chloroform	ND		1.0	0.90	ug/L			01/18/24 13:27	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/18/24 13:27	1
Chloromethane	ND		1.0	0.90	ug/L			01/18/24 13:27	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/18/24 13:27	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/18/24 13:27	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/18/24 13:27	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/18/24 13:27	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/18/24 13:27	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/18/24 13:27	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/18/24 13:27	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/18/24 13:27	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/18/24 13:27	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/18/24 13:27	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 13:27	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 13:27	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 13:27	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/18/24 13:27	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/18/24 13:27	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/18/24 13:27	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/18/24 13:27	1
2-Hexanone	ND		25	1.4	ug/L			01/18/24 13:27	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/18/24 13:27	1
Methylene bromide	ND		5.0	0.22	ug/L			01/18/24 13:27	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/18/24 13:27	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/18/24 13:27	1
Methyl tert-butyl ether	**0.53**	**J**	1.0	0.22	ug/L			01/18/24 13:27	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/18/24 13:27	1
Naphthalene	ND		5.0	3.0	ug/L			01/18/24 13:27	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/18/24 13:27	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/18/24 13:27	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/18/24 13:27	1
o-Xylene	ND		5.0	0.60	ug/L			01/18/24 13:27	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/18/24 13:27	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/18/24 13:27	1

Client Sample ID: MW13-ROX-011024
Date Collected: 01/10/24 09:50
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-8
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/18/24 13:27	1
Styrene	ND		1.0	1.0	ug/L			01/18/24 13:27	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/18/24 13:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/18/24 13:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/18/24 13:27	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/18/24 13:27	1
Toluene	ND		1.0	0.90	ug/L			01/18/24 13:27	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/18/24 13:27	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/18/24 13:27	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/18/24 13:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/18/24 13:27	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/18/24 13:27	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/18/24 13:27	1
Trichloroethene	ND		1.0	0.15	ug/L			01/18/24 13:27	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/18/24 13:27	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/18/24 13:27	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/18/24 13:27	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/18/24 13:27	1
Vinyl acetate	ND		25	0.93	ug/L			01/18/24 13:27	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/18/24 13:27	1
Xylenes, Total	ND		10	1.6	ug/L			01/18/24 13:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 130*		*01/18/24 13:27*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*01/18/24 13:27*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*01/18/24 13:27*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.24**		0.20	0.098	ug/L		01/17/24 11:35	01/17/24 22:28	1
Acenaphthylene	**0.38**		0.20	0.043	ug/L		01/17/24 11:35	01/17/24 22:28	1
Anthracene	ND		0.20	0.046	ug/L		01/17/24 11:35	01/17/24 22:28	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		01/17/24 11:35	01/17/24 22:28	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		01/17/24 11:35	01/17/24 22:28	1
Benzo[b]fluoranthene	ND	*+	0.20	0.037	ug/L		01/17/24 11:35	01/17/24 22:28	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/17/24 11:35	01/17/24 22:28	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		01/17/24 11:35	01/17/24 22:28	1
Chrysene	ND		0.20	0.033	ug/L		01/17/24 11:35	01/17/24 22:28	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		01/17/24 11:35	01/17/24 22:28	1
Fluoranthene	ND		0.20	0.034	ug/L		01/17/24 11:35	01/17/24 22:28	1
Fluorene	ND		0.20	0.088	ug/L		01/17/24 11:35	01/17/24 22:28	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		01/17/24 11:35	01/17/24 22:28	1
Phenanthrene	ND		0.20	0.089	ug/L		01/17/24 11:35	01/17/24 22:28	1
Pyrene	ND		0.20	0.039	ug/L		01/17/24 11:35	01/17/24 22:28	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		01/17/24 11:35	01/17/24 22:28	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		01/17/24 11:35	01/17/24 22:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*124*		*18 - 147*	*01/17/24 11:35*	*01/17/24 22:28*	*1*
2-Fluorobiphenyl	*62*		*15 - 128*	*01/17/24 11:35*	*01/17/24 22:28*	*1*

Client Sample ID: MW13-ROX-011024
Date Collected: 01/10/24 09:50
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-8
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*75*		*10 - 144*	*01/17/24 11:35*	*01/17/24 22:28*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.8	8.5	ug/L		01/15/24 09:26	01/16/24 20:16	1
Benzenethiol	ND		9.8	9.7	ug/L		01/15/24 09:26	01/16/24 20:16	1
Benzoic acid	ND	*+	29	23	ug/L		01/15/24 09:26	01/16/24 20:16	1
Benzyl alcohol	ND		9.8	7.1	ug/L		01/15/24 09:26	01/16/24 20:16	1
Bis(2-chloroethoxy)methane	ND		9.8	4.5	ug/L		01/15/24 09:26	01/16/24 20:16	1
Bis(2-chloroethyl)ether	ND		9.8	3.8	ug/L		01/15/24 09:26	01/16/24 20:16	1
bis (2-chloroisopropyl) ether	ND		9.8	1.8	ug/L		01/15/24 09:26	01/16/24 20:16	1
Bis(2-ethylhexyl) phthalate	ND		9.8	8.7	ug/L		01/15/24 09:26	01/16/24 20:16	1
4-Bromophenyl phenyl ether	ND		9.8	8.4	ug/L		01/15/24 09:26	01/16/24 20:16	1
Butyl benzyl phthalate	ND		9.8	5.7	ug/L		01/15/24 09:26	01/16/24 20:16	1
4-Chloroaniline	ND		9.8	4.6	ug/L		01/15/24 09:26	01/16/24 20:16	1
4-Chloro-3-methylphenol	ND		9.8	5.2	ug/L		01/15/24 09:26	01/16/24 20:16	1
2-Chloronaphthalene	ND		9.8	3.7	ug/L		01/15/24 09:26	01/16/24 20:16	1
2-Chlorophenol	ND		9.8	4.0	ug/L		01/15/24 09:26	01/16/24 20:16	1
4-Chlorophenyl phenyl ether	ND		9.8	3.6	ug/L		01/15/24 09:26	01/16/24 20:16	1
Dibenz[a,h]acridine	ND		9.8	2.7	ug/L		01/15/24 09:26	01/16/24 20:16	1
Dibenzofuran	ND		9.8	3.9	ug/L		01/15/24 09:26	01/16/24 20:16	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/15/24 09:26	01/16/24 20:16	1
2,4-Dichlorophenol	ND		9.8	4.2	ug/L		01/15/24 09:26	01/16/24 20:16	1
Diethyl phthalate	ND		9.8	4.3	ug/L		01/15/24 09:26	01/16/24 20:16	1
2,4-Dimethylphenol	ND		9.8	5.1	ug/L		01/15/24 09:26	01/16/24 20:16	1
Dimethyl phthalate	ND		9.8	4.1	ug/L		01/15/24 09:26	01/16/24 20:16	1
Di-n-butyl phthalate	ND		9.8	4.5	ug/L		01/15/24 09:26	01/16/24 20:16	1
4,6-Dinitro-ortho-cresol	ND		9.8	9.8	ug/L		01/15/24 09:26	01/16/24 20:16	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		01/15/24 09:26	01/16/24 20:16	1
2,4-Dinitrotoluene	ND		9.8	5.0	ug/L		01/15/24 09:26	01/16/24 20:16	1
2,6-Dinitrotoluene	ND		9.8	3.8	ug/L		01/15/24 09:26	01/16/24 20:16	1
Di-n-octyl phthalate	ND		9.8	5.9	ug/L		01/15/24 09:26	01/16/24 20:16	1
1,4-Dioxane	ND		9.8	4.2	ug/L		01/15/24 09:26	01/16/24 20:16	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	3.2	ug/L		01/15/24 09:26	01/16/24 20:16	1
Hexachlorobenzene	ND		9.8	9.5	ug/L		01/15/24 09:26	01/16/24 20:16	1
Hexachlorocyclopentadiene	ND		20	4.4	ug/L		01/15/24 09:26	01/16/24 20:16	1
Hexachloroethane	ND		9.8	5.1	ug/L		01/15/24 09:26	01/16/24 20:16	1
Indene	ND		9.8	3.5	ug/L		01/15/24 09:26	01/16/24 20:16	1
Isophorone	ND		9.8	5.1	ug/L		01/15/24 09:26	01/16/24 20:16	1
2-Methylphenol	ND		9.8	3.1	ug/L		01/15/24 09:26	01/16/24 20:16	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		01/15/24 09:26	01/16/24 20:16	1
2-Nitroaniline	ND		9.8	4.9	ug/L		01/15/24 09:26	01/16/24 20:16	1
3-Nitroaniline	ND		9.8	4.6	ug/L		01/15/24 09:26	01/16/24 20:16	1
4-Nitroaniline	ND		9.8	4.0	ug/L		01/15/24 09:26	01/16/24 20:16	1
Nitrobenzene	ND		9.8	4.6	ug/L		01/15/24 09:26	01/16/24 20:16	1
2-Nitrophenol	ND		9.8	4.5	ug/L		01/15/24 09:26	01/16/24 20:16	1
4-Nitrophenol	ND		9.8	3.2	ug/L		01/15/24 09:26	01/16/24 20:16	1
N-Nitrosodimethylamine	ND		9.8	2.1	ug/L		01/15/24 09:26	01/16/24 20:16	1

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

Job ID: 400-249625-1

Client Sample ID: MW13-ROX-011024
Date Collected: 01/10/24 09:50
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-8
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	2.4	ug/L		01/15/24 09:26	01/16/24 20:16	1
N-Nitrosodiphenylamine	ND		9.8	3.6	ug/L		01/15/24 09:26	01/16/24 20:16	1
Pentachlorophenol	ND		20	12	ug/L		01/15/24 09:26	01/16/24 20:16	1
Phenol	ND		9.8	4.1	ug/L		01/15/24 09:26	01/16/24 20:16	1
Pyridine	ND	*1	9.8	9.8	ug/L		01/15/24 09:26	01/16/24 20:16	1
Quinoline	ND		9.8	2.3	ug/L		01/15/24 09:26	01/16/24 20:16	1
2,4,5-Trichlorophenol	ND		9.8	3.9	ug/L		01/15/24 09:26	01/16/24 20:16	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		01/15/24 09:26	01/16/24 20:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*21 - 114*	*01/15/24 09:26*	*01/16/24 20:16*	*1*
2-Fluorophenol	*50*		*10 - 105*	*01/15/24 09:26*	*01/16/24 20:16*	*1*
Nitrobenzene-d5	*70*		*16 - 127*	*01/15/24 09:26*	*01/16/24 20:16*	*1*
Phenol-d5	*36*		*10 - 129*	*01/15/24 09:26*	*01/16/24 20:16*	*1*
Terphenyl-d14	*97*		*13 - 150*	*01/15/24 09:26*	*01/16/24 20:16*	*1*
2,4,6-Tribromophenol	*89*		*10 - 150*	*01/15/24 09:26*	*01/16/24 20:16*	*1*

Method: EPA 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		01/18/24 11:45	01/18/24 17:41	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/24 11:45	01/18/24 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*125*		*51 - 149*	*01/18/24 11:45*	*01/18/24 17:41*	*1*

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

Job ID: 400-249625-1

Client Sample ID: P114R-ROX-011024
Date Collected: 01/10/24 12:50
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-9
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/18/24 13:50	1
Acrolein	ND		20	3.3	ug/L			01/18/24 13:50	1
Acrylonitrile	ND		10	2.8	ug/L			01/18/24 13:50	1
Benzene	ND		1.0	0.50	ug/L			01/18/24 13:50	1
Bromobenzene	ND		1.0	0.54	ug/L			01/18/24 13:50	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/18/24 13:50	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/18/24 13:50	1
Bromoform	ND		5.0	0.25	ug/L			01/18/24 13:50	1
Bromomethane	ND		1.0	0.98	ug/L			01/18/24 13:50	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/18/24 13:50	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/18/24 13:50	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/18/24 13:50	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/18/24 13:50	1
Chloroethane	ND		1.0	0.76	ug/L			01/18/24 13:50	1
2-Chloroethyl vinyl ether	ND	*+	5.0	2.0	ug/L			01/18/24 13:50	1
Chloroform	ND		1.0	0.90	ug/L			01/18/24 13:50	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/18/24 13:50	1
Chloromethane	ND		1.0	0.90	ug/L			01/18/24 13:50	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/18/24 13:50	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/18/24 13:50	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/18/24 13:50	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/18/24 13:50	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/18/24 13:50	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/18/24 13:50	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/18/24 13:50	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/18/24 13:50	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/18/24 13:50	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/18/24 13:50	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 13:50	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 13:50	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 13:50	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/18/24 13:50	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/18/24 13:50	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/18/24 13:50	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/18/24 13:50	1
2-Hexanone	ND		25	1.4	ug/L			01/18/24 13:50	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/18/24 13:50	1
Methylene bromide	ND		5.0	0.22	ug/L			01/18/24 13:50	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/18/24 13:50	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/18/24 13:50	1
Methyl tert-butyl ether	**1.8**		1.0	0.22	ug/L			01/18/24 13:50	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/18/24 13:50	1
Naphthalene	ND		5.0	3.0	ug/L			01/18/24 13:50	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/18/24 13:50	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/18/24 13:50	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/18/24 13:50	1
o-Xylene	ND		5.0	0.60	ug/L			01/18/24 13:50	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/18/24 13:50	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/18/24 13:50	1

Client Sample ID: P114R-ROX-011024
Date Collected: 01/10/24 12:50
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-9
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/18/24 13:50	1
Styrene	ND		1.0	1.0	ug/L			01/18/24 13:50	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/18/24 13:50	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/18/24 13:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/18/24 13:50	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/18/24 13:50	1
Toluene	ND		1.0	0.90	ug/L			01/18/24 13:50	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/18/24 13:50	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/18/24 13:50	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/18/24 13:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/18/24 13:50	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/18/24 13:50	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/18/24 13:50	1
Trichloroethene	ND		1.0	0.15	ug/L			01/18/24 13:50	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/18/24 13:50	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/18/24 13:50	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/18/24 13:50	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/18/24 13:50	1
Vinyl acetate	ND		25	0.93	ug/L			01/18/24 13:50	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/18/24 13:50	1
Xylenes, Total	ND		10	1.6	ug/L			01/18/24 13:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*72 - 130*		*01/18/24 13:50*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*01/18/24 13:50*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*01/18/24 13:50*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.76**		0.20	0.098	ug/L		01/17/24 11:35	01/17/24 22:49	1
Acenaphthylene	**0.26**		0.20	0.044	ug/L		01/17/24 11:35	01/17/24 22:49	1
Anthracene	ND		0.20	0.047	ug/L		01/17/24 11:35	01/17/24 22:49	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		01/17/24 11:35	01/17/24 22:49	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		01/17/24 11:35	01/17/24 22:49	1
Benzo[b]fluoranthene	ND	*+	0.20	0.037	ug/L		01/17/24 11:35	01/17/24 22:49	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/17/24 11:35	01/17/24 22:49	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		01/17/24 11:35	01/17/24 22:49	1
Chrysene	ND		0.20	0.033	ug/L		01/17/24 11:35	01/17/24 22:49	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		01/17/24 11:35	01/17/24 22:49	1
Fluoranthene	**0.065**	**J**	0.20	0.034	ug/L		01/17/24 11:35	01/17/24 22:49	1
Fluorene	ND		0.20	0.088	ug/L		01/17/24 11:35	01/17/24 22:49	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		01/17/24 11:35	01/17/24 22:49	1
Phenanthrene	ND		0.20	0.089	ug/L		01/17/24 11:35	01/17/24 22:49	1
Pyrene	ND		0.20	0.039	ug/L		01/17/24 11:35	01/17/24 22:49	1
1-Methylnaphthalene	**0.22**		0.20	0.079	ug/L		01/17/24 11:35	01/17/24 22:49	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		01/17/24 11:35	01/17/24 22:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*109*		*18 - 147*	*01/17/24 11:35*	*01/17/24 22:49*	*1*
2-Fluorobiphenyl	*51*		*15 - 128*	*01/17/24 11:35*	*01/17/24 22:49*	*1*

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

Job ID: 400-249625-1

Client Sample ID: P114R-ROX-011024
Date Collected: 01/10/24 12:50
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-9
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*37*		*10 - 144*	*01/17/24 11:35*	*01/17/24 22:49*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.5	8.3	ug/L		01/15/24 09:26	01/16/24 20:41	1
Benzenethiol	ND		9.5	9.5	ug/L		01/15/24 09:26	01/16/24 20:41	1
Benzoic acid	ND	*+	29	23	ug/L		01/15/24 09:26	01/16/24 20:41	1
Benzyl alcohol	ND		9.5	7.0	ug/L		01/15/24 09:26	01/16/24 20:41	1
Bis(2-chloroethoxy)methane	ND		9.5	4.4	ug/L		01/15/24 09:26	01/16/24 20:41	1
Bis(2-chloroethyl)ether	ND		9.5	3.7	ug/L		01/15/24 09:26	01/16/24 20:41	1
bis (2-chloroisopropyl) ether	ND		9.5	1.7	ug/L		01/15/24 09:26	01/16/24 20:41	1
Bis(2-ethylhexyl) phthalate	ND		9.5	8.5	ug/L		01/15/24 09:26	01/16/24 20:41	1
4-Bromophenyl phenyl ether	ND		9.5	8.2	ug/L		01/15/24 09:26	01/16/24 20:41	1
Butyl benzyl phthalate	ND		9.5	5.5	ug/L		01/15/24 09:26	01/16/24 20:41	1
4-Chloroaniline	ND		9.5	4.5	ug/L		01/15/24 09:26	01/16/24 20:41	1
4-Chloro-3-methylphenol	ND		9.5	5.1	ug/L		01/15/24 09:26	01/16/24 20:41	1
2-Chloronaphthalene	ND		9.5	3.6	ug/L		01/15/24 09:26	01/16/24 20:41	1
2-Chlorophenol	ND		9.5	3.9	ug/L		01/15/24 09:26	01/16/24 20:41	1
4-Chlorophenyl phenyl ether	ND		9.5	3.5	ug/L		01/15/24 09:26	01/16/24 20:41	1
Dibenz[a,h]acridine	ND		9.5	2.7	ug/L		01/15/24 09:26	01/16/24 20:41	1
Dibenzofuran	ND		9.5	3.8	ug/L		01/15/24 09:26	01/16/24 20:41	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/15/24 09:26	01/16/24 20:41	1
2,4-Dichlorophenol	ND		9.5	4.1	ug/L		01/15/24 09:26	01/16/24 20:41	1
Diethyl phthalate	ND		9.5	4.2	ug/L		01/15/24 09:26	01/16/24 20:41	1
2,4-Dimethylphenol	ND		9.5	5.0	ug/L		01/15/24 09:26	01/16/24 20:41	1
Dimethyl phthalate	ND		9.5	4.0	ug/L		01/15/24 09:26	01/16/24 20:41	1
Di-n-butyl phthalate	ND		9.5	4.4	ug/L		01/15/24 09:26	01/16/24 20:41	1
4,6-Dinitro-ortho-cresol	ND		9.5	9.5	ug/L		01/15/24 09:26	01/16/24 20:41	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		01/15/24 09:26	01/16/24 20:41	1
2,4-Dinitrotoluene	ND		9.5	4.9	ug/L		01/15/24 09:26	01/16/24 20:41	1
2,6-Dinitrotoluene	ND		9.5	3.7	ug/L		01/15/24 09:26	01/16/24 20:41	1
Di-n-octyl phthalate	ND		9.5	5.7	ug/L		01/15/24 09:26	01/16/24 20:41	1
1,4-Dioxane	ND		9.5	4.1	ug/L		01/15/24 09:26	01/16/24 20:41	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	3.2	ug/L		01/15/24 09:26	01/16/24 20:41	1
Hexachlorobenzene	ND		9.5	9.3	ug/L		01/15/24 09:26	01/16/24 20:41	1
Hexachlorocyclopentadiene	ND		19	4.3	ug/L		01/15/24 09:26	01/16/24 20:41	1
Hexachloroethane	ND		9.5	5.0	ug/L		01/15/24 09:26	01/16/24 20:41	1
Indene	ND		9.5	3.4	ug/L		01/15/24 09:26	01/16/24 20:41	1
Isophorone	ND		9.5	5.0	ug/L		01/15/24 09:26	01/16/24 20:41	1
2-Methylphenol	ND		9.5	3.1	ug/L		01/15/24 09:26	01/16/24 20:41	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		01/15/24 09:26	01/16/24 20:41	1
2-Nitroaniline	ND		9.5	4.8	ug/L		01/15/24 09:26	01/16/24 20:41	1
3-Nitroaniline	ND		9.5	4.5	ug/L		01/15/24 09:26	01/16/24 20:41	1
4-Nitroaniline	ND		9.5	3.9	ug/L		01/15/24 09:26	01/16/24 20:41	1
Nitrobenzene	ND		9.5	4.5	ug/L		01/15/24 09:26	01/16/24 20:41	1
2-Nitrophenol	ND		9.5	4.4	ug/L		01/15/24 09:26	01/16/24 20:41	1
4-Nitrophenol	ND		9.5	3.2	ug/L		01/15/24 09:26	01/16/24 20:41	1
N-Nitrosodimethylamine	ND		9.5	2.1	ug/L		01/15/24 09:26	01/16/24 20:41	1

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

Job ID: 400-249625-1

Client Sample ID: P114R-ROX-011024
Date Collected: 01/10/24 12:50
Date Received: 01/12/24 09:31

Lab Sample ID: 400-249625-9
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	2.4	ug/L		01/15/24 09:26	01/16/24 20:41	1
N-Nitrosodiphenylamine	ND		9.5	3.5	ug/L		01/15/24 09:26	01/16/24 20:41	1
Pentachlorophenol	ND		19	11	ug/L		01/15/24 09:26	01/16/24 20:41	1
Phenol	ND		9.5	4.0	ug/L		01/15/24 09:26	01/16/24 20:41	1
Pyridine	ND	*1	9.5	9.5	ug/L		01/15/24 09:26	01/16/24 20:41	1
Quinoline	ND		9.5	2.3	ug/L		01/15/24 09:26	01/16/24 20:41	1
2,4,5-Trichlorophenol	ND		9.5	3.8	ug/L		01/15/24 09:26	01/16/24 20:41	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/15/24 09:26	01/16/24 20:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*21 - 114*	*01/15/24 09:26*	*01/16/24 20:41*	*1*
2-Fluorophenol	*47*		*10 - 105*	*01/15/24 09:26*	*01/16/24 20:41*	*1*
Nitrobenzene-d5	*72*		*16 - 127*	*01/15/24 09:26*	*01/16/24 20:41*	*1*
Phenol-d5	*37*		*10 - 129*	*01/15/24 09:26*	*01/16/24 20:41*	*1*
Terphenyl-d14	*99*		*13 - 150*	*01/15/24 09:26*	*01/16/24 20:41*	*1*
2,4,6-Tribromophenol	*102*		*10 - 150*	*01/15/24 09:26*	*01/16/24 20:41*	*1*

Method: EPA 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		01/18/24 11:45	01/18/24 18:02	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/24 11:45	01/18/24 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*133*		*51 - 149*	*01/18/24 11:45*	*01/18/24 18:02*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc. Job ID: 400-249625-1
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, high biased.
*1	LCS/LCSD RPD exceeds control limits.
E	Result exceeded calibration range.
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: 400-249625-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	BFB (72-130)	DBFM (75-126)	TOL (64-132)
400-249625-1	TB-ROX-011024-8260-B	108	109	96
400-249625-3	P56-ROX-011024	111	93	99
400-249625-4	P93D-ROX-011024	108	107	97
400-249625-5	P93A-ROX-011024	109	105	96
400-249625-6	TB-ROX-011024-8260-A	107	106	95
400-249625-8	MW13-ROX-011024	109	109	96
400-249625-9	P114R-ROX-011024	111	106	97
LCS 400-657889/1001	Lab Control Sample	105	92	97
LCS 400-657968/1001	Lab Control Sample	108	95	98
MB 400-657889/5	Method Blank	109	109	97
MB 400-657968/28	Method Blank	110	108	98

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	FBP (21-114)	2FP (10-105)	NBZ (16-127)	PHL (10-129)	TPHL (13-150)	TBP (10-150)
400-249625-3	P56-ROX-011024	79	11	66	17	94	23
400-249625-4	P93D-ROX-011024	75	41	61	32	90	84
400-249625-5	P93A-ROX-011024	82	48	66	34	95	89
400-249625-8	MW13-ROX-011024	82	50	70	36	97	89
400-249625-9	P114R-ROX-011024	86	47	72	37	99	102
LCS 400-657668/2-A	Lab Control Sample	76	49	83	42	94	86
LCS 400-657668/4-A	Lab Control Sample	84	49	67	40	107	79
LCSD 400-657668/3-A	Lab Control Sample Dup	83	54	84	50	100	92
LCSD 400-657668/5-A	Lab Control Sample Dup	83	44	62	38	97	80
MB 400-657668/1-A	Method Blank	90	50	73	38	104	82

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	TPHL (18-147)	FBP (15-128)	NBZ (10-144)
400-249625-3	P56-ROX-011024	143	75	80
400-249625-4	P93D-ROX-011024	145	91	77
400-249625-5	P93A-ROX-011024	170 S1+	91	77

Surrogate Summary

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

Job ID: 400-249625-1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-249625-8	MW13-ROX-011024	124	62	75
400-249625-9	P114R-ROX-011024	109	51	37
LCS 400-657912/2-A	Lab Control Sample	82	84	89
LCSD 400-657912/3-A	Lab Control Sample Dup	86	88	92
MB 400-657912/1-A	Method Blank	194 S1+	100	73

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-249625-2	TB-ROX-011024-8011-B	140
400-249625-3	P56-ROX-011024	88
400-249625-4	P93D-ROX-011024	102
400-249625-5	P93A-ROX-011024	124
400-249625-7	TB-ROX-011024-8011-A	94 p
400-249625-8	MW13-ROX-011024	125
400-249625-9	P114R-ROX-011024	133
LCS 400-657905/2-A	Lab Control Sample	86 p
LCS 400-658010/2-A	Lab Control Sample	119
LCSD 400-657905/3-A	Lab Control Sample Dup	85 p
LCSD 400-658010/3-A	Lab Control Sample Dup	120
MB 400-657905/1-A	Method Blank	86 p
MB 400-658010/1-A	Method Blank	125

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-249625-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins 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: 400-249625-1

Client Sample ID: TB-ROX-011024-8260-B
Lab Sample ID: 400-249625-1
Date Collected: 01/10/24 00:00
Matrix: Water
Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657889	01/17/24 16:01	BPO	EET PEN

Client Sample ID: TB-ROX-011024-8011-B
Lab Sample ID: 400-249625-2
Date Collected: 01/10/24 00:00
Matrix: Water
Date Received: 01/12/24 09:31

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	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 22:51	PG	EET PEN

Client Sample ID: P56-ROX-011024
Lab Sample ID: 400-249625-3
Date Collected: 01/10/24 09:35
Matrix: Water
Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657968	01/18/24 13:05	BPO	EET PEN
Total/NA	Prep	3510C			263.4 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 18:59	VC1	EET PEN
Total/NA	Prep	3510C			267.2 mL	1 mL	657912	01/17/24 11:35	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657957	01/17/24 21:27	TH	EET PEN
Total/NA	Prep	8011			36.1 mL	35 mL	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 23:32	PG	EET PEN

Client Sample ID: P93D-ROX-011024
Lab Sample ID: 400-249625-4
Date Collected: 01/10/24 10:50
Matrix: Water
Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657889	01/17/24 19:49	BPO	EET PEN
Total/NA	Prep	3510C			262 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 19:25	VC1	EET PEN
Total/NA	Prep	3510C			265.2 mL	1 mL	657912	01/17/24 11:35	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657957	01/17/24 21:48	TH	EET PEN
Total/NA	Prep	8011			36 mL	35 mL	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 23:53	PG	EET PEN

Client Sample ID: P93A-ROX-011024
Lab Sample ID: 400-249625-5
Date Collected: 01/10/24 11:30
Matrix: Water
Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657889	01/17/24 20:12	BPO	EET PEN
Total/NA	Prep	3510C			265.2 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 19:50	VC1	EET PEN

Client Sample ID: P93A-ROX-011024
Lab Sample ID: 400-249625-5

Date Collected: 01/10/24 11:30
Matrix: Water
Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			265 mL	1 mL	657912	01/17/24 11:35	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657957	01/17/24 22:08	TH	EET PEN
Total/NA	Prep	8011			36.2 mL	35 mL	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/18/24 00:14	PG	EET PEN

Client Sample ID: TB-ROX-011024-8260-A
Lab Sample ID: 400-249625-6

Date Collected: 01/10/24 00:00
Matrix: Water
Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657889	01/17/24 16:24	BPO	EET PEN

Client Sample ID: TB-ROX-011024-8011-A
Lab Sample ID: 400-249625-7

Date Collected: 01/10/24 00:00
Matrix: Water
Date Received: 01/12/24 09:31

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 mL	35 mL	658010	01/18/24 11:45	JAW	EET PEN
Total/NA	Analysis	8011		1			658027	01/18/24 17:20	JAW	EET PEN

Client Sample ID: MW13-ROX-011024
Lab Sample ID: 400-249625-8

Date Collected: 01/10/24 09:50
Matrix: Water
Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657968	01/18/24 13:27	BPO	EET PEN
Total/NA	Prep	3510C			256.4 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 20:16	VC1	EET PEN
Total/NA	Prep	3510C			253.2 mL	1 mL	657912	01/17/24 11:35	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657957	01/17/24 22:28	TH	EET PEN
Total/NA	Prep	8011			34.2 mL	35 mL	658010	01/18/24 11:45	JAW	EET PEN
Total/NA	Analysis	8011		1			658027	01/18/24 17:41	JAW	EET PEN

Client Sample ID: P114R-ROX-011024
Lab Sample ID: 400-249625-9

Date Collected: 01/10/24 12:50
Matrix: Water
Date Received: 01/12/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657968	01/18/24 13:50	BPO	EET PEN
Total/NA	Prep	3510C			261.8 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 20:41	VC1	EET PEN
Total/NA	Prep	3510C			252.6 mL	1 mL	657912	01/17/24 11:35	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657957	01/17/24 22:49	TH	EET PEN
Total/NA	Prep	8011			35.7 mL	35 mL	658010	01/18/24 11:45	JAW	EET PEN
Total/NA	Analysis	8011		1			658027	01/18/24 18:02	JAW	EET PEN

Lab Chronicle

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

Job ID: 400-249625-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-657668/1-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	3510C			250 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 13:03	VC1	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-657889/5
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	8260D		1	5 mL	5 mL	657889	01/17/24 14:08	BPO	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-657905/1-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	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 15:53	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-657912/1-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	3510C			250 mL	1 mL	657912	01/17/24 11:34	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657957	01/17/24 17:23	TH	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-657968/28
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	8260D		1	5 mL	5 mL	657968	01/18/24 10:26	BPO	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-658010/1-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	658010	01/18/24 11:45	JAW	EET PEN
Total/NA	Analysis	8011		1			658027	01/18/24 16:17	JAW	EET PEN

Lab Chronicle

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

Job ID: 400-249625-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657668/2-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	3510C			250 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 13:29	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657668/4-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	3510C			250 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 14:19	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657889/1001
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	8260D		1	5 mL	5 mL	657889	01/17/24 09:48	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657905/2-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	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 16:13	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657912/2-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	3510C			250 mL	1 mL	657912	01/17/24 11:34	STC	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	657957	01/17/24 17:44	TH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657968/1001
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	8260D		1	5 mL	5 mL	657968	01/18/24 09:15	BPO	EET PEN

Lab Chronicle

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

Job ID: 400-249625-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-658010/2-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	658010	01/18/24 11:45	JAW	EET PEN
Total/NA	Analysis	8011		1			658027	01/18/24 16:38	JAW	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657668/3-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	3510C			250 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 13:54	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657668/5-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	3510C			250 mL	1 mL	657668	01/15/24 09:26	AMM	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657759	01/16/24 14:45	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657905/3-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	657905	01/17/24 10:31	PG	EET PEN
Total/NA	Analysis	8011		1			657923	01/17/24 16:34	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657912/3-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	3510C			250 mL	1 mL	657912	01/17/24 11:34	STC	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	657957	01/17/24 18:04	TH	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-658010/3-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	658010	01/18/24 11:45	JAW	EET PEN
Total/NA	Analysis	8011		1			658027	01/18/24 16:59	JAW	EET PEN

Laboratory References:
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 657889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249625-1	TB-ROX-011024-8260-B	Total/NA	Water	8260D	
400-249625-4	P93D-ROX-011024	Total/NA	Water	8260D	
400-249625-5	P93A-ROX-011024	Total/NA	Water	8260D	
400-249625-6	TB-ROX-011024-8260-A	Total/NA	Water	8260D	
MB 400-657889/5	Method Blank	Total/NA	Water	8260D	
LCS 400-657889/1001	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 657968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249625-3	P56-ROX-011024	Total/NA	Water	8260D	
400-249625-8	MW13-ROX-011024	Total/NA	Water	8260D	
400-249625-9	P114R-ROX-011024	Total/NA	Water	8260D	
MB 400-657968/28	Method Blank	Total/NA	Water	8260D	
LCS 400-657968/1001	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 657668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249625-3	P56-ROX-011024	Total/NA	Water	3510C	
400-249625-4	P93D-ROX-011024	Total/NA	Water	3510C	
400-249625-5	P93A-ROX-011024	Total/NA	Water	3510C	
400-249625-8	MW13-ROX-011024	Total/NA	Water	3510C	
400-249625-9	P114R-ROX-011024	Total/NA	Water	3510C	
MB 400-657668/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-657668/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-657668/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-657668/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-657668/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 657759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249625-3	P56-ROX-011024	Total/NA	Water	8270E	657668
400-249625-4	P93D-ROX-011024	Total/NA	Water	8270E	657668
400-249625-5	P93A-ROX-011024	Total/NA	Water	8270E	657668
400-249625-8	MW13-ROX-011024	Total/NA	Water	8270E	657668
400-249625-9	P114R-ROX-011024	Total/NA	Water	8270E	657668
MB 400-657668/1-A	Method Blank	Total/NA	Water	8270E	657668
LCS 400-657668/2-A	Lab Control Sample	Total/NA	Water	8270E	657668
LCS 400-657668/4-A	Lab Control Sample	Total/NA	Water	8270E	657668
LCSD 400-657668/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	657668
LCSD 400-657668/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	657668

Prep Batch: 657912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249625-3	P56-ROX-011024	Total/NA	Water	3510C	
400-249625-4	P93D-ROX-011024	Total/NA	Water	3510C	
400-249625-5	P93A-ROX-011024	Total/NA	Water	3510C	
400-249625-8	MW13-ROX-011024	Total/NA	Water	3510C	
400-249625-9	P114R-ROX-011024	Total/NA	Water	3510C	
MB 400-657912/1-A	Method Blank	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 657912 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-657912/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-657912/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 657957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249625-3	P56-ROX-011024	Total/NA	Water	8270E SIM	657912
400-249625-4	P93D-ROX-011024	Total/NA	Water	8270E SIM	657912
400-249625-5	P93A-ROX-011024	Total/NA	Water	8270E SIM	657912
400-249625-8	MW13-ROX-011024	Total/NA	Water	8270E SIM	657912
400-249625-9	P114R-ROX-011024	Total/NA	Water	8270E SIM	657912
MB 400-657912/1-A	Method Blank	Total/NA	Water	8270E SIM	657912
LCS 400-657912/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	657912
LCSD 400-657912/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	657912

GC Semi VOA

Prep Batch: 657905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249625-2	TB-ROX-011024-8011-B	Total/NA	Water	8011	
400-249625-3	P56-ROX-011024	Total/NA	Water	8011	
400-249625-4	P93D-ROX-011024	Total/NA	Water	8011	
400-249625-5	P93A-ROX-011024	Total/NA	Water	8011	
MB 400-657905/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-657905/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-657905/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 657923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249625-2	TB-ROX-011024-8011-B	Total/NA	Water	8011	657905
400-249625-3	P56-ROX-011024	Total/NA	Water	8011	657905
400-249625-4	P93D-ROX-011024	Total/NA	Water	8011	657905
400-249625-5	P93A-ROX-011024	Total/NA	Water	8011	657905
MB 400-657905/1-A	Method Blank	Total/NA	Water	8011	657905
LCS 400-657905/2-A	Lab Control Sample	Total/NA	Water	8011	657905
LCSD 400-657905/3-A	Lab Control Sample Dup	Total/NA	Water	8011	657905

Prep Batch: 658010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249625-7	TB-ROX-011024-8011-A	Total/NA	Water	8011	
400-249625-8	MW13-ROX-011024	Total/NA	Water	8011	
400-249625-9	P114R-ROX-011024	Total/NA	Water	8011	
MB 400-658010/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-658010/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-658010/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 658027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249625-7	TB-ROX-011024-8011-A	Total/NA	Water	8011	658010
400-249625-8	MW13-ROX-011024	Total/NA	Water	8011	658010
400-249625-9	P114R-ROX-011024	Total/NA	Water	8011	658010
MB 400-658010/1-A	Method Blank	Total/NA	Water	8011	658010

GC Semi VOA (Continued)

Analysis Batch: 658027 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-658010/2-A	Lab Control Sample	Total/NA	Water	8011	658010
LCSD 400-658010/3-A	Lab Control Sample Dup	Total/NA	Water	8011	658010

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-657889/5
Matrix: Water
Analysis Batch: 657889

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			01/17/24 14:08	1
Acrolein	ND		20	3.3	ug/L			01/17/24 14:08	1
Acrylonitrile	ND		10	2.8	ug/L			01/17/24 14:08	1
Benzene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Bromobenzene	ND		1.0	0.54	ug/L			01/17/24 14:08	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/17/24 14:08	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Bromoform	ND		5.0	0.25	ug/L			01/17/24 14:08	1
Bromomethane	ND		1.0	0.98	ug/L			01/17/24 14:08	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/17/24 14:08	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/17/24 14:08	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/17/24 14:08	1
Chloroethane	ND		1.0	0.76	ug/L			01/17/24 14:08	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/17/24 14:08	1
Chloroform	ND		1.0	0.90	ug/L			01/17/24 14:08	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/17/24 14:08	1
Chloromethane	ND		1.0	0.90	ug/L			01/17/24 14:08	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/17/24 14:08	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/17/24 14:08	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/17/24 14:08	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/17/24 14:08	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/17/24 14:08	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/17/24 14:08	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/17/24 14:08	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/17/24 14:08	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/17/24 14:08	1
2-Hexanone	ND		25	1.4	ug/L			01/17/24 14:08	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/17/24 14:08	1
Methylene bromide	ND		5.0	0.22	ug/L			01/17/24 14:08	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/17/24 14:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/17/24 14:08	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/17/24 14:08	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/17/24 14:08	1
Naphthalene	ND		5.0	3.0	ug/L			01/17/24 14:08	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/17/24 14:08	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/17/24 14:08	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/17/24 14:08	1
o-Xylene	ND		5.0	0.60	ug/L			01/17/24 14:08	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/17/24 14:08	1

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

Lab Sample ID: MB 400-657889/5
Matrix: Water
Analysis Batch: 657889

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			01/17/24 14:08	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/17/24 14:08	1
Styrene	ND		1.0	1.0	ug/L			01/17/24 14:08	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/17/24 14:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/17/24 14:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/17/24 14:08	1
Toluene	ND		1.0	0.90	ug/L			01/17/24 14:08	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 14:08	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/17/24 14:08	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/17/24 14:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/17/24 14:08	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/17/24 14:08	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/17/24 14:08	1
Trichloroethene	ND		1.0	0.15	ug/L			01/17/24 14:08	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/17/24 14:08	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/17/24 14:08	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/17/24 14:08	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/17/24 14:08	1
Vinyl acetate	ND		25	0.93	ug/L			01/17/24 14:08	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/17/24 14:08	1
Xylenes, Total	ND		10	1.6	ug/L			01/17/24 14:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 130*		*01/17/24 14:08*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*01/17/24 14:08*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*01/17/24 14:08*	*1*

Lab Sample ID: LCS 400-657889/1001
Matrix: Water
Analysis Batch: 657889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	221		ug/L		111	43 - 160
Acrolein	500	604		ug/L		121	38 - 160
Acrylonitrile	500	544		ug/L		109	64 - 142
Benzene	50.0	54.0		ug/L		108	70 - 130
Bromobenzene	50.0	51.3		ug/L		103	70 - 132
Bromochloromethane	50.0	50.4		ug/L		101	70 - 130
Bromodichloromethane	50.0	56.0		ug/L		112	67 - 133
Bromoform	50.0	55.5		ug/L		111	57 - 140
Bromomethane	50.0	36.0		ug/L		72	10 - 160
2-Butanone (MEK)	200	227		ug/L		113	61 - 145
Carbon disulfide	50.0	40.6		ug/L		81	61 - 137
Carbon tetrachloride	50.0	47.5		ug/L		95	61 - 137
Chlorobenzene	50.0	51.0		ug/L		102	70 - 130
Chloroethane	50.0	45.3		ug/L		91	55 - 141
2-Chloroethyl vinyl ether	50.0	76.1		ug/L		152	10 - 160

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

Lab Sample ID: LCS 400-657889/1001
Matrix: Water
Analysis Batch: 657889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	51.4		ug/L		103	69 - 130
1-Chlorohexane	50.0	51.9		ug/L		104	69 - 130
Chloromethane	50.0	45.2		ug/L		90	58 - 137
cis-1,2-Dichloroethene	50.0	52.2		ug/L		104	68 - 130
cis-1,3-Dichloropropene	50.0	58.2		ug/L		116	69 - 132
Dibromochloromethane	50.0	54.2		ug/L		108	67 - 135
1,2-Dichlorobenzene	50.0	50.5		ug/L		101	67 - 130
1,3-Dichlorobenzene	50.0	50.7		ug/L		101	70 - 130
1,4-Dichlorobenzene	50.0	50.3		ug/L		101	70 - 130
Dichlorodifluoromethane	50.0	39.8		ug/L		80	41 - 146
1,1-Dichloroethane	50.0	52.9		ug/L		106	70 - 130
1,2-Dichloroethane	50.0	52.0		ug/L		104	69 - 130
1,1-Dichloroethene	50.0	45.7		ug/L		91	63 - 134
1,2-Dichloropropane	50.0	57.7		ug/L		115	70 - 130
1,3-Dichloropropane	50.0	56.3		ug/L		113	70 - 130
2,2-Dichloropropane	50.0	43.2		ug/L		86	52 - 135
1,1-Dichloropropene	50.0	51.1		ug/L		102	70 - 130
Ethylbenzene	50.0	51.6		ug/L		103	70 - 130
Ethyl methacrylate	50.0	56.0		ug/L		112	68 - 130
Hexachlorobutadiene	50.0	51.6		ug/L		103	53 - 140
2-Hexanone	200	216		ug/L		108	65 - 137
Isopropylbenzene	50.0	50.0		ug/L		100	70 - 130
Methylene bromide	50.0	50.7		ug/L		101	70 - 130
Methylene Chloride	50.0	53.4		ug/L		107	66 - 135
4-Methyl-2-pentanone (MIBK)	200	224		ug/L		112	69 - 138
Methyl tert-butyl ether	50.0	54.3		ug/L		109	66 - 130
m-Xylene & p-Xylene	50.0	50.8		ug/L		102	70 - 130
Naphthalene	50.0	51.2		ug/L		102	47 - 149
n-Butylbenzene	50.0	52.2		ug/L		104	67 - 130
N-Propylbenzene	50.0	51.7		ug/L		103	70 - 130
o-Chlorotoluene	50.0	51.9		ug/L		104	70 - 130
o-Xylene	50.0	52.1		ug/L		104	70 - 130
p-Chlorotoluene	50.0	52.3		ug/L		105	70 - 130
p-Isopropyltoluene	50.0	50.4		ug/L		101	65 - 130
sec-Butylbenzene	50.0	49.9		ug/L		100	66 - 130
Styrene	50.0	52.5		ug/L		105	70 - 130
tert-Butylbenzene	50.0	47.6		ug/L		95	64 - 139
1,1,1,2-Tetrachloroethane	50.0	53.3		ug/L		107	67 - 131
1,1,2,2-Tetrachloroethane	50.0	56.0		ug/L		112	70 - 131
Tetrachloroethene	50.0	49.0		ug/L		98	65 - 130
Toluene	50.0	50.1		ug/L		100	70 - 130
trans-1,2-Dichloroethene	50.0	48.0		ug/L		96	70 - 130
trans-1,3-Dichloropropene	50.0	55.2		ug/L		110	63 - 130
1,2,3-Trichlorobenzene	50.0	53.2		ug/L		106	60 - 138
1,2,4-Trichlorobenzene	50.0	53.0		ug/L		106	60 - 140
1,1,1-Trichloroethane	50.0	47.6		ug/L		95	68 - 130
1,1,2-Trichloroethane	50.0	55.9		ug/L		112	70 - 130
Trichloroethene	50.0	49.2		ug/L		98	70 - 130
Trichlorofluoromethane	50.0	43.6		ug/L		87	65 - 138

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

Lab Sample ID: LCS 400-657889/1001
Matrix: Water
Analysis Batch: 657889

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	51.7		ug/L		103	70 - 130
1,2,4-Trimethylbenzene	50.0	53.4		ug/L		107	70 - 130
1,3,5-Trimethylbenzene	50.0	51.2		ug/L		102	69 - 130
Vinyl acetate	100	130		ug/L		130	26 - 160
Vinyl chloride	50.0	47.3		ug/L		95	59 - 136
Xylenes, Total	100	103		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*72 - 130*
Dibromofluoromethane	*92*		*75 - 126*
Toluene-d8 (Surr)	*97*		*64 - 132*

Lab Sample ID: MB 400-657968/28
Matrix: Water
Analysis Batch: 657968

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			01/18/24 10:26	1
Acrolein	ND		20	3.3	ug/L			01/18/24 10:26	1
Acrylonitrile	ND		10	2.8	ug/L			01/18/24 10:26	1
Benzene	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Bromobenzene	ND		1.0	0.54	ug/L			01/18/24 10:26	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/18/24 10:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Bromoform	ND		5.0	0.25	ug/L			01/18/24 10:26	1
Bromomethane	ND		1.0	0.98	ug/L			01/18/24 10:26	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/18/24 10:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/18/24 10:26	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/18/24 10:26	1
Chloroethane	ND		1.0	0.76	ug/L			01/18/24 10:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/18/24 10:26	1
Chloroform	ND		1.0	0.90	ug/L			01/18/24 10:26	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/18/24 10:26	1
Chloromethane	ND		1.0	0.90	ug/L			01/18/24 10:26	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/18/24 10:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/18/24 10:26	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/18/24 10:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/18/24 10:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/18/24 10:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/18/24 10:26	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/18/24 10:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/18/24 10:26	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/18/24 10:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/18/24 10:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 10:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 10:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/24 10:26	1

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

Lab Sample ID: MB 400-657968/28
Matrix: Water
Analysis Batch: 657968

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			01/18/24 10:26	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/18/24 10:26	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/18/24 10:26	1
2-Hexanone	ND		25	1.4	ug/L			01/18/24 10:26	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/18/24 10:26	1
Methylene bromide	ND		5.0	0.22	ug/L			01/18/24 10:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/18/24 10:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/18/24 10:26	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/18/24 10:26	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/18/24 10:26	1
Naphthalene	ND		5.0	3.0	ug/L			01/18/24 10:26	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/18/24 10:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/18/24 10:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/18/24 10:26	1
o-Xylene	ND		5.0	0.60	ug/L			01/18/24 10:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/18/24 10:26	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/18/24 10:26	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/18/24 10:26	1
Styrene	ND		1.0	1.0	ug/L			01/18/24 10:26	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/18/24 10:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/18/24 10:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/18/24 10:26	1
Toluene	ND		1.0	0.90	ug/L			01/18/24 10:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/18/24 10:26	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/18/24 10:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/18/24 10:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/18/24 10:26	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/18/24 10:26	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/18/24 10:26	1
Trichloroethene	ND		1.0	0.15	ug/L			01/18/24 10:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/18/24 10:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/18/24 10:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/18/24 10:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/18/24 10:26	1
Vinyl acetate	ND		25	0.93	ug/L			01/18/24 10:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/18/24 10:26	1
Xylenes, Total	ND		10	1.6	ug/L			01/18/24 10:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*72 - 130*		*01/18/24 10:26*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*01/18/24 10:26*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*01/18/24 10:26*	*1*

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

Lab Sample ID: LCS 400-657968/1001
Matrix: Water
Analysis Batch: 657968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	218		ug/L		109	43 - 160
Acrolein	500	637		ug/L		127	38 - 160
Acrylonitrile	500	535		ug/L		107	64 - 142
Benzene	50.0	58.9		ug/L		118	70 - 130
Bromobenzene	50.0	53.3		ug/L		107	70 - 132
Bromochloromethane	50.0	53.2		ug/L		106	70 - 130
Bromodichloromethane	50.0	58.6		ug/L		117	67 - 133
Bromoform	50.0	53.3		ug/L		107	57 - 140
Bromomethane	50.0	41.2		ug/L		82	10 - 160
2-Butanone (MEK)	200	226		ug/L		113	61 - 145
Carbon disulfide	50.0	47.0		ug/L		94	61 - 137
Carbon tetrachloride	50.0	52.2		ug/L		104	61 - 137
Chlorobenzene	50.0	54.3		ug/L		109	70 - 130
Chloroethane	50.0	55.8		ug/L		112	55 - 141
2-Chloroethyl vinyl ether	50.0	81.1	*+	ug/L		162	10 - 160
Chloroform	50.0	55.7		ug/L		111	69 - 130
1-Chlorohexane	50.0	59.2		ug/L		118	69 - 130
Chloromethane	50.0	48.4		ug/L		97	58 - 137
cis-1,2-Dichloroethene	50.0	55.8		ug/L		112	68 - 130
cis-1,3-Dichloropropene	50.0	61.7		ug/L		123	69 - 132
Dibromochloromethane	50.0	54.4		ug/L		109	67 - 135
1,2-Dichlorobenzene	50.0	51.8		ug/L		104	67 - 130
1,3-Dichlorobenzene	50.0	53.0		ug/L		106	70 - 130
1,4-Dichlorobenzene	50.0	52.7		ug/L		105	70 - 130
Dichlorodifluoromethane	50.0	46.7		ug/L		93	41 - 146
1,1-Dichloroethane	50.0	56.2		ug/L		112	70 - 130
1,2-Dichloroethane	50.0	55.8		ug/L		112	69 - 130
1,1-Dichloroethene	50.0	49.1		ug/L		98	63 - 134
1,2-Dichloropropane	50.0	61.6		ug/L		123	70 - 130
1,3-Dichloropropane	50.0	58.3		ug/L		117	70 - 130
2,2-Dichloropropane	50.0	45.6		ug/L		91	52 - 135
1,1-Dichloropropene	50.0	56.6		ug/L		113	70 - 130
Ethylbenzene	50.0	57.0		ug/L		114	70 - 130
Ethyl methacrylate	50.0	57.6		ug/L		115	68 - 130
Hexachlorobutadiene	50.0	55.3		ug/L		111	53 - 140
2-Hexanone	200	229		ug/L		114	65 - 137
Isopropylbenzene	50.0	54.3		ug/L		109	70 - 130
Methylene bromide	50.0	53.7		ug/L		107	70 - 130
Methylene Chloride	50.0	56.3		ug/L		113	66 - 135
4-Methyl-2-pentanone (MIBK)	200	229		ug/L		115	69 - 138
Methyl tert-butyl ether	50.0	55.7		ug/L		111	66 - 130
m-Xylene & p-Xylene	50.0	56.1		ug/L		112	70 - 130
Naphthalene	50.0	49.7		ug/L		99	47 - 149
n-Butylbenzene	50.0	59.2		ug/L		118	67 - 130
N-Propylbenzene	50.0	56.5		ug/L		113	70 - 130
o-Chlorotoluene	50.0	57.3		ug/L		115	70 - 130
o-Xylene	50.0	56.8		ug/L		114	70 - 130
p-Chlorotoluene	50.0	56.5		ug/L		113	70 - 130

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

Lab Sample ID: LCS 400-657968/1001
Matrix: Water
Analysis Batch: 657968

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	54.4		ug/L		109	65 - 130
sec-Butylbenzene	50.0	54.0		ug/L		108	66 - 130
Styrene	50.0	56.0		ug/L		112	70 - 130
tert-Butylbenzene	50.0	50.1		ug/L		100	64 - 139
1,1,1,2-Tetrachloroethane	50.0	55.4		ug/L		111	67 - 131
1,1,2,2-Tetrachloroethane	50.0	55.5		ug/L		111	70 - 131
Tetrachloroethene	50.0	51.6		ug/L		103	65 - 130
Toluene	50.0	55.1		ug/L		110	70 - 130
trans-1,2-Dichloroethene	50.0	52.5		ug/L		105	70 - 130
trans-1,3-Dichloropropene	50.0	57.5		ug/L		115	63 - 130
1,2,3-Trichlorobenzene	50.0	54.0		ug/L		108	60 - 138
1,2,4-Trichlorobenzene	50.0	55.2		ug/L		110	60 - 140
1,1,1-Trichloroethane	50.0	51.6		ug/L		103	68 - 130
1,1,2-Trichloroethane	50.0	56.8		ug/L		114	70 - 130
Trichloroethene	50.0	53.2		ug/L		106	70 - 130
Trichlorofluoromethane	50.0	49.9		ug/L		100	65 - 138
1,2,3-Trichloropropane	50.0	52.5		ug/L		105	70 - 130
1,2,4-Trimethylbenzene	50.0	58.1		ug/L		116	70 - 130
1,3,5-Trimethylbenzene	50.0	55.4		ug/L		111	69 - 130
Vinyl acetate	100	149		ug/L		149	26 - 160
Vinyl chloride	50.0	53.8		ug/L		108	59 - 136
Xylenes, Total	100	113		ug/L		113	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*108*		*72 - 130*
Dibromofluoromethane	*95*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-657668/1-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657668

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
Benzenethiol	ND		10	9.9	ug/L		01/15/24 09:26	01/16/24 13:03	1
Benzoic acid	ND		30	24	ug/L		01/15/24 09:26	01/16/24 13:03	1
Benzyl alcohol	ND		10	7.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		01/15/24 09:26	01/16/24 13:03	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		01/15/24 09:26	01/16/24 13:03	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Chloroaniline	ND		10	4.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
2-Chloronaphthalene	ND		10	3.8	ug/L		01/15/24 09:26	01/16/24 13:03	1
2-Chlorophenol	ND		10	4.1	ug/L		01/15/24 09:26	01/16/24 13:03	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-657668/1-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657668

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		01/15/24 09:26	01/16/24 13:03	1
Dibenzofuran	ND		10	4.0	ug/L		01/15/24 09:26	01/16/24 13:03	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
Diethyl phthalate	ND		10	4.4	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
Dimethyl phthalate	ND		10	4.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		01/15/24 09:26	01/16/24 13:03	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		01/15/24 09:26	01/16/24 13:03	1
1,4-Dioxane	ND		10	4.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
Hexachlorobenzene	ND		10	9.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		01/15/24 09:26	01/16/24 13:03	1
Hexachloroethane	ND		10	5.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
Indene	ND		10	3.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
Isophorone	ND		10	5.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
2-Methylphenol	ND		10	3.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
2-Nitroaniline	ND		10	5.0	ug/L		01/15/24 09:26	01/16/24 13:03	1
3-Nitroaniline	ND		10	4.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Nitroaniline	ND		10	4.1	ug/L		01/15/24 09:26	01/16/24 13:03	1
Nitrobenzene	ND		10	4.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
2-Nitrophenol	ND		10	4.6	ug/L		01/15/24 09:26	01/16/24 13:03	1
4-Nitrophenol	ND		10	3.3	ug/L		01/15/24 09:26	01/16/24 13:03	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		01/15/24 09:26	01/16/24 13:03	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		01/15/24 09:26	01/16/24 13:03	1
Pentachlorophenol	ND		20	12	ug/L		01/15/24 09:26	01/16/24 13:03	1
Phenol	ND		10	4.2	ug/L		01/15/24 09:26	01/16/24 13:03	1
Pyridine	ND		10	10	ug/L		01/15/24 09:26	01/16/24 13:03	1
Quinoline	ND		10	2.4	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		01/15/24 09:26	01/16/24 13:03	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/15/24 09:26	01/16/24 13:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*21 - 114*	*01/15/24 09:26*	*01/16/24 13:03*	*1*
2-Fluorophenol	*50*		*10 - 105*	*01/15/24 09:26*	*01/16/24 13:03*	*1*
Nitrobenzene-d5	*73*		*16 - 127*	*01/15/24 09:26*	*01/16/24 13:03*	*1*
Phenol-d5	*38*		*10 - 129*	*01/15/24 09:26*	*01/16/24 13:03*	*1*
Terphenyl-d14	*104*		*13 - 150*	*01/15/24 09:26*	*01/16/24 13:03*	*1*
2,4,6-Tribromophenol	*82*		*10 - 150*	*01/15/24 09:26*	*01/16/24 13:03*	*1*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-657668/2-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657668

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	37.0		ug/L		31	10 - 127
Benzoic acid	120	117		ug/L		98	19 - 126
Benzyl alcohol	120	79.6		ug/L		66	17 - 109
Bis(2-chloroethoxy)methane	120	66.3		ug/L		55	24 - 125
Bis(2-chloroethyl)ether	120	63.7		ug/L		53	10 - 121
bis (2-chloroisopropyl) ether	120	68.9		ug/L		57	14 - 123
Bis(2-ethylhexyl) phthalate	120	97.5		ug/L		81	16 - 150
4-Bromophenyl phenyl ether	120	106		ug/L		88	17 - 150
Butyl benzyl phthalate	120	105		ug/L		87	21 - 150
4-Chloroaniline	120	66.7		ug/L		56	10 - 124
4-Chloro-3-methylphenol	120	85.8		ug/L		72	37 - 131
2-Chloronaphthalene	120	96.3		ug/L		80	24 - 132
2-Chlorophenol	120	77.5		ug/L		65	27 - 124
4-Chlorophenyl phenyl ether	120	102		ug/L		85	27 - 147
Dibenz[a,h]acridine	114	125		ug/L		109	40 - 140
Dibenzofuran	120	94.4		ug/L		79	30 - 135
3,3'-Dichlorobenzidine	160	143		ug/L		89	10 - 150
2,4-Dichlorophenol	120	95.3		ug/L		79	33 - 132
Diethyl phthalate	120	95.9		ug/L		80	37 - 145
2,4-Dimethylphenol	120	114		ug/L		95	38 - 132
Dimethyl phthalate	120	94.0		ug/L		78	32 - 137
Di-n-butyl phthalate	120	107		ug/L		89	27 - 150
4,6-Dinitro-ortho-cresol	240	209		ug/L		87	14 - 150
2,4-Dinitrophenol	240	173		ug/L		72	15 - 150
2,4-Dinitrotoluene	120	95.7		ug/L		80	35 - 136
2,6-Dinitrotoluene	120	96.5		ug/L		80	29 - 140
Di-n-octyl phthalate	120	97.6		ug/L		81	26 - 150
1,4-Dioxane	120	46.4		ug/L		39	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	107		ug/L		89	23 - 138
Hexachlorobenzene	120	111		ug/L		93	10 - 150
Hexachlorocyclopentadiene	120	90.6		ug/L		76	10 - 124
Hexachloroethane	120	76.7		ug/L		64	10 - 127
Indene	120	92.8		ug/L		77	18 - 150
Isophorone	120	80.9		ug/L		67	28 - 127
2-Methylphenol	120	89.1		ug/L		74	34 - 124
3 & 4 Methylphenol	120	83.5		ug/L		70	32 - 122
2-Nitroaniline	120	95.8		ug/L		80	24 - 139
3-Nitroaniline	120	82.6		ug/L		69	10 - 128
4-Nitroaniline	120	82.6		ug/L		69	28 - 118
Nitrobenzene	120	79.3		ug/L		66	29 - 120
2-Nitrophenol	120	93.7		ug/L		78	25 - 148
4-Nitrophenol	240	211		ug/L		88	12 - 129
N-Nitrosodimethylamine	120	102		ug/L		85	10 - 115
N-Nitrosodi-n-propylamine	120	93.8		ug/L		78	24 - 142
N-Nitrosodiphenylamine	119	107		ug/L		90	29 - 138
Pentachlorophenol	240	164		ug/L		68	19 - 150
Phenol	120	51.2		ug/L		43	11 - 95
Pyridine	240	28.2		ug/L		12	10 - 82

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-657668/2-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657668

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Quinoline			114	76.7		ug/L		67	40 - 140		
2,4,5-Trichlorophenol			120	99.3		ug/L		83	30 - 144		
2,4,6-Trichlorophenol			120	98.0		ug/L		82	27 - 147		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*21 - 114*
2-Fluorophenol	*49*		*10 - 105*
Nitrobenzene-d5	*83*		*16 - 127*
Phenol-d5	*42*		*10 - 129*
Terphenyl-d14	*94*		*13 - 150*
2,4,6-Tribromophenol	*86*		*10 - 150*

Lab Sample ID: LCS 400-657668/4-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657668

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	83.7		ug/L		70	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*21 - 114*
2-Fluorophenol	*49*		*10 - 105*
Nitrobenzene-d5	*67*		*16 - 127*
Phenol-d5	*40*		*10 - 129*
Terphenyl-d14	*107*		*13 - 150*
2,4,6-Tribromophenol	*79*		*10 - 150*

Lab Sample ID: LCSD 400-657668/3-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657668

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	61.1	*1	ug/L		51	10 - 127	49	40
Benzoic acid			120	162	*+	ug/L		135	19 - 126	32	40
Benzyl alcohol			120	93.4		ug/L		78	17 - 109	16	40
Bis(2-chloroethoxy)methane			120	70.5		ug/L		59	24 - 125	6	40
Bis(2-chloroethyl)ether			120	61.8		ug/L		51	10 - 121	3	40
bis (2-chloroisopropyl) ether			120	70.4		ug/L		59	14 - 123	2	40
Bis(2-ethylhexyl) phthalate			120	104		ug/L		86	16 - 150	6	40
4-Bromophenyl phenyl ether			120	107		ug/L		89	17 - 150	1	40
Butyl benzyl phthalate			120	107		ug/L		89	21 - 150	2	40
4-Chloroaniline			120	71.7		ug/L		60	10 - 124	7	40
4-Chloro-3-methylphenol			120	93.4		ug/L		78	37 - 131	8	40
2-Chloronaphthalene			120	102		ug/L		85	24 - 132	6	40
2-Chlorophenol			120	87.3		ug/L		73	27 - 124	12	40
4-Chlorophenyl phenyl ether			120	106		ug/L		88	27 - 147	4	40
Dibenz[a,h]acridine			114	131		ug/L		115	40 - 140	5	40
Dibenzofuran			120	101		ug/L		84	30 - 135	7	40

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-657668/3-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657668

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine			160	148		ug/L		93	10 - 150	4	40
2,4-Dichlorophenol			120	101		ug/L		84	33 - 132	6	40
Diethyl phthalate			120	107		ug/L		89	37 - 145	11	40
2,4-Dimethylphenol			120	122		ug/L		102	38 - 132	7	40
Dimethyl phthalate			120	102		ug/L		85	32 - 137	8	40
Di-n-butyl phthalate			120	113		ug/L		95	27 - 150	6	40
4,6-Dinitro-ortho-cresol			240	225		ug/L		94	14 - 150	7	40
2,4-Dinitrophenol			240	194		ug/L		81	15 - 150	12	40
2,4-Dinitrotoluene			120	99.3		ug/L		83	35 - 136	4	40
2,6-Dinitrotoluene			120	96.9		ug/L		81	29 - 140	0	40
Di-n-octyl phthalate			120	103		ug/L		86	26 - 150	5	40
1,4-Dioxane			120	50.9		ug/L		42	10 - 87	9	40
1,2-Diphenylhydrazine (as Azobenzene)			120	109		ug/L		91	23 - 138	2	40
Hexachlorobenzene			120	117		ug/L		98	10 - 150	5	40
Hexachlorocyclopentadiene			120	101		ug/L		85	10 - 124	11	40
Hexachloroethane			120	82.6		ug/L		69	10 - 127	7	40
Indene			120	98.5		ug/L		82	18 - 150	6	40
Isophorone			120	83.4		ug/L		69	28 - 127	3	40
2-Methylphenol			120	94.9		ug/L		79	34 - 124	6	40
3 & 4 Methylphenol			120	90.2		ug/L		75	32 - 122	8	40
2-Nitroaniline			120	97.4		ug/L		81	24 - 139	2	40
3-Nitroaniline			120	91.3		ug/L		76	10 - 128	10	40
4-Nitroaniline			120	94.3		ug/L		79	28 - 118	13	40
Nitrobenzene			120	84.4		ug/L		70	29 - 120	6	40
2-Nitrophenol			120	100		ug/L		84	25 - 148	7	40
4-Nitrophenol			240	227		ug/L		94	12 - 129	7	40
N-Nitrosodimethylamine			120	115		ug/L		96	10 - 115	12	40
N-Nitrosodi-n-propylamine			120	102		ug/L		85	24 - 142	8	40
N-Nitrosodiphenylamine			119	113		ug/L		95	29 - 138	6	40
Pentachlorophenol			240	178		ug/L		74	19 - 150	8	40
Phenol			120	58.8		ug/L		49	11 - 95	14	40
Pyridine			240	46.5	*1	ug/L		19	10 - 82	49	40
Quinoline			114	97.9		ug/L		86	40 - 140	24	40
2,4,5-Trichlorophenol			120	104		ug/L		87	30 - 144	5	40
2,4,6-Trichlorophenol			120	102		ug/L		85	27 - 147	4	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*21 - 114*
2-Fluorophenol	*54*		*10 - 105*
Nitrobenzene-d5	*84*		*16 - 127*
Phenol-d5	*50*		*10 - 129*
Terphenyl-d14	*100*		*13 - 150*
2,4,6-Tribromophenol	*92*		*10 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-657668/5-A
Matrix: Water
Analysis Batch: 657759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657668

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	72.3		ug/L		60	40 - 140	15	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*21 - 114*
2-Fluorophenol	*44*		*10 - 105*
Nitrobenzene-d5	*62*		*16 - 127*
Phenol-d5	*38*		*10 - 129*
Terphenyl-d14	*97*		*13 - 150*
2,4,6-Tribromophenol	*80*		*10 - 150*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-657912/1-A
Matrix: Water
Analysis Batch: 657957

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		01/17/24 11:34	01/17/24 17:23	1
Acenaphthylene	ND		0.20	0.044	ug/L		01/17/24 11:34	01/17/24 17:23	1
Anthracene	ND		0.20	0.047	ug/L		01/17/24 11:34	01/17/24 17:23	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		01/17/24 11:34	01/17/24 17:23	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		01/17/24 11:34	01/17/24 17:23	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		01/17/24 11:34	01/17/24 17:23	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/17/24 11:34	01/17/24 17:23	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		01/17/24 11:34	01/17/24 17:23	1
Chrysene	ND		0.20	0.033	ug/L		01/17/24 11:34	01/17/24 17:23	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		01/17/24 11:34	01/17/24 17:23	1
Fluoranthene	ND		0.20	0.034	ug/L		01/17/24 11:34	01/17/24 17:23	1
Fluorene	ND		0.20	0.089	ug/L		01/17/24 11:34	01/17/24 17:23	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		01/17/24 11:34	01/17/24 17:23	1
Phenanthrene	ND		0.20	0.090	ug/L		01/17/24 11:34	01/17/24 17:23	1
Pyrene	ND		0.20	0.039	ug/L		01/17/24 11:34	01/17/24 17:23	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		01/17/24 11:34	01/17/24 17:23	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		01/17/24 11:34	01/17/24 17:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*194*	*S1+*	*18 - 147*	*01/17/24 11:34*	*01/17/24 17:23*	*1*
2-Fluorobiphenyl	*100*		*15 - 128*	*01/17/24 11:34*	*01/17/24 17:23*	*1*
Nitrobenzene-d5	*73*		*10 - 144*	*01/17/24 11:34*	*01/17/24 17:23*	*1*

Lab Sample ID: LCS 400-657912/2-A
Matrix: Water
Analysis Batch: 657957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657912

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acenaphthene			120	118		ug/L		98	40 - 140		
Acenaphthylene			120	110		ug/L		92	40 - 140		
Anthracene			120	100	E	ug/L		83	40 - 140		

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 400-657912/2-A
Matrix: Water
Analysis Batch: 657957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657912

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzo[a]anthracene			120	133		ug/L		111	40 - 140		
Benzo[a]pyrene			120	122		ug/L		102	40 - 140		
Benzo[b]fluoranthene			120	164		ug/L		137	40 - 140		
Benzo[g,h,i]perylene			120	113		ug/L		94	40 - 140		
Benzo[k]fluoranthene			120	117		ug/L		97	40 - 140		
Chrysene			120	108		ug/L		90	40 - 140		
Dibenz(a,h)anthracene			120	134		ug/L		111	40 - 140		
Fluoranthene			120	97.6	E	ug/L		81	40 - 140		
Fluorene			120	123		ug/L		102	40 - 140		
Indeno[1,2,3-cd]pyrene			120	136		ug/L		113	40 - 140		
Phenanthrene			120	117		ug/L		97	40 - 140		
Pyrene			120	112		ug/L		93	40 - 140		
1-Methylnaphthalene			120	111		ug/L		92	40 - 140		
2-Methylnaphthalene			120	115		ug/L		96	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*82*		*18 - 147*
2-Fluorobiphenyl	*84*		*15 - 128*
Nitrobenzene-d5	*89*		*10 - 144*

Lab Sample ID: LCSD 400-657912/3-A
Matrix: Water
Analysis Batch: 657957

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657912

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	122		ug/L		102	40 - 140	4	40
Acenaphthylene			120	116		ug/L		96	40 - 140	5	40
Anthracene			120	103	E	ug/L		86	40 - 140	3	40
Benzo[a]anthracene			120	141		ug/L		117	40 - 140	6	40
Benzo[a]pyrene			120	130		ug/L		108	40 - 140	6	40
Benzo[b]fluoranthene			120	171	*+	ug/L		143	40 - 140	4	40
Benzo[g,h,i]perylene			120	125		ug/L		104	40 - 140	9	40
Benzo[k]fluoranthene			120	125		ug/L		104	40 - 140	6	40
Chrysene			120	115		ug/L		96	40 - 140	6	40
Dibenz(a,h)anthracene			120	144		ug/L		120	40 - 140	8	40
Fluoranthene			120	101	E	ug/L		84	40 - 140	3	40
Fluorene			120	128		ug/L		107	40 - 140	4	40
Indeno[1,2,3-cd]pyrene			120	146		ug/L		122	40 - 140	7	40
Phenanthrene			120	122		ug/L		102	40 - 140	4	40
Pyrene			120	118		ug/L		98	40 - 140	5	40
1-Methylnaphthalene			120	114		ug/L		95	40 - 140	3	40
2-Methylnaphthalene			120	117		ug/L		98	40 - 140	2	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*86*		*18 - 147*
2-Fluorobiphenyl	*88*		*15 - 128*
Nitrobenzene-d5	*92*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-657905/1-A
Matrix: Water
Analysis Batch: 657923

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657905

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		01/17/24 10:31	01/17/24 15:53	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/17/24 10:31	01/17/24 15:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*	*p*	*51 - 149*	*01/17/24 10:31*	*01/17/24 15:53*	*1*

Lab Sample ID: LCS 400-657905/2-A
Matrix: Water
Analysis Batch: 657923

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657905

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0986		ug/L		98	60 - 140		
1,2-Dibromoethane			0.100	0.0926		ug/L		92	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*86*	*p*	*51 - 149*

Lab Sample ID: LCSD 400-657905/3-A
Matrix: Water
Analysis Batch: 657923

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657905

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0963		ug/L		96	60 - 140	2	30
1,2-Dibromoethane			0.100	0.0915		ug/L		91	60 - 140	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*85*	*p*	*51 149*

Lab Sample ID: MB 400-658010/1-A
Matrix: Water
Analysis Batch: 658027

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 658010

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		01/18/24 11:45	01/18/24 16:17	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/24 11:45	01/18/24 16:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*125*		*51 - 149*	*01/18/24 11:45*	*01/18/24 16:17*	*1*

Lab Sample ID: LCS 400-658010/2-A
Matrix: Water
Analysis Batch: 658027

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 658010

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.105		ug/L		104	60 - 140		
1,2-Dibromoethane			0.100	0.104		ug/L		104	60 - 140		

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCS 400-658010/2-A
Matrix: Water
Analysis Batch: 658027

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 658010

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*119*		*51 - 149*

Lab Sample ID: LCSD 400-658010/3-A
Matrix: Water
Analysis Batch: 658027

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 658010

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.105		ug/L		104	60 - 140	0	30
1,2-Dibromoethane			0.100	0.101		ug/L		101	60 - 140	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*120*		*51 - 149*

LAB (LOCATION 400-249625 COC

Shell Oil Products US Chain Of Custody Record

AECOM

☐ 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
Melissa Remiger	25278	DATE: 1/8/2024
PO #	**GSAP Project ID**	PAGE: 1 of 2
60721927 – 3.1.2	USPC/00114/R/02	

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS: Street and City:	State:	AECOM Project / Task Number:
AECOM		900 South Central Ave; ROXANA	IL	Roxana Quarterly GW 60721927 – 3.1.2

ADDRESS:	EDF DELIVERABLE TO (Name, Company, Office Location):	PHONE NO:	E-MAIL:	AECOM Other ID:
100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA	Melissa Remiger - please see special instructions	314-802-1207	melissa.remiger@aecom.com	

PROJECT CONTACT (Hardcopy or PDF Report to):	TELEPHONE:	FAX:	Bill To Contact E-MAIL:
Melissa Remiger, Mary Massa, Brett Howell	314-429-0100	314-429-0462	melissa.remiger@aecom.com

SAMPLER NAME(S) (Print): M. MASSA ; E. CHALFANT

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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

* Please include "J" values on Reports.
* Please provide sample receipt upon login.
* Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.1.2

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 8270 SIMS
	TB-ROX-011024-8260-B	1/10/2024	0000	Water	2						X			
	TB-ROX-011024-8011-B	1/10/2024	0000	Water	2							X		
	P56-ROX-011024	1/10/2024	0935	Water	6			2			X	X	X	X
	P93D-ROX-011024	1/10/2024	1050	Water	6			2			X	X	X	X
	P93A-ROX-011024	1/10/2024	1130	Water	6			2			X	X	X	X

EOC 01/10/24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
E. CHALFANT	FEDEX: 6339 6598 2678	1/10/2024	1800
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
		1-12-24	0931 5,4°C IR10
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sep23

CUSTODY SEALS -159981 ; 1599819

1/22/2024

LAB (LOCATION)

Shell Oil Products US Chain Of Custody Record

AECOM

☐ 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
Melissa Remiger	25278	DATE: 1/10/2024
PO #	**GSAP Project ID**	PAGE: 2 of 2
60721927 3.1.2	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 60721927 3.1.2
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions
PHONE NO.: 314-802-1207
E-MAIL: melissa.remiger@aecom.com
AECOM Other ID:
PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell
SAMPLER NAME(S) (Print): C. McDavid, T. Jenkins
LAB USE ONLY
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C° | Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES:

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

* Please include "J" values on Reports.
* Please provide sample receipt upon login.
* Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 3.1.2

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 8270 SIMS
	TB-ROX-011024-8260-A	1/10/2024	0000	Water	2					2	X			
	TB-ROX-011024-8011-A	1/10/2024	0000	Water	2					2		X		
	MW13-ROX-011024	1/10/2024	0950	Water	6			2		8	X	X	X	X
	P114R-ROX-011024	1/10/2024	1250	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: See page 1	1/10/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
		1-12-24	0931 5.4°C ERO
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: See page 1

1/22/2024

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-249625-1

Login Number: 249625
List Number: 1
Creator: Earnest, Tamantha

List Source: Eurofins 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	5.4°C IR10
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").	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. Job ID: 400-249625-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Roxana Groundwater Quarterly – 1st Quarter 2024 Data Review

Laboratory SDG: 400-249691-1

Data Reviewer: Adelina Gita

Peer Reviewer: Cheyana Cokley

Date Reviewed: 2/29/2024

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

Sample Identification	Sample Identification
TB-ROX-011224-8260-A	TB-ROX-011224-8011-A
MW22-ROX-011224-EB	MW22-ROX-011224
MW22-ROX-011224-DUP	TB-ROX-011224-8011-B
TB-ROX-011224-8260-B	P59-ROX-011224
P58-ROX-011224	P58-ROX-011224-DUP
P93B-ROX-011224	-

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 initial calibration verification (ICV) for 2,4-dimethylphenol was outside evaluation criteria, biased high. The initial calibration verification (ICV) for 3,3'-dichlorobenzidine was outside evaluation criteria, biased low. VOCs were diluted to bring the concentration of target analytes within the calibration range of the instrument, and PAHs in field duplicate pair P58-ROX-011224/P58-ROX-011224-DUP were diluted to bring the concentration of target analytes within the calibration range of the instrument. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (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?

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?

Yes

Field ID	Field Duplicate ID
MW22-ROX-011224	MW22-ROX-011224-DUP
P58-ROX-011224	P58-ROX-011224-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 initial calibration verifications (ICV) for 2,4-dimethylphenol, was outside evaluation criteria, biased high. The initial calibration verification (ICV) for 3,3'-dichlorobenzidine was outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW22-ROX-011224	SVOCs	2,4-Dimethylphenol	**J**
MW22-ROX-011224-DUP	SVOCs	2,4-Dimethylphenol	**J**
MW22-ROX-011224	SVOCs	3,3'-Dichlorobenzidine	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW22-ROX-011224-DUP	SVOCs	3,3'-Dichlorobenzidine	**UJ**
P59-ROX-011224	SVOCs	3,3'-Dichlorobenzidine	**UJ**
P58-ROX-011224	SVOCs	3,3'-Dichlorobenzidine	**UJ**
P58-ROX-011224-DUP	SVOCs	3,3'-Dichlorobenzidine	**UJ**
P93B-ROX-011224	SVOCs	3,3'-Dichlorobenzidine	**UJ**

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ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
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JOB DESCRIPTION

SHELL ROXANA QUARTERLY GW

JOB NUMBER

400-249691-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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Job ID: 400-249691-1 Eurofins Pensacola

Job Narrative
400-249691-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 1/15/2024 9:32 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 time was 0.1°C

GC/MS VOA
Method 8260D: 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-011224-8260-A (400-249691-1), MW22-ROX-011224-EB (400-249691-3), MW22-ROX-011224-DUP (400-249691-5), TB-ROX-011224-8260-B (400-249691-7), P59-ROX-011224 (400-249691-8), P58-ROX-011224 (400-249691-9), P58-ROX-011224-DUP (400-249691-10) and P93B-ROX-011224 (400-249691-11). 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 8260D: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW22-ROX-011224 (400-249691-4), MW22-ROX-011224-DUP (400-249691-5), P59-ROX-011224 (400-249691-8), P58-ROX-011224 (400-249691-9), P58-ROX-011224-DUP (400-249691-10) and P93B-ROX-011224 (400-249691-11). 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 8270E: The initial calibration verification (ICV) analyzed in batch 400-654856 was outside method criteria for the following analyte(s): 3,3'-Dichlorobenzidine, 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-657939 recovered above the upper control limit for Dibenz(a,h)anthracene. The samples associated with this CCV were below the reporting limit for the affected analytes; therefore, the data have been reported.

Method 8270E_SIM: The following samples were diluted to bring the concentration of target analytes within the calibration range: P58-ROX-011224 (400-249691-9) and P58-ROX-011224-DUP (400-249691-10). 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 Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: AECOM Technical Services Inc.
Job ID: 400-249691-1
Project/Site: SHELL ROXANA QUARTERLY GW

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-249691-1	TB-ROX-011224-8260-A	Water	01/12/24 00:00	01/15/24 09:32
400-249691-2	TB-ROX-011224-8011-A	Water	01/12/24 00:00	01/15/24 09:32
400-249691-3	MW22-ROX-011224-EB	Water	01/12/24 10:20	01/15/24 09:32
400-249691-4	MW22-ROX-011224	Water	01/12/24 11:00	01/15/24 09:32
400-249691-5	MW22-ROX-011224-DUP	Water	01/12/24 11:00	01/15/24 09:32
400-249691-6	TB-ROX-011224-8011-B	Water	01/12/24 00:00	01/15/24 09:32
400-249691-7	TB-ROX-011224-8260-B	Water	01/12/24 00:00	01/15/24 09:32
400-249691-8	P59-ROX-011224	Water	01/12/24 10:15	01/15/24 09:32
400-249691-9	P58-ROX-011224	Water	01/12/24 11:10	01/15/24 09:32
400-249691-10	P58-ROX-011224-DUP	Water	01/12/24 11:10	01/15/24 09:32
400-249691-11	P93B-ROX-011224	Water	01/12/24 12:25	01/15/24 09:32

Detection Summary

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

Job ID: 400-249691-1

Client Sample ID: TB-ROX-011224-8260-A — Lab Sample ID: 400-249691-1

No Detections.

Client Sample ID: TB-ROX-011224-8011-A — Lab Sample ID: 400-249691-2

No Detections.

Client Sample ID: MW22-ROX-011224-EB — Lab Sample ID: 400-249691-3

No Detections.

Client Sample ID: MW22-ROX-011224 — Lab Sample ID: 400-249691-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	130		5.0	2.5	ug/L	5		8260D	Total/NA
Ethylbenzene	340		5.0	2.5	ug/L	5		8260D	Total/NA
Isopropylbenzene	60		5.0	2.7	ug/L	5		8260D	Total/NA
Methyl tert-butyl ether	1.3	J	5.0	1.1	ug/L	5		8260D	Total/NA
m-Xylene & p-Xylene	760		25	3.2	ug/L	5		8260D	Total/NA
Naphthalene	140		25	15	ug/L	5		8260D	Total/NA
n-Butylbenzene	9.3		5.0	3.8	ug/L	5		8260D	Total/NA
N-Propylbenzene	110		5.0	3.5	ug/L	5		8260D	Total/NA
o-Xylene	39		25	3.0	ug/L	5		8260D	Total/NA
p-Isopropyltoluene	4.8	J	5.0	3.6	ug/L	5		8260D	Total/NA
sec-Butylbenzene	5.3		5.0	3.5	ug/L	5		8260D	Total/NA
tert-Butylbenzene	10		5.0	3.2	ug/L	5		8260D	Total/NA
Toluene	60		5.0	4.5	ug/L	5		8260D	Total/NA
1,2,4-Trimethylbenzene	160		5.0	4.1	ug/L	5		8260D	Total/NA
1,3,5-Trimethylbenzene	130		5.0	2.8	ug/L	5		8260D	Total/NA
Xylenes, Total	800		50	8.0	ug/L	5		8260D	Total/NA
Acenaphthene	0.10	J	0.20	0.097	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	12		0.20	0.079	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	17		0.20	0.065	ug/L	1		8270E SIM	Total/NA
2,4-Dimethylphenol	10		9.8	5.1	ug/L	1		8270E	Total/NA

Client Sample ID: MW22-ROX-011224-DUP — Lab Sample ID: 400-249691-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	120		5.0	2.5	ug/L	5		8260D	Total/NA
Ethylbenzene	290		5.0	2.5	ug/L	5		8260D	Total/NA
Isopropylbenzene	51		5.0	2.7	ug/L	5		8260D	Total/NA
m-Xylene & p-Xylene	650		25	3.2	ug/L	5		8260D	Total/NA
Naphthalene	130		25	15	ug/L	5		8260D	Total/NA
n-Butylbenzene	7.8		5.0	3.8	ug/L	5		8260D	Total/NA
N-Propylbenzene	86		5.0	3.5	ug/L	5		8260D	Total/NA
o-Xylene	33		25	3.0	ug/L	5		8260D	Total/NA
p-Isopropyltoluene	3.9	J	5.0	3.6	ug/L	5		8260D	Total/NA
sec-Butylbenzene	4.5	J	5.0	3.5	ug/L	5		8260D	Total/NA
tert-Butylbenzene	8.7		5.0	3.2	ug/L	5		8260D	Total/NA
Toluene	52		5.0	4.5	ug/L	5		8260D	Total/NA
1,2,4-Trimethylbenzene	130		5.0	4.1	ug/L	5		8260D	Total/NA
1,3,5-Trimethylbenzene	110		5.0	2.8	ug/L	5		8260D	Total/NA
Xylenes, Total	680		50	8.0	ug/L	5		8260D	Total/NA
Acenaphthene	0.11	J	0.19	0.095	ug/L	1		8270E SIM	Total/NA
Fluorene	0.090	J	0.19	0.085	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	13		0.19	0.077	ug/L	1		8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW22-ROX-011224-DUP (Continued)
Lab Sample ID: 400-249691-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	18		0.19	0.063	ug/L	1		8270E SIM	Total/NA
2,4-Dimethylphenol	11		9.6	5.0	ug/L	1		8270E	Total/NA

Client Sample ID: TB-ROX-011224-8011-B
Lab Sample ID: 400-249691-6

No Detections.

Client Sample ID: TB-ROX-011224-8260-B
Lab Sample ID: 400-249691-7

No Detections.

Client Sample ID: P59-ROX-011224
Lab Sample ID: 400-249691-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1600		10	5.0	ug/L	10		8260D	Total/NA
Ethylbenzene	160		10	5.0	ug/L	10		8260D	Total/NA
Isopropylbenzene	47		10	5.3	ug/L	10		8260D	Total/NA
m-Xylene & p-Xylene	120		50	6.3	ug/L	10		8260D	Total/NA
Naphthalene	44	J	50	30	ug/L	10		8260D	Total/NA
N-Propylbenzene	66		10	6.9	ug/L	10		8260D	Total/NA
Toluene	75		10	9.0	ug/L	10		8260D	Total/NA
1,2,4-Trimethylbenzene	31		10	8.2	ug/L	10		8260D	Total/NA
1,3,5-Trimethylbenzene	32		10	5.6	ug/L	10		8260D	Total/NA
Xylenes, Total	120		100	16	ug/L	10		8260D	Total/NA
Acenaphthene	0.45		0.21	0.10	ug/L	1		8270E SIM	Total/NA
Anthracene	0.23		0.21	0.050	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.075	J	0.21	0.036	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.050	J	0.21	0.039	ug/L	1		8270E SIM	Total/NA
Benzo[g,h,i]perylene	0.037	J	0.21	0.028	ug/L	1		8270E SIM	Total/NA
Chrysene	0.084	J	0.21	0.035	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.14	J	0.21	0.036	ug/L	1		8270E SIM	Total/NA
Fluorene	0.25		0.21	0.094	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.71		0.21	0.095	ug/L	1		8270E SIM	Total/NA
Pyrene	0.36		0.21	0.041	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	8.2		0.21	0.084	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	11		0.21	0.070	ug/L	1		8270E SIM	Total/NA
Phenol	17		11	4.4	ug/L	1		8270E	Total/NA

Client Sample ID: P58-ROX-011224
Lab Sample ID: 400-249691-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	240000		1000	500	ug/L	1000		8260D	Total/NA
Acenaphthene	0.58		0.21	0.10	ug/L	1		8270E SIM	Total/NA
Anthracene	0.36		0.21	0.049	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.34		0.21	0.035	ug/L	1		8270E SIM	Total/NA
Benzo[a]pyrene	0.29		0.21	0.066	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.16	J	0.21	0.038	ug/L	1		8270E SIM	Total/NA
Benzo[g,h,i]perylene	0.13	J	0.21	0.028	ug/L	1		8270E SIM	Total/NA
Chrysene	0.56		0.21	0.034	ug/L	1		8270E SIM	Total/NA
Dibenz(a,h)anthracene	0.071	J	0.21	0.050	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.20	J	0.21	0.035	ug/L	1		8270E SIM	Total/NA
Fluorene	1.4		0.21	0.092	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.073	J	0.21	0.035	ug/L	1		8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: P58-ROX-011224 (Continued)
Lab Sample ID: 400-249691-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	2.1		0.21	0.093	ug/L	1		8270E SIM	Total/NA
Pyrene	0.88		0.21	0.040	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	19		0.21	0.068	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene - DL	58		0.41	0.17	ug/L	2		8270E SIM	Total/NA
Phenol	310		10	4.3	ug/L	1		8270E	Total/NA

Client Sample ID: P58-ROX-011224-DUP
Lab Sample ID: 400-249691-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	250000		1000	500	ug/L	1000		8260D	Total/NA
Acenaphthene	0.60		0.20	0.10	ug/L	1		8270E SIM	Total/NA
Anthracene	0.46		0.20	0.048	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.33		0.20	0.035	ug/L	1		8270E SIM	Total/NA
Benzo[a]pyrene	0.28		0.20	0.065	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.18	J	0.20	0.038	ug/L	1		8270E SIM	Total/NA
Benzo[g,h,i]perylene	0.12	J	0.20	0.028	ug/L	1		8270E SIM	Total/NA
Chrysene	0.61		0.20	0.034	ug/L	1		8270E SIM	Total/NA
Dibenz(a,h)anthracene	0.087	J	0.20	0.049	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.19	J	0.20	0.035	ug/L	1		8270E SIM	Total/NA
Fluorene	1.4		0.20	0.091	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.070	J	0.20	0.035	ug/L	1		8270E SIM	Total/NA
Phenanthrene	2.1		0.20	0.092	ug/L	1		8270E SIM	Total/NA
Pyrene	0.94		0.20	0.040	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	19		0.20	0.067	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene - DL	58		0.41	0.16	ug/L	2		8270E SIM	Total/NA
Phenol	280		10	4.3	ug/L	1		8270E	Total/NA

Client Sample ID: P93B-ROX-011224
Lab Sample ID: 400-249691-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	690000		2500	1300	ug/L	2500		8260D	Total/NA
Acenaphthylene	0.10	J	0.21	0.046	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	0.22		0.21	0.085	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	0.17	J	0.21	0.070	ug/L	1		8270E SIM	Total/NA
Phenol	200		11	4.4	ug/L	1		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-249691-1

Client Sample ID: TB-ROX-011224-8260-A
Date Collected: 01/12/24 00:00
Date Received: 01/15/24 09:32

Lab Sample ID: 400-249691-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/17/24 09:48	1
Acrolein	ND		20	3.3	ug/L			01/17/24 09:48	1
Acrylonitrile	ND		10	2.8	ug/L			01/17/24 09:48	1
Benzene	ND		1.0	0.50	ug/L			01/17/24 09:48	1
Bromobenzene	ND		1.0	0.54	ug/L			01/17/24 09:48	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/17/24 09:48	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/17/24 09:48	1
Bromoform	ND		5.0	0.25	ug/L			01/17/24 09:48	1
Bromomethane	ND		1.0	0.98	ug/L			01/17/24 09:48	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/17/24 09:48	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/17/24 09:48	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/17/24 09:48	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/17/24 09:48	1
Chloroethane	ND		1.0	0.76	ug/L			01/17/24 09:48	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/17/24 09:48	1
Chloroform	ND		1.0	0.90	ug/L			01/17/24 09:48	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/17/24 09:48	1
Chloromethane	ND		1.0	0.90	ug/L			01/17/24 09:48	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/17/24 09:48	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/17/24 09:48	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/17/24 09:48	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/17/24 09:48	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/17/24 09:48	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/17/24 09:48	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/17/24 09:48	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/17/24 09:48	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/17/24 09:48	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 09:48	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 09:48	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 09:48	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 09:48	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/17/24 09:48	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/17/24 09:48	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/17/24 09:48	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/17/24 09:48	1
2-Hexanone	ND		25	1.4	ug/L			01/17/24 09:48	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/17/24 09:48	1
Methylene bromide	ND		5.0	0.22	ug/L			01/17/24 09:48	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/17/24 09:48	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/17/24 09:48	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/17/24 09:48	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/17/24 09:48	1
Naphthalene	ND		5.0	3.0	ug/L			01/17/24 09:48	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/17/24 09:48	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/17/24 09:48	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/17/24 09:48	1
o-Xylene	ND		5.0	0.60	ug/L			01/17/24 09:48	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/17/24 09:48	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/17/24 09:48	1

Client: AECOM Technical Services Inc.
Job ID: 400-249691-1
Project/Site: SHELL ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-011224-8260-A
Lab Sample ID: 400-249691-1
Date Collected: 01/12/24 00:00
Matrix: Water
Date Received: 01/15/24 09:32

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/17/24 09:48	1
Styrene	ND		1.0	1.0	ug/L			01/17/24 09:48	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/17/24 09:48	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/17/24 09:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/17/24 09:48	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/17/24 09:48	1
Toluene	ND		1.0	0.90	ug/L			01/17/24 09:48	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 09:48	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/17/24 09:48	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/17/24 09:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/17/24 09:48	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/17/24 09:48	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/17/24 09:48	1
Trichloroethene	ND		1.0	0.15	ug/L			01/17/24 09:48	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/17/24 09:48	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/17/24 09:48	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/17/24 09:48	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/17/24 09:48	1
Vinyl acetate	ND		25	0.93	ug/L			01/17/24 09:48	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/17/24 09:48	1
Xylenes, Total	ND		10	1.6	ug/L			01/17/24 09:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*01/17/24 09:48*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/17/24 09:48*	*1*
Toluene-d8 (Surr)	*88*		*64 - 132*		*01/17/24 09:48*	*1*

Client: AECOM Technical Services Inc.
Job ID: 400-249691-1
Project/Site: SHELL ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-011224-8011-A
Lab Sample ID: 400-249691-2
Date Collected: 01/12/24 00:00
Matrix: Water
Date Received: 01/15/24 09:32

Method: EPA 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		01/18/24 11:45	01/18/24 18:23	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		01/18/24 11:45	01/18/24 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*	*p*	*51 - 149*	*01/18/24 11:45*	*01/18/24 18:23*	*1*

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

Job ID: 400-249691-1

Client Sample ID: MW22-ROX-011224-EB
Date Collected: 01/12/24 10:20
Date Received: 01/15/24 09:32

Lab Sample ID: 400-249691-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/17/24 09:23	1
Acrolein	ND		20	3.3	ug/L			01/17/24 09:23	1
Acrylonitrile	ND		10	2.8	ug/L			01/17/24 09:23	1
Benzene	ND		1.0	0.50	ug/L			01/17/24 09:23	1
Bromobenzene	ND		1.0	0.54	ug/L			01/17/24 09:23	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/17/24 09:23	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/17/24 09:23	1
Bromoform	ND		5.0	0.25	ug/L			01/17/24 09:23	1
Bromomethane	ND		1.0	0.98	ug/L			01/17/24 09:23	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/17/24 09:23	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/17/24 09:23	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/17/24 09:23	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/17/24 09:23	1
Chloroethane	ND		1.0	0.76	ug/L			01/17/24 09:23	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/17/24 09:23	1
Chloroform	ND		1.0	0.90	ug/L			01/17/24 09:23	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/17/24 09:23	1
Chloromethane	ND		1.0	0.90	ug/L			01/17/24 09:23	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/17/24 09:23	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/17/24 09:23	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/17/24 09:23	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/17/24 09:23	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/17/24 09:23	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/17/24 09:23	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/17/24 09:23	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/17/24 09:23	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/17/24 09:23	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 09:23	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 09:23	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 09:23	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 09:23	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/17/24 09:23	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/17/24 09:23	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/17/24 09:23	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/17/24 09:23	1
2-Hexanone	ND		25	1.4	ug/L			01/17/24 09:23	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/17/24 09:23	1
Methylene bromide	ND		5.0	0.22	ug/L			01/17/24 09:23	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/17/24 09:23	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/17/24 09:23	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/17/24 09:23	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/17/24 09:23	1
Naphthalene	ND		5.0	3.0	ug/L			01/17/24 09:23	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/17/24 09:23	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/17/24 09:23	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/17/24 09:23	1
o-Xylene	ND		5.0	0.60	ug/L			01/17/24 09:23	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/17/24 09:23	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/17/24 09:23	1

Client: AECOM Technical Services Inc.
Job ID: 400-249691-1
Project/Site: SHELL ROXANA QUARTERLY GW

Client Sample ID: MW22-ROX-011224-EB
Lab Sample ID: 400-249691-3
Date Collected: 01/12/24 10:20
Matrix: Water
Date Received: 01/15/24 09:32

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/17/24 09:23	1
Styrene	ND		1.0	1.0	ug/L			01/17/24 09:23	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/17/24 09:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/17/24 09:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/17/24 09:23	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/17/24 09:23	1
Toluene	ND		1.0	0.90	ug/L			01/17/24 09:23	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 09:23	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/17/24 09:23	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/17/24 09:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/17/24 09:23	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/17/24 09:23	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/17/24 09:23	1
Trichloroethene	ND		1.0	0.15	ug/L			01/17/24 09:23	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/17/24 09:23	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/17/24 09:23	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/17/24 09:23	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/17/24 09:23	1
Vinyl acetate	ND		25	0.93	ug/L			01/17/24 09:23	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/17/24 09:23	1
Xylenes, Total	ND		10	1.6	ug/L			01/17/24 09:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*01/17/24 09:23*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*01/17/24 09:23*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*01/17/24 09:23*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.095	ug/L		01/16/24 11:18	01/17/24 20:43	1
Acenaphthylene	ND		0.19	0.042	ug/L		01/16/24 11:18	01/17/24 20:43	1
Anthracene	ND		0.19	0.045	ug/L		01/16/24 11:18	01/17/24 20:43	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		01/16/24 11:18	01/17/24 20:43	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		01/16/24 11:18	01/17/24 20:43	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		01/16/24 11:18	01/17/24 20:43	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		01/16/24 11:18	01/17/24 20:43	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		01/16/24 11:18	01/17/24 20:43	1
Chrysene	ND		0.19	0.032	ug/L		01/16/24 11:18	01/17/24 20:43	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		01/16/24 11:18	01/17/24 20:43	1
Fluoranthene	ND		0.19	0.033	ug/L		01/16/24 11:18	01/17/24 20:43	1
Fluorene	ND		0.19	0.085	ug/L		01/16/24 11:18	01/17/24 20:43	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		01/16/24 11:18	01/17/24 20:43	1
Phenanthrene	ND		0.19	0.086	ug/L		01/16/24 11:18	01/17/24 20:43	1
Pyrene	ND		0.19	0.037	ug/L		01/16/24 11:18	01/17/24 20:43	1
1-Methylnaphthalene	ND		0.19	0.077	ug/L		01/16/24 11:18	01/17/24 20:43	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		01/16/24 11:18	01/17/24 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*18 - 147*	*01/16/24 11:18*	*01/17/24 20:43*	*1*
2-Fluorobiphenyl	*72*		*15 - 128*	*01/16/24 11:18*	*01/17/24 20:43*	*1*

Client: AECOM Technical Services Inc.
Job ID: 400-249691-1
Project/Site: SHELL ROXANA QUARTERLY GW

Client Sample ID: MW22-ROX-011224-EB
Lab Sample ID: 400-249691-3
Date Collected: 01/12/24 10:20
Matrix: Water
Date Received: 01/15/24 09:32

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*74*		*10 - 144*	*01/16/24 11:18*	*01/17/24 20:43*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	8.3	ug/L		01/16/24 11:18	01/16/24 17:56	1
Benzenethiol	ND		9.6	9.5	ug/L		01/16/24 11:18	01/16/24 17:56	1
Benzoic acid	ND		29	23	ug/L		01/16/24 11:18	01/16/24 17:56	1
Benzyl alcohol	ND		9.6	7.0	ug/L		01/16/24 11:18	01/16/24 17:56	1
Bis(2-chloroethoxy)methane	ND		9.6	4.4	ug/L		01/16/24 11:18	01/16/24 17:56	1
Bis(2-chloroethyl)ether	ND		9.6	3.7	ug/L		01/16/24 11:18	01/16/24 17:56	1
bis (2-chloroisopropyl) ether	ND		9.6	1.7	ug/L		01/16/24 11:18	01/16/24 17:56	1
Bis(2-ethylhexyl) phthalate	ND		9.6	8.5	ug/L		01/16/24 11:18	01/16/24 17:56	1
4-Bromophenyl phenyl ether	ND		9.6	8.2	ug/L		01/16/24 11:18	01/16/24 17:56	1
Butyl benzyl phthalate	ND		9.6	5.6	ug/L		01/16/24 11:18	01/16/24 17:56	1
4-Chloroaniline	ND		9.6	4.5	ug/L		01/16/24 11:18	01/16/24 17:56	1
4-Chloro-3-methylphenol	ND		9.6	5.1	ug/L		01/16/24 11:18	01/16/24 17:56	1
2-Chloronaphthalene	ND		9.6	3.6	ug/L		01/16/24 11:18	01/16/24 17:56	1
2-Chlorophenol	ND		9.6	3.9	ug/L		01/16/24 11:18	01/16/24 17:56	1
4-Chlorophenyl phenyl ether	ND		9.6	3.5	ug/L		01/16/24 11:18	01/16/24 17:56	1
Dibenz[a,h]acridine	ND		9.6	2.7	ug/L		01/16/24 11:18	01/16/24 17:56	1
Dibenzofuran	ND		9.6	3.8	ug/L		01/16/24 11:18	01/16/24 17:56	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/16/24 11:18	01/16/24 17:56	1
2,4-Dichlorophenol	ND		9.6	4.1	ug/L		01/16/24 11:18	01/16/24 17:56	1
Diethyl phthalate	ND		9.6	4.2	ug/L		01/16/24 11:18	01/16/24 17:56	1
2,4-Dimethylphenol	ND		9.6	5.0	ug/L		01/16/24 11:18	01/16/24 17:56	1
Dimethyl phthalate	ND		9.6	4.0	ug/L		01/16/24 11:18	01/16/24 17:56	1
Di-n-butyl phthalate	ND		9.6	4.4	ug/L		01/16/24 11:18	01/16/24 17:56	1
4,6-Dinitro-ortho-cresol	ND		9.6	9.6	ug/L		01/16/24 11:18	01/16/24 17:56	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		01/16/24 11:18	01/16/24 17:56	1
2,4-Dinitrotoluene	ND		9.6	4.9	ug/L		01/16/24 11:18	01/16/24 17:56	1
2,6-Dinitrotoluene	ND		9.6	3.7	ug/L		01/16/24 11:18	01/16/24 17:56	1
Di-n-octyl phthalate	ND		9.6	5.7	ug/L		01/16/24 11:18	01/16/24 17:56	1
1,4-Dioxane	ND		9.6	4.1	ug/L		01/16/24 11:18	01/16/24 17:56	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	3.2	ug/L		01/16/24 11:18	01/16/24 17:56	1
Hexachlorobenzene	ND		9.6	9.3	ug/L		01/16/24 11:18	01/16/24 17:56	1
Hexachlorocyclopentadiene	ND		19	4.3	ug/L		01/16/24 11:18	01/16/24 17:56	1
Hexachloroethane	ND		9.6	5.0	ug/L		01/16/24 11:18	01/16/24 17:56	1
Indene	ND		9.6	3.4	ug/L		01/16/24 11:18	01/16/24 17:56	1
Isophorone	ND		9.6	5.0	ug/L		01/16/24 11:18	01/16/24 17:56	1
2-Methylphenol	ND		9.6	3.1	ug/L		01/16/24 11:18	01/16/24 17:56	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		01/16/24 11:18	01/16/24 17:56	1
2-Nitroaniline	ND		9.6	4.8	ug/L		01/16/24 11:18	01/16/24 17:56	1
3-Nitroaniline	ND		9.6	4.5	ug/L		01/16/24 11:18	01/16/24 17:56	1
4-Nitroaniline	ND		9.6	3.9	ug/L		01/16/24 11:18	01/16/24 17:56	1
Nitrobenzene	ND		9.6	4.5	ug/L		01/16/24 11:18	01/16/24 17:56	1
2-Nitrophenol	ND		9.6	4.4	ug/L		01/16/24 11:18	01/16/24 17:56	1
4-Nitrophenol	ND		9.6	3.2	ug/L		01/16/24 11:18	01/16/24 17:56	1
N-Nitrosodimethylamine	ND		9.6	2.1	ug/L		01/16/24 11:18	01/16/24 17:56	1

Client Sample ID: MW22-ROX-011224-EB **Lab Sample ID: 400-249691-3**
Date Collected: 01/12/24 10:20 **Matrix: Water**
Date Received: 01/15/24 09:32

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	2.4	ug/L		01/16/24 11:18	01/16/24 17:56	1
N-Nitrosodiphenylamine	ND		9.6	3.5	ug/L		01/16/24 11:18	01/16/24 17:56	1
Pentachlorophenol	ND		19	11	ug/L		01/16/24 11:18	01/16/24 17:56	1
Phenol	ND		9.6	4.0	ug/L		01/16/24 11:18	01/16/24 17:56	1
Pyridine	ND		9.6	9.6	ug/L		01/16/24 11:18	01/16/24 17:56	1
Quinoline	ND		9.6	2.3	ug/L		01/16/24 11:18	01/16/24 17:56	1
2,4,5-Trichlorophenol	ND		9.6	3.8	ug/L		01/16/24 11:18	01/16/24 17:56	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		01/16/24 11:18	01/16/24 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*21 - 114*	*01/16/24 11:18*	*01/16/24 17:56*	*1*
2-Fluorophenol	*49*		*10 - 105*	*01/16/24 11:18*	*01/16/24 17:56*	*1*
Nitrobenzene-d5	*67*		*16 - 127*	*01/16/24 11:18*	*01/16/24 17:56*	*1*
Phenol-d5	*37*		*10 - 129*	*01/16/24 11:18*	*01/16/24 17:56*	*1*
Terphenyl-d14	*83*		*13 - 150*	*01/16/24 11:18*	*01/16/24 17:56*	*1*
2,4,6-Tribromophenol	*59*		*10 - 150*	*01/16/24 11:18*	*01/16/24 17:56*	*1*

Method: EPA 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		01/18/24 11:45	01/18/24 18:44	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/24 11:45	01/18/24 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*	*p*	*51 - 149*	*01/18/24 11:45*	*01/18/24 18:44*	*1*

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

Job ID: 400-249691-1

Client Sample ID: MW22-ROX-011224
Date Collected: 01/12/24 11:00
Date Received: 01/15/24 09:32

Lab Sample ID: 400-249691-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130	50	ug/L			01/17/24 17:51	5
Acrolein	ND		100	17	ug/L			01/17/24 17:51	5
Acrylonitrile	ND		50	14	ug/L			01/17/24 17:51	5
Benzene	**130**		5.0	2.5	ug/L			01/17/24 17:51	5
Bromobenzene	ND		5.0	2.7	ug/L			01/17/24 17:51	5
Bromochloromethane	ND		5.0	1.1	ug/L			01/17/24 17:51	5
Bromodichloromethane	ND		5.0	2.5	ug/L			01/17/24 17:51	5
Bromoform	ND		25	1.3	ug/L			01/17/24 17:51	5
Bromomethane	ND		5.0	4.9	ug/L			01/17/24 17:51	5
2-Butanone (MEK)	ND		130	13	ug/L			01/17/24 17:51	5
Carbon disulfide	ND		5.0	2.5	ug/L			01/17/24 17:51	5
Carbon tetrachloride	ND		5.0	0.95	ug/L			01/17/24 17:51	5
Chlorobenzene	ND		5.0	4.5	ug/L			01/17/24 17:51	5
Chloroethane	ND		5.0	3.8	ug/L			01/17/24 17:51	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			01/17/24 17:51	5
Chloroform	ND		5.0	4.5	ug/L			01/17/24 17:51	5
1-Chlorohexane	ND		5.0	1.6	ug/L			01/17/24 17:51	5
Chloromethane	ND		5.0	4.5	ug/L			01/17/24 17:51	5
cis-1,2-Dichloroethene	ND		5.0	1.0	ug/L			01/17/24 17:51	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			01/17/24 17:51	5
Dibromochloromethane	ND		5.0	1.2	ug/L			01/17/24 17:51	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			01/17/24 17:51	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			01/17/24 17:51	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			01/17/24 17:51	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			01/17/24 17:51	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			01/17/24 17:51	5
1,2-Dichloroethane	ND		5.0	0.95	ug/L			01/17/24 17:51	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			01/17/24 17:51	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			01/17/24 17:51	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			01/17/24 17:51	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			01/17/24 17:51	5
1,1-Dichloropropene	ND		5.0	2.5	ug/L			01/17/24 17:51	5
Ethylbenzene	**340**		5.0	2.5	ug/L			01/17/24 17:51	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			01/17/24 17:51	5
Hexachlorobutadiene	ND		25	4.5	ug/L			01/17/24 17:51	5
2-Hexanone	ND		130	7.0	ug/L			01/17/24 17:51	5
Isopropylbenzene	**60**		5.0	2.7	ug/L			01/17/24 17:51	5
Methylene bromide	ND		25	1.1	ug/L			01/17/24 17:51	5
Methylene Chloride	ND		25	15	ug/L			01/17/24 17:51	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			01/17/24 17:51	5
Methyl tert-butyl ether	**1.3**	**J**	5.0	1.1	ug/L			01/17/24 17:51	5
m-Xylene & p-Xylene	**760**		25	3.2	ug/L			01/17/24 17:51	5
Naphthalene	**140**		25	15	ug/L			01/17/24 17:51	5
n-Butylbenzene	**9.3**		5.0	3.8	ug/L			01/17/24 17:51	5
N-Propylbenzene	**110**		5.0	3.5	ug/L			01/17/24 17:51	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			01/17/24 17:51	5
o-Xylene	**39**		25	3.0	ug/L			01/17/24 17:51	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			01/17/24 17:51	5
p-Isopropyltoluene	**4.8**	**J**	5.0	3.6	ug/L			01/17/24 17:51	5

Client Sample ID: MW22-ROX-011224 **Lab Sample ID: 400-249691-4**
Date Collected: 01/12/24 11:00 **Matrix: Water**
Date Received: 01/15/24 09:32

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**5.3**		5.0	3.5	ug/L			01/17/24 17:51	5
Styrene	ND		5.0	5.0	ug/L			01/17/24 17:51	5
tert-Butylbenzene	**10**		5.0	3.2	ug/L			01/17/24 17:51	5
1,1,1,2-Tetrachloroethane	ND		5.0	0.80	ug/L			01/17/24 17:51	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			01/17/24 17:51	5
Tetrachloroethene	ND		5.0	4.5	ug/L			01/17/24 17:51	5
Toluene	**60**		5.0	4.5	ug/L			01/17/24 17:51	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			01/17/24 17:51	5
trans-1,3-Dichloropropene	ND		25	1.0	ug/L			01/17/24 17:51	5
1,2,3-Trichlorobenzene	ND		5.0	4.5	ug/L			01/17/24 17:51	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			01/17/24 17:51	5
1,1,1-Trichloroethane	ND		5.0	0.90	ug/L			01/17/24 17:51	5
1,1,2-Trichloroethane	ND		25	1.1	ug/L			01/17/24 17:51	5
Trichloroethene	ND		5.0	0.75	ug/L			01/17/24 17:51	5
Trichlorofluoromethane	ND		5.0	2.6	ug/L			01/17/24 17:51	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			01/17/24 17:51	5
1,2,4-Trimethylbenzene	**160**		5.0	4.1	ug/L			01/17/24 17:51	5
1,3,5-Trimethylbenzene	**130**		5.0	2.8	ug/L			01/17/24 17:51	5
Vinyl acetate	ND		130	4.7	ug/L			01/17/24 17:51	5
Vinyl chloride	ND		5.0	2.5	ug/L			01/17/24 17:51	5
Xylenes, Total	**800**		50	8.0	ug/L			01/17/24 17:51	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 130*		*01/17/24 17:51*	*5*
Dibromofluoromethane	*106*		*75 - 126*		*01/17/24 17:51*	*5*
Toluene-d8 (Surr)	*85*		*64 - 132*		*01/17/24 17:51*	*5*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.10**	**J**	0.20	0.097	ug/L		01/16/24 11:18	01/17/24 21:03	1
Acenaphthylene	ND		0.20	0.043	ug/L		01/16/24 11:18	01/17/24 21:03	1
Anthracene	ND		0.20	0.046	ug/L		01/16/24 11:18	01/17/24 21:03	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		01/16/24 11:18	01/17/24 21:03	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		01/16/24 11:18	01/17/24 21:03	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		01/16/24 11:18	01/17/24 21:03	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/16/24 11:18	01/17/24 21:03	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		01/16/24 11:18	01/17/24 21:03	1
Chrysene	ND		0.20	0.032	ug/L		01/16/24 11:18	01/17/24 21:03	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		01/16/24 11:18	01/17/24 21:03	1
Fluoranthene	ND		0.20	0.033	ug/L		01/16/24 11:18	01/17/24 21:03	1
Fluorene	ND		0.20	0.087	ug/L		01/16/24 11:18	01/17/24 21:03	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		01/16/24 11:18	01/17/24 21:03	1
Phenanthrene	ND		0.20	0.088	ug/L		01/16/24 11:18	01/17/24 21:03	1
Pyrene	ND		0.20	0.038	ug/L		01/16/24 11:18	01/17/24 21:03	1
1-Methylnaphthalene	**12**		0.20	0.079	ug/L		01/16/24 11:18	01/17/24 21:03	1
2-Methylnaphthalene	**17**		0.20	0.065	ug/L		01/16/24 11:18	01/17/24 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*69*		*18 - 147*	*01/16/24 11:18*	*01/17/24 21:03*	*1*
2-Fluorobiphenyl	*49*		*15 - 128*	*01/16/24 11:18*	*01/17/24 21:03*	*1*

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

Job ID: 400-249691-1

Client Sample ID: MW22-ROX-011224
Date Collected: 01/12/24 11:00
Date Received: 01/15/24 09:32

Lab Sample ID: 400-249691-4
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*57*		*10 - 144*	*01/16/24 11:18*	*01/17/24 21:03*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	8.5	ug/L		01/16/24 11:18	01/16/24 18:19	1
Benzenethiol	ND		9.8	9.7	ug/L		01/16/24 11:18	01/16/24 18:19	1
Benzoic acid	ND		29	24	ug/L		01/16/24 11:18	01/16/24 18:19	1
Benzyl alcohol	ND		9.8	7.2	ug/L		01/16/24 11:18	01/16/24 18:19	1
Bis(2-chloroethoxy)methane	ND		9.8	4.5	ug/L		01/16/24 11:18	01/16/24 18:19	1
Bis(2-chloroethyl)ether	ND		9.8	3.8	ug/L		01/16/24 11:18	01/16/24 18:19	1
bis (2-chloroisopropyl) ether	ND		9.8	1.8	ug/L		01/16/24 11:18	01/16/24 18:19	1
Bis(2-ethylhexyl) phthalate	ND		9.8	8.7	ug/L		01/16/24 11:18	01/16/24 18:19	1
4-Bromophenyl phenyl ether	ND		9.8	8.5	ug/L		01/16/24 11:18	01/16/24 18:19	1
Butyl benzyl phthalate	ND		9.8	5.7	ug/L		01/16/24 11:18	01/16/24 18:19	1
4-Chloroaniline	ND		9.8	4.6	ug/L		01/16/24 11:18	01/16/24 18:19	1
4-Chloro-3-methylphenol	ND		9.8	5.2	ug/L		01/16/24 11:18	01/16/24 18:19	1
2-Chloronaphthalene	ND		9.8	3.7	ug/L		01/16/24 11:18	01/16/24 18:19	1
2-Chlorophenol	ND		9.8	4.0	ug/L		01/16/24 11:18	01/16/24 18:19	1
4-Chlorophenyl phenyl ether	ND		9.8	3.6	ug/L		01/16/24 11:18	01/16/24 18:19	1
Dibenz[a,h]acridine	ND		9.8	2.8	ug/L		01/16/24 11:18	01/16/24 18:19	1
Dibenzofuran	ND		9.8	3.9	ug/L		01/16/24 11:18	01/16/24 18:19	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/16/24 11:18	01/16/24 18:19	1
2,4-Dichlorophenol	ND		9.8	4.2	ug/L		01/16/24 11:18	01/16/24 18:19	1
Diethyl phthalate	ND		9.8	4.3	ug/L		01/16/24 11:18	01/16/24 18:19	1
2,4-Dimethylphenol	**10**		9.8	5.1	ug/L		01/16/24 11:18	01/16/24 18:19	1
Dimethyl phthalate	ND		9.8	4.1	ug/L		01/16/24 11:18	01/16/24 18:19	1
Di-n-butyl phthalate	ND		9.8	4.5	ug/L		01/16/24 11:18	01/16/24 18:19	1
4,6-Dinitro-ortho-cresol	ND		9.8	9.8	ug/L		01/16/24 11:18	01/16/24 18:19	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		01/16/24 11:18	01/16/24 18:19	1
2,4-Dinitrotoluene	ND		9.8	5.0	ug/L		01/16/24 11:18	01/16/24 18:19	1
2,6-Dinitrotoluene	ND		9.8	3.8	ug/L		01/16/24 11:18	01/16/24 18:19	1
Di-n-octyl phthalate	ND		9.8	5.9	ug/L		01/16/24 11:18	01/16/24 18:19	1
1,4-Dioxane	ND		9.8	4.2	ug/L		01/16/24 11:18	01/16/24 18:19	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	3.2	ug/L		01/16/24 11:18	01/16/24 18:19	1
Hexachlorobenzene	ND		9.8	9.5	ug/L		01/16/24 11:18	01/16/24 18:19	1
Hexachlorocyclopentadiene	ND		20	4.4	ug/L		01/16/24 11:18	01/16/24 18:19	1
Hexachloroethane	ND		9.8	5.1	ug/L		01/16/24 11:18	01/16/24 18:19	1
Indene	ND		9.8	3.5	ug/L		01/16/24 11:18	01/16/24 18:19	1
Isophorone	ND		9.8	5.1	ug/L		01/16/24 11:18	01/16/24 18:19	1
2-Methylphenol	ND		9.8	3.1	ug/L		01/16/24 11:18	01/16/24 18:19	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		01/16/24 11:18	01/16/24 18:19	1
2-Nitroaniline	ND		9.8	4.9	ug/L		01/16/24 11:18	01/16/24 18:19	1
3-Nitroaniline	ND		9.8	4.6	ug/L		01/16/24 11:18	01/16/24 18:19	1
4-Nitroaniline	ND		9.8	4.0	ug/L		01/16/24 11:18	01/16/24 18:19	1
Nitrobenzene	ND		9.8	4.6	ug/L		01/16/24 11:18	01/16/24 18:19	1
2-Nitrophenol	ND		9.8	4.5	ug/L		01/16/24 11:18	01/16/24 18:19	1
4-Nitrophenol	ND		9.8	3.2	ug/L		01/16/24 11:18	01/16/24 18:19	1
N-Nitrosodimethylamine	ND		9.8	2.2	ug/L		01/16/24 11:18	01/16/24 18:19	1

Client: AECOM Technical Services Inc.
Job ID: 400-249691-1
Project/Site: SHELL ROXANA QUARTERLY GW

Client Sample ID: MW22-ROX-011224
Lab Sample ID: 400-249691-4
Date Collected: 01/12/24 11:00
Matrix: Water
Date Received: 01/15/24 09:32

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	2.5	ug/L		01/16/24 11:18	01/16/24 18:19	1
N-Nitrosodiphenylamine	ND		9.8	3.6	ug/L		01/16/24 11:18	01/16/24 18:19	1
Pentachlorophenol	ND		20	12	ug/L		01/16/24 11:18	01/16/24 18:19	1
Phenol	ND		9.8	4.1	ug/L		01/16/24 11:18	01/16/24 18:19	1
Pyridine	ND		9.8	9.8	ug/L		01/16/24 11:18	01/16/24 18:19	1
Quinoline	ND		9.8	2.4	ug/L		01/16/24 11:18	01/16/24 18:19	1
2,4,5-Trichlorophenol	ND		9.8	3.9	ug/L		01/16/24 11:18	01/16/24 18:19	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		01/16/24 11:18	01/16/24 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*21 - 114*	*01/16/24 11:18*	*01/16/24 18:19*	*1*
2-Fluorophenol	*32*		*10 - 105*	*01/16/24 11:18*	*01/16/24 18:19*	*1*
Nitrobenzene-d5	*66*		*16 - 127*	*01/16/24 11:18*	*01/16/24 18:19*	*1*
Phenol-d5	*39*		*10 - 129*	*01/16/24 11:18*	*01/16/24 18:19*	*1*
Terphenyl-d14	*80*		*13 - 150*	*01/16/24 11:18*	*01/16/24 18:19*	*1*
2,4,6-Tribromophenol	*71*		*10 - 150*	*01/16/24 11:18*	*01/16/24 18:19*	*1*

Method: EPA 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		01/18/24 11:45	01/18/24 19:05	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/24 11:45	01/18/24 19:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*119*		*51 - 149*	*01/18/24 11:45*	*01/18/24 19:05*	*1*

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

Job ID: 400-249691-1

Client Sample ID: MW22-ROX-011224-DUP
Date Collected: 01/12/24 11:00
Date Received: 01/15/24 09:32

Lab Sample ID: 400-249691-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130	50	ug/L			01/17/24 18:16	5
Acrolein	ND		100	17	ug/L			01/17/24 18:16	5
Acrylonitrile	ND		50	14	ug/L			01/17/24 18:16	5
Benzene	**120**		5.0	2.5	ug/L			01/17/24 18:16	5
Bromobenzene	ND		5.0	2.7	ug/L			01/17/24 18:16	5
Bromochloromethane	ND		5.0	1.1	ug/L			01/17/24 18:16	5
Bromodichloromethane	ND		5.0	2.5	ug/L			01/17/24 18:16	5
Bromoform	ND		25	1.3	ug/L			01/17/24 18:16	5
Bromomethane	ND		5.0	4.9	ug/L			01/17/24 18:16	5
2-Butanone (MEK)	ND		130	13	ug/L			01/17/24 18:16	5
Carbon disulfide	ND		5.0	2.5	ug/L			01/17/24 18:16	5
Carbon tetrachloride	ND		5.0	0.95	ug/L			01/17/24 18:16	5
Chlorobenzene	ND		5.0	4.5	ug/L			01/17/24 18:16	5
Chloroethane	ND		5.0	3.8	ug/L			01/17/24 18:16	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			01/17/24 18:16	5
Chloroform	ND		5.0	4.5	ug/L			01/17/24 18:16	5
1-Chlorohexane	ND		5.0	1.6	ug/L			01/17/24 18:16	5
Chloromethane	ND		5.0	4.5	ug/L			01/17/24 18:16	5
cis-1,2-Dichloroethene	ND		5.0	1.0	ug/L			01/17/24 18:16	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			01/17/24 18:16	5
Dibromochloromethane	ND		5.0	1.2	ug/L			01/17/24 18:16	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			01/17/24 18:16	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			01/17/24 18:16	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			01/17/24 18:16	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			01/17/24 18:16	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			01/17/24 18:16	5
1,2-Dichloroethane	ND		5.0	0.95	ug/L			01/17/24 18:16	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			01/17/24 18:16	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			01/17/24 18:16	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			01/17/24 18:16	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			01/17/24 18:16	5
1,1-Dichloropropene	ND		5.0	2.5	ug/L			01/17/24 18:16	5
Ethylbenzene	**290**		5.0	2.5	ug/L			01/17/24 18:16	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			01/17/24 18:16	5
Hexachlorobutadiene	ND		25	4.5	ug/L			01/17/24 18:16	5
2-Hexanone	ND		130	7.0	ug/L			01/17/24 18:16	5
Isopropylbenzene	**51**		5.0	2.7	ug/L			01/17/24 18:16	5
Methylene bromide	ND		25	1.1	ug/L			01/17/24 18:16	5
Methylene Chloride	ND		25	15	ug/L			01/17/24 18:16	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			01/17/24 18:16	5
Methyl tert-butyl ether	ND		5.0	1.1	ug/L			01/17/24 18:16	5
m-Xylene & p-Xylene	**650**		25	3.2	ug/L			01/17/24 18:16	5
Naphthalene	**130**		25	15	ug/L			01/17/24 18:16	5
n-Butylbenzene	**7.8**		5.0	3.8	ug/L			01/17/24 18:16	5
N-Propylbenzene	**86**		5.0	3.5	ug/L			01/17/24 18:16	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			01/17/24 18:16	5
o-Xylene	**33**		25	3.0	ug/L			01/17/24 18:16	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			01/17/24 18:16	5
p-Isopropyltoluene	**3.9**	**J**	5.0	3.6	ug/L			01/17/24 18:16	5

Client Sample ID: MW22-ROX-011224-DUP
Lab Sample ID: 400-249691-5

Date Collected: 01/12/24 11:00
Matrix: Water
Date Received: 01/15/24 09:32

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**4.5**	**J**	5.0	3.5	ug/L			01/17/24 18:16	5
Styrene	ND		5.0	5.0	ug/L			01/17/24 18:16	5
tert-Butylbenzene	**8.7**		5.0	3.2	ug/L			01/17/24 18:16	5
1,1,1,2-Tetrachloroethane	ND		5.0	0.80	ug/L			01/17/24 18:16	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			01/17/24 18:16	5
Tetrachloroethene	ND		5.0	4.5	ug/L			01/17/24 18:16	5
Toluene	**52**		5.0	4.5	ug/L			01/17/24 18:16	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			01/17/24 18:16	5
trans-1,3-Dichloropropene	ND		25	1.0	ug/L			01/17/24 18:16	5
1,2,3-Trichlorobenzene	ND		5.0	4.5	ug/L			01/17/24 18:16	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			01/17/24 18:16	5
1,1,1-Trichloroethane	ND		5.0	0.90	ug/L			01/17/24 18:16	5
1,1,2-Trichloroethane	ND		25	1.1	ug/L			01/17/24 18:16	5
Trichloroethene	ND		5.0	0.75	ug/L			01/17/24 18:16	5
Trichlorofluoromethane	ND		5.0	2.6	ug/L			01/17/24 18:16	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			01/17/24 18:16	5
1,2,4-Trimethylbenzene	**130**		5.0	4.1	ug/L			01/17/24 18:16	5
1,3,5-Trimethylbenzene	**110**		5.0	2.8	ug/L			01/17/24 18:16	5
Vinyl acetate	ND		130	4.7	ug/L			01/17/24 18:16	5
Vinyl chloride	ND		5.0	2.5	ug/L			01/17/24 18:16	5
Xylenes, Total	**680**		50	8.0	ug/L			01/17/24 18:16	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 130*		*01/17/24 18:16*	*5*
Dibromofluoromethane	*101*		*75 - 126*		*01/17/24 18:16*	*5*
Toluene-d8 (Surr)	*84*		*64 - 132*		*01/17/24 18:16*	*5*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.11**	**J**	0.19	0.095	ug/L		01/16/24 11:18	01/17/24 21:24	1
Acenaphthylene	ND		0.19	0.042	ug/L		01/16/24 11:18	01/17/24 21:24	1
Anthracene	ND		0.19	0.045	ug/L		01/16/24 11:18	01/17/24 21:24	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		01/16/24 11:18	01/17/24 21:24	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		01/16/24 11:18	01/17/24 21:24	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		01/16/24 11:18	01/17/24 21:24	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		01/16/24 11:18	01/17/24 21:24	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		01/16/24 11:18	01/17/24 21:24	1
Chrysene	ND		0.19	0.032	ug/L		01/16/24 11:18	01/17/24 21:24	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		01/16/24 11:18	01/17/24 21:24	1
Fluoranthene	ND		0.19	0.033	ug/L		01/16/24 11:18	01/17/24 21:24	1
Fluorene	**0.090**	**J**	0.19	0.085	ug/L		01/16/24 11:18	01/17/24 21:24	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		01/16/24 11:18	01/17/24 21:24	1
Phenanthrene	ND		0.19	0.086	ug/L		01/16/24 11:18	01/17/24 21:24	1
Pyrene	ND		0.19	0.037	ug/L		01/16/24 11:18	01/17/24 21:24	1
1-Methylnaphthalene	**13**		0.19	0.077	ug/L		01/16/24 11:18	01/17/24 21:24	1
2-Methylnaphthalene	**18**		0.19	0.063	ug/L		01/16/24 11:18	01/17/24 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*65*		*18 - 147*	*01/16/24 11:18*	*01/17/24 21:24*	*1*
2-Fluorobiphenyl	*47*		*15 - 128*	*01/16/24 11:18*	*01/17/24 21:24*	*1*

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

Job ID: 400-249691-1

Client Sample ID: MW22-ROX-011224-DUP
Date Collected: 01/12/24 11:00
Date Received: 01/15/24 09:32

Lab Sample ID: 400-249691-5
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	57		10 - 144	01/16/24 11:18	01/17/24 21:24	1

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	8.3	ug/L		01/16/24 11:18	01/16/24 18:41	1
Benzenethiol	ND		9.6	9.5	ug/L		01/16/24 11:18	01/16/24 18:41	1
Benzoic acid	ND		29	23	ug/L		01/16/24 11:18	01/16/24 18:41	1
Benzyl alcohol	ND		9.6	7.0	ug/L		01/16/24 11:18	01/16/24 18:41	1
Bis(2-chloroethoxy)methane	ND		9.6	4.4	ug/L		01/16/24 11:18	01/16/24 18:41	1
Bis(2-chloroethyl)ether	ND		9.6	3.7	ug/L		01/16/24 11:18	01/16/24 18:41	1
bis (2-chloroisopropyl) ether	ND		9.6	1.7	ug/L		01/16/24 11:18	01/16/24 18:41	1
Bis(2-ethylhexyl) phthalate	ND		9.6	8.5	ug/L		01/16/24 11:18	01/16/24 18:41	1
4-Bromophenyl phenyl ether	ND		9.6	8.2	ug/L		01/16/24 11:18	01/16/24 18:41	1
Butyl benzyl phthalate	ND		9.6	5.6	ug/L		01/16/24 11:18	01/16/24 18:41	1
4-Chloroaniline	ND		9.6	4.5	ug/L		01/16/24 11:18	01/16/24 18:41	1
4-Chloro-3-methylphenol	ND		9.6	5.1	ug/L		01/16/24 11:18	01/16/24 18:41	1
2-Chloronaphthalene	ND		9.6	3.6	ug/L		01/16/24 11:18	01/16/24 18:41	1
2-Chlorophenol	ND		9.6	3.9	ug/L		01/16/24 11:18	01/16/24 18:41	1
4-Chlorophenyl phenyl ether	ND		9.6	3.5	ug/L		01/16/24 11:18	01/16/24 18:41	1
Dibenz[a,h]acridine	ND		9.6	2.7	ug/L		01/16/24 11:18	01/16/24 18:41	1
Dibenzofuran	ND		9.6	3.8	ug/L		01/16/24 11:18	01/16/24 18:41	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/16/24 11:18	01/16/24 18:41	1
2,4-Dichlorophenol	ND		9.6	4.1	ug/L		01/16/24 11:18	01/16/24 18:41	1
Diethyl phthalate	ND		9.6	4.2	ug/L		01/16/24 11:18	01/16/24 18:41	1
2,4-Dimethylphenol	**11**		9.6	5.0	ug/L		01/16/24 11:18	01/16/24 18:41	1
Dimethyl phthalate	ND		9.6	4.0	ug/L		01/16/24 11:18	01/16/24 18:41	1
Di-n-butyl phthalate	ND		9.6	4.4	ug/L		01/16/24 11:18	01/16/24 18:41	1
4,6-Dinitro-ortho-cresol	ND		9.6	9.6	ug/L		01/16/24 11:18	01/16/24 18:41	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		01/16/24 11:18	01/16/24 18:41	1
2,4-Dinitrotoluene	ND		9.6	4.9	ug/L		01/16/24 11:18	01/16/24 18:41	1
2,6-Dinitrotoluene	ND		9.6	3.7	ug/L		01/16/24 11:18	01/16/24 18:41	1
Di-n-octyl phthalate	ND		9.6	5.7	ug/L		01/16/24 11:18	01/16/24 18:41	1
1,4-Dioxane	ND		9.6	4.1	ug/L		01/16/24 11:18	01/16/24 18:41	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	3.2	ug/L		01/16/24 11:18	01/16/24 18:41	1
Hexachlorobenzene	ND		9.6	9.3	ug/L		01/16/24 11:18	01/16/24 18:41	1
Hexachlorocyclopentadiene	ND		19	4.3	ug/L		01/16/24 11:18	01/16/24 18:41	1
Hexachloroethane	ND		9.6	5.0	ug/L		01/16/24 11:18	01/16/24 18:41	1
Indene	ND		9.6	3.4	ug/L		01/16/24 11:18	01/16/24 18:41	1
Isophorone	ND		9.6	5.0	ug/L		01/16/24 11:18	01/16/24 18:41	1
2-Methylphenol	ND		9.6	3.1	ug/L		01/16/24 11:18	01/16/24 18:41	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		01/16/24 11:18	01/16/24 18:41	1
2-Nitroaniline	ND		9.6	4.8	ug/L		01/16/24 11:18	01/16/24 18:41	1
3-Nitroaniline	ND		9.6	4.5	ug/L		01/16/24 11:18	01/16/24 18:41	1
4-Nitroaniline	ND		9.6	3.9	ug/L		01/16/24 11:18	01/16/24 18:41	1
Nitrobenzene	ND		9.6	4.5	ug/L		01/16/24 11:18	01/16/24 18:41	1
2-Nitrophenol	ND		9.6	4.4	ug/L		01/16/24 11:18	01/16/24 18:41	1
4-Nitrophenol	ND		9.6	3.2	ug/L		01/16/24 11:18	01/16/24 18:41	1
N-Nitrosodimethylamine	ND		9.6	2.1	ug/L		01/16/24 11:18	01/16/24 18:41	1

Client: AECOM Technical Services Inc.
Job ID: 400-249691-1
Project/Site: SHELL ROXANA QUARTERLY GW

Client Sample ID: MW22-ROX-011224-DUP
Lab Sample ID: 400-249691-5
Date Collected: 01/12/24 11:00
Matrix: Water
Date Received: 01/15/24 09:32

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	2.4	ug/L		01/16/24 11:18	01/16/24 18:41	1
N-Nitrosodiphenylamine	ND		9.6	3.5	ug/L		01/16/24 11:18	01/16/24 18:41	1
Pentachlorophenol	ND		19	11	ug/L		01/16/24 11:18	01/16/24 18:41	1
Phenol	ND		9.6	4.0	ug/L		01/16/24 11:18	01/16/24 18:41	1
Pyridine	ND		9.6	9.6	ug/L		01/16/24 11:18	01/16/24 18:41	1
Quinoline	ND		9.6	2.3	ug/L		01/16/24 11:18	01/16/24 18:41	1
2,4,5-Trichlorophenol	ND		9.6	3.8	ug/L		01/16/24 11:18	01/16/24 18:41	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		01/16/24 11:18	01/16/24 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*21 - 114*	*01/16/24 11:18*	*01/16/24 18:41*	*1*
2-Fluorophenol	*34*		*10 - 105*	*01/16/24 11:18*	*01/16/24 18:41*	*1*
Nitrobenzene-d5	*68*		*16 - 127*	*01/16/24 11:18*	*01/16/24 18:41*	*1*
Phenol-d5	*40*		*10 - 129*	*01/16/24 11:18*	*01/16/24 18:41*	*1*
Terphenyl-d14	*82*		*13 - 150*	*01/16/24 11:18*	*01/16/24 18:41*	*1*
2,4,6-Tribromophenol	*75*		*10 - 150*	*01/16/24 11:18*	*01/16/24 18:41*	*1*

Method: EPA 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		01/18/24 11:45	01/18/24 19:26	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/24 11:45	01/18/24 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*123*		*51 - 149*	*01/18/24 11:45*	*01/18/24 19:26*	*1*

Client: AECOM Technical Services Inc.
Job ID: 400-249691-1
Project/Site: SHELL ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-011224-8011-B
Lab Sample ID: 400-249691-6
Date Collected: 01/12/24 00:00
Matrix: Water
Date Received: 01/15/24 09:32

Method: EPA 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		01/18/24 11:45	01/18/24 20:08	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		01/18/24 11:45	01/18/24 20:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*51 - 149*	*01/18/24 11:45*	*01/18/24 20:08*	*1*

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

Job ID: 400-249691-1

Client Sample ID: TB-ROX-011224-8260-B
Date Collected: 01/12/24 00:00
Date Received: 01/15/24 09:32

Lab Sample ID: 400-249691-7
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/17/24 14:59	1
Acrolein	ND		20	3.3	ug/L			01/17/24 14:59	1
Acrylonitrile	ND		10	2.8	ug/L			01/17/24 14:59	1
Benzene	ND		1.0	0.50	ug/L			01/17/24 14:59	1
Bromobenzene	ND		1.0	0.54	ug/L			01/17/24 14:59	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/17/24 14:59	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/17/24 14:59	1
Bromoform	ND		5.0	0.25	ug/L			01/17/24 14:59	1
Bromomethane	ND		1.0	0.98	ug/L			01/17/24 14:59	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/17/24 14:59	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/17/24 14:59	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/17/24 14:59	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/17/24 14:59	1
Chloroethane	ND		1.0	0.76	ug/L			01/17/24 14:59	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/17/24 14:59	1
Chloroform	ND		1.0	0.90	ug/L			01/17/24 14:59	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/17/24 14:59	1
Chloromethane	ND		1.0	0.90	ug/L			01/17/24 14:59	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/17/24 14:59	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/17/24 14:59	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/17/24 14:59	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/17/24 14:59	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/17/24 14:59	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/17/24 14:59	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/17/24 14:59	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/17/24 14:59	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/17/24 14:59	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 14:59	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 14:59	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 14:59	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 14:59	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/17/24 14:59	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/17/24 14:59	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/17/24 14:59	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/17/24 14:59	1
2-Hexanone	ND		25	1.4	ug/L			01/17/24 14:59	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/17/24 14:59	1
Methylene bromide	ND		5.0	0.22	ug/L			01/17/24 14:59	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/17/24 14:59	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/17/24 14:59	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/17/24 14:59	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/17/24 14:59	1
Naphthalene	ND		5.0	3.0	ug/L			01/17/24 14:59	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/17/24 14:59	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/17/24 14:59	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/17/24 14:59	1
o-Xylene	ND		5.0	0.60	ug/L			01/17/24 14:59	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/17/24 14:59	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/17/24 14:59	1

Client: AECOM Technical Services Inc.
Job ID: 400-249691-1
Project/Site: SHELL ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-011224-8260-B
Lab Sample ID: 400-249691-7
Date Collected: 01/12/24 00:00
Matrix: Water
Date Received: 01/15/24 09:32

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/17/24 14:59	1
Styrene	ND		1.0	1.0	ug/L			01/17/24 14:59	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/17/24 14:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/17/24 14:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/17/24 14:59	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/17/24 14:59	1
Toluene	ND		1.0	0.90	ug/L			01/17/24 14:59	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 14:59	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/17/24 14:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/17/24 14:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/17/24 14:59	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/17/24 14:59	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/17/24 14:59	1
Trichloroethene	ND		1.0	0.15	ug/L			01/17/24 14:59	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/17/24 14:59	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/17/24 14:59	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/17/24 14:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/17/24 14:59	1
Vinyl acetate	ND		25	0.93	ug/L			01/17/24 14:59	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/17/24 14:59	1
Xylenes, Total	ND		10	1.6	ug/L			01/17/24 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 130*		*01/17/24 14:59*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*01/17/24 14:59*	*1*
Toluene-d8 (Surr)	*88*		*64 - 132*		*01/17/24 14:59*	*1*

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

Job ID: 400-249691-1

Client Sample ID: P59-ROX-011224
Date Collected: 01/12/24 10:15
Date Received: 01/15/24 09:32

Lab Sample ID: 400-249691-8
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		250	100	ug/L			01/17/24 12:36	10
Acrolein	ND		200	33	ug/L			01/17/24 12:36	10
Acrylonitrile	ND		100	28	ug/L			01/17/24 12:36	10
Benzene	**1600**		10	5.0	ug/L			01/17/24 12:36	10
Bromobenzene	ND		10	5.4	ug/L			01/17/24 12:36	10
Bromochloromethane	ND		10	2.1	ug/L			01/17/24 12:36	10
Bromodichloromethane	ND		10	5.0	ug/L			01/17/24 12:36	10
Bromoform	ND		50	2.5	ug/L			01/17/24 12:36	10
Bromomethane	ND		10	9.8	ug/L			01/17/24 12:36	10
2-Butanone (MEK)	ND		250	26	ug/L			01/17/24 12:36	10
Carbon disulfide	ND		10	5.0	ug/L			01/17/24 12:36	10
Carbon tetrachloride	ND		10	1.9	ug/L			01/17/24 12:36	10
Chlorobenzene	ND		10	9.0	ug/L			01/17/24 12:36	10
Chloroethane	ND		10	7.6	ug/L			01/17/24 12:36	10
2-Chloroethyl vinyl ether	ND		50	20	ug/L			01/17/24 12:36	10
Chloroform	ND		10	9.0	ug/L			01/17/24 12:36	10
1-Chlorohexane	ND		10	3.2	ug/L			01/17/24 12:36	10
Chloromethane	ND		10	9.0	ug/L			01/17/24 12:36	10
cis-1,2-Dichloroethene	ND		10	2.0	ug/L			01/17/24 12:36	10
cis-1,3-Dichloropropene	ND		50	5.0	ug/L			01/17/24 12:36	10
Dibromochloromethane	ND		10	2.4	ug/L			01/17/24 12:36	10
1,2-Dichlorobenzene	ND		10	5.0	ug/L			01/17/24 12:36	10
1,3-Dichlorobenzene	ND		10	5.4	ug/L			01/17/24 12:36	10
1,4-Dichlorobenzene	ND		10	6.4	ug/L			01/17/24 12:36	10
Dichlorodifluoromethane	ND		10	8.5	ug/L			01/17/24 12:36	10
1,1-Dichloroethane	ND		10	5.0	ug/L			01/17/24 12:36	10
1,2-Dichloroethane	ND		10	1.9	ug/L			01/17/24 12:36	10
1,1-Dichloroethene	ND		10	5.0	ug/L			01/17/24 12:36	10
1,2-Dichloropropane	ND		10	5.0	ug/L			01/17/24 12:36	10
1,3-Dichloropropane	ND		10	5.0	ug/L			01/17/24 12:36	10
2,2-Dichloropropane	ND		10	5.0	ug/L			01/17/24 12:36	10
1,1-Dichloropropene	ND		10	5.0	ug/L			01/17/24 12:36	10
Ethylbenzene	**160**		10	5.0	ug/L			01/17/24 12:36	10
Ethyl methacrylate	ND		10	6.0	ug/L			01/17/24 12:36	10
Hexachlorobutadiene	ND		50	9.0	ug/L			01/17/24 12:36	10
2-Hexanone	ND		250	14	ug/L			01/17/24 12:36	10
Isopropylbenzene	**47**		10	5.3	ug/L			01/17/24 12:36	10
Methylene bromide	ND		50	2.2	ug/L			01/17/24 12:36	10
Methylene Chloride	ND		50	30	ug/L			01/17/24 12:36	10
4-Methyl-2-pentanone (MIBK)	ND		250	18	ug/L			01/17/24 12:36	10
Methyl tert-butyl ether	ND		10	2.2	ug/L			01/17/24 12:36	10
m-Xylene & p-Xylene	**120**		50	6.3	ug/L			01/17/24 12:36	10
Naphthalene	**44**	**J**	50	30	ug/L			01/17/24 12:36	10
n-Butylbenzene	ND		10	7.6	ug/L			01/17/24 12:36	10
N-Propylbenzene	**66**		10	6.9	ug/L			01/17/24 12:36	10
o-Chlorotoluene	ND		10	5.7	ug/L			01/17/24 12:36	10
o-Xylene	ND		50	6.0	ug/L			01/17/24 12:36	10
p-Chlorotoluene	ND		10	5.6	ug/L			01/17/24 12:36	10
p-Isopropyltoluene	ND		10	7.1	ug/L			01/17/24 12:36	10

Client Sample ID: P59-ROX-011224
Lab Sample ID: 400-249691-8
Date Collected: 01/12/24 10:15
Matrix: Water
Date Received: 01/15/24 09:32

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		10	7.0	ug/L			01/17/24 12:36	10
Styrene	ND		10	10	ug/L			01/17/24 12:36	10
tert-Butylbenzene	ND		10	6.3	ug/L			01/17/24 12:36	10
1,1,1,2-Tetrachloroethane	ND		10	1.6	ug/L			01/17/24 12:36	10
1,1,2,2-Tetrachloroethane	ND		10	5.0	ug/L			01/17/24 12:36	10
Tetrachloroethene	ND		10	9.0	ug/L			01/17/24 12:36	10
Toluene	**75**		10	9.0	ug/L			01/17/24 12:36	10
trans-1,2-Dichloroethene	ND		10	5.0	ug/L			01/17/24 12:36	10
trans-1,3-Dichloropropene	ND		50	2.0	ug/L			01/17/24 12:36	10
1,2,3-Trichlorobenzene	ND		10	9.0	ug/L			01/17/24 12:36	10
1,2,4-Trichlorobenzene	ND		10	8.2	ug/L			01/17/24 12:36	10
1,1,1-Trichloroethane	ND		10	1.8	ug/L			01/17/24 12:36	10
1,1,2-Trichloroethane	ND		50	2.1	ug/L			01/17/24 12:36	10
Trichloroethene	ND		10	1.5	ug/L			01/17/24 12:36	10
Trichlorofluoromethane	ND		10	5.2	ug/L			01/17/24 12:36	10
1,2,3-Trichloropropane	ND		50	8.4	ug/L			01/17/24 12:36	10
1,2,4-Trimethylbenzene	**31**		10	8.2	ug/L			01/17/24 12:36	10
1,3,5-Trimethylbenzene	**32**		10	5.6	ug/L			01/17/24 12:36	10
Vinyl acetate	ND		250	9.3	ug/L			01/17/24 12:36	10
Vinyl chloride	ND		10	5.0	ug/L			01/17/24 12:36	10
Xylenes, Total	**120**		100	16	ug/L			01/17/24 12:36	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*01/17/24 12:36*	*10*
Dibromofluoromethane	*99*		*75 - 126*		*01/17/24 12:36*	*10*
Toluene-d8 (Surr)	*88*		*64 - 132*		*01/17/24 12:36*	*10*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.45**		0.21	0.10	ug/L		01/16/24 11:18	01/17/24 21:44	1
Acenaphthylene	ND		0.21	0.046	ug/L		01/16/24 11:18	01/17/24 21:44	1
Anthracene	**0.23**		0.21	0.050	ug/L		01/16/24 11:18	01/17/24 21:44	1
Benzo[a]anthracene	**0.075**	**J**	0.21	0.036	ug/L		01/16/24 11:18	01/17/24 21:44	1
Benzo[a]pyrene	ND		0.21	0.067	ug/L		01/16/24 11:18	01/17/24 21:44	1
Benzo[b]fluoranthene	**0.050**	**J**	0.21	0.039	ug/L		01/16/24 11:18	01/17/24 21:44	1
Benzo[g,h,i]perylene	**0.037**	**J**	0.21	0.028	ug/L		01/16/24 11:18	01/17/24 21:44	1
Benzo[k]fluoranthene	ND		0.21	0.065	ug/L		01/16/24 11:18	01/17/24 21:44	1
Chrysene	**0.084**	**J**	0.21	0.035	ug/L		01/16/24 11:18	01/17/24 21:44	1
Dibenz(a,h)anthracene	ND		0.21	0.051	ug/L		01/16/24 11:18	01/17/24 21:44	1
Fluoranthene	**0.14**	**J**	0.21	0.036	ug/L		01/16/24 11:18	01/17/24 21:44	1
Fluorene	**0.25**		0.21	0.094	ug/L		01/16/24 11:18	01/17/24 21:44	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.036	ug/L		01/16/24 11:18	01/17/24 21:44	1
Phenanthrene	**0.71**		0.21	0.095	ug/L		01/16/24 11:18	01/17/24 21:44	1
Pyrene	**0.36**		0.21	0.041	ug/L		01/16/24 11:18	01/17/24 21:44	1
1-Methylnaphthalene	**8.2**		0.21	0.084	ug/L		01/16/24 11:18	01/17/24 21:44	1
2-Methylnaphthalene	**11**		0.21	0.070	ug/L		01/16/24 11:18	01/17/24 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*58*		*18 - 147*	*01/16/24 11:18*	*01/17/24 21:44*	*1*
2-Fluorobiphenyl	*43*		*15 - 128*	*01/16/24 11:18*	*01/17/24 21:44*	*1*

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

Job ID: 400-249691-1

Client Sample ID: P59-ROX-011224
Date Collected: 01/12/24 10:15
Date Received: 01/15/24 09:32

Lab Sample ID: 400-249691-8
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*49*		*10 - 144*	*01/16/24 11:18*	*01/17/24 21:44*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	9.2	ug/L		01/16/24 11:18	01/16/24 19:04	1
Benzenethiol	ND		11	10	ug/L		01/16/24 11:18	01/16/24 19:04	1
Benzoic acid	ND		32	25	ug/L		01/16/24 11:18	01/16/24 19:04	1
Benzyl alcohol	ND		11	7.7	ug/L		01/16/24 11:18	01/16/24 19:04	1
Bis(2-chloroethoxy)methane	ND		11	4.8	ug/L		01/16/24 11:18	01/16/24 19:04	1
Bis(2-chloroethyl)ether	ND		11	4.1	ug/L		01/16/24 11:18	01/16/24 19:04	1
bis (2-chloroisopropyl) ether	ND		11	1.9	ug/L		01/16/24 11:18	01/16/24 19:04	1
Bis(2-ethylhexyl) phthalate	ND		11	9.4	ug/L		01/16/24 11:18	01/16/24 19:04	1
4-Bromophenyl phenyl ether	ND		11	9.1	ug/L		01/16/24 11:18	01/16/24 19:04	1
Butyl benzyl phthalate	ND		11	6.1	ug/L		01/16/24 11:18	01/16/24 19:04	1
4-Chloroaniline	ND		11	5.0	ug/L		01/16/24 11:18	01/16/24 19:04	1
4-Chloro-3-methylphenol	ND		11	5.6	ug/L		01/16/24 11:18	01/16/24 19:04	1
2-Chloronaphthalene	ND		11	4.0	ug/L		01/16/24 11:18	01/16/24 19:04	1
2-Chlorophenol	ND		11	4.3	ug/L		01/16/24 11:18	01/16/24 19:04	1
4-Chlorophenyl phenyl ether	ND		11	3.9	ug/L		01/16/24 11:18	01/16/24 19:04	1
Dibenz[a,h]acridine	ND		11	3.0	ug/L		01/16/24 11:18	01/16/24 19:04	1
Dibenzofuran	ND		11	4.2	ug/L		01/16/24 11:18	01/16/24 19:04	1
3,3'-Dichlorobenzidine	ND		12	12	ug/L		01/16/24 11:18	01/16/24 19:04	1
2,4-Dichlorophenol	ND		11	4.5	ug/L		01/16/24 11:18	01/16/24 19:04	1
Diethyl phthalate	ND		11	4.6	ug/L		01/16/24 11:18	01/16/24 19:04	1
2,4-Dimethylphenol	ND		11	5.5	ug/L		01/16/24 11:18	01/16/24 19:04	1
Dimethyl phthalate	ND		11	4.4	ug/L		01/16/24 11:18	01/16/24 19:04	1
Di-n-butyl phthalate	ND		11	4.8	ug/L		01/16/24 11:18	01/16/24 19:04	1
4,6-Dinitro-ortho-cresol	ND		11	11	ug/L		01/16/24 11:18	01/16/24 19:04	1
2,4-Dinitrophenol	ND		32	4.8	ug/L		01/16/24 11:18	01/16/24 19:04	1
2,4-Dinitrotoluene	ND		11	5.4	ug/L		01/16/24 11:18	01/16/24 19:04	1
2,6-Dinitrotoluene	ND		11	4.1	ug/L		01/16/24 11:18	01/16/24 19:04	1
Di-n-octyl phthalate	ND		11	6.3	ug/L		01/16/24 11:18	01/16/24 19:04	1
1,4-Dioxane	ND		11	4.5	ug/L		01/16/24 11:18	01/16/24 19:04	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	3.5	ug/L		01/16/24 11:18	01/16/24 19:04	1
Hexachlorobenzene	ND		11	10	ug/L		01/16/24 11:18	01/16/24 19:04	1
Hexachlorocyclopentadiene	ND		21	4.7	ug/L		01/16/24 11:18	01/16/24 19:04	1
Hexachloroethane	ND		11	5.5	ug/L		01/16/24 11:18	01/16/24 19:04	1
Indene	ND		11	3.8	ug/L		01/16/24 11:18	01/16/24 19:04	1
Isophorone	ND		11	5.5	ug/L		01/16/24 11:18	01/16/24 19:04	1
2-Methylphenol	ND		11	3.4	ug/L		01/16/24 11:18	01/16/24 19:04	1
3 & 4 Methylphenol	ND		21	4.8	ug/L		01/16/24 11:18	01/16/24 19:04	1
2-Nitroaniline	ND		11	5.3	ug/L		01/16/24 11:18	01/16/24 19:04	1
3-Nitroaniline	ND		11	5.0	ug/L		01/16/24 11:18	01/16/24 19:04	1
4-Nitroaniline	ND		11	4.3	ug/L		01/16/24 11:18	01/16/24 19:04	1
Nitrobenzene	ND		11	5.0	ug/L		01/16/24 11:18	01/16/24 19:04	1
2-Nitrophenol	ND		11	4.8	ug/L		01/16/24 11:18	01/16/24 19:04	1
4-Nitrophenol	ND		11	3.5	ug/L		01/16/24 11:18	01/16/24 19:04	1
N-Nitrosodimethylamine	ND		11	2.3	ug/L		01/16/24 11:18	01/16/24 19:04	1

Client Sample ID: P59-ROX-011224 **Lab Sample ID: 400-249691-8**
Date Collected: 01/12/24 10:15 **Matrix: Water**
Date Received: 01/15/24 09:32

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		11	2.6	ug/L		01/16/24 11:18	01/16/24 19:04	1
N-Nitrosodiphenylamine	ND		11	3.9	ug/L		01/16/24 11:18	01/16/24 19:04	1
Pentachlorophenol	ND		21	13	ug/L		01/16/24 11:18	01/16/24 19:04	1
Phenol	**17**		11	4.4	ug/L		01/16/24 11:18	01/16/24 19:04	1
Pyridine	ND		11	11	ug/L		01/16/24 11:18	01/16/24 19:04	1
Quinoline	ND		11	2.5	ug/L		01/16/24 11:18	01/16/24 19:04	1
2,4,5-Trichlorophenol	ND		11	4.2	ug/L		01/16/24 11:18	01/16/24 19:04	1
2,4,6-Trichlorophenol	ND		11	3.7	ug/L		01/16/24 11:18	01/16/24 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*21 - 114*	*01/16/24 11:18*	*01/16/24 19:04*	*1*
2-Fluorophenol	*43*		*10 - 105*	*01/16/24 11:18*	*01/16/24 19:04*	*1*
Nitrobenzene-d5	*56*		*16 - 127*	*01/16/24 11:18*	*01/16/24 19:04*	*1*
Phenol-d5	*35*		*10 - 129*	*01/16/24 11:18*	*01/16/24 19:04*	*1*
Terphenyl-d14	*83*		*13 - 150*	*01/16/24 11:18*	*01/16/24 19:04*	*1*
2,4,6-Tribromophenol	*75*		*10 - 150*	*01/16/24 11:18*	*01/16/24 19:04*	*1*

Method: EPA 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		01/18/24 11:45	01/18/24 20:28	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/24 11:45	01/18/24 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*126*		*51 - 149*	*01/18/24 11:45*	*01/18/24 20:28*	*1*

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

Job ID: 400-249691-1

Client Sample ID: P58-ROX-011224
Date Collected: 01/12/24 11:10
Date Received: 01/15/24 09:32

Lab Sample ID: 400-249691-9
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	10000	ug/L			01/17/24 12:59	1000
Acrolein	ND		20000	3300	ug/L			01/17/24 12:59	1000
Acrylonitrile	ND		10000	2800	ug/L			01/17/24 12:59	1000
Benzene	**240000**		1000	500	ug/L			01/17/24 12:59	1000
Bromobenzene	ND		1000	540	ug/L			01/17/24 12:59	1000
Bromochloromethane	ND		1000	210	ug/L			01/17/24 12:59	1000
Bromodichloromethane	ND		1000	500	ug/L			01/17/24 12:59	1000
Bromoform	ND		5000	250	ug/L			01/17/24 12:59	1000
Bromomethane	ND		1000	980	ug/L			01/17/24 12:59	1000
2-Butanone (MEK)	ND		25000	2600	ug/L			01/17/24 12:59	1000
Carbon disulfide	ND		1000	500	ug/L			01/17/24 12:59	1000
Carbon tetrachloride	ND		1000	190	ug/L			01/17/24 12:59	1000
Chlorobenzene	ND		1000	900	ug/L			01/17/24 12:59	1000
Chloroethane	ND		1000	760	ug/L			01/17/24 12:59	1000
2-Chloroethyl vinyl ether	ND		5000	2000	ug/L			01/17/24 12:59	1000
Chloroform	ND		1000	900	ug/L			01/17/24 12:59	1000
1-Chlorohexane	ND		1000	320	ug/L			01/17/24 12:59	1000
Chloromethane	ND		1000	900	ug/L			01/17/24 12:59	1000
cis-1,2-Dichloroethene	ND		1000	200	ug/L			01/17/24 12:59	1000
cis-1,3-Dichloropropene	ND		5000	500	ug/L			01/17/24 12:59	1000
Dibromochloromethane	ND		1000	240	ug/L			01/17/24 12:59	1000
1,2-Dichlorobenzene	ND		1000	500	ug/L			01/17/24 12:59	1000
1,3-Dichlorobenzene	ND		1000	540	ug/L			01/17/24 12:59	1000
1,4-Dichlorobenzene	ND		1000	640	ug/L			01/17/24 12:59	1000
Dichlorodifluoromethane	ND		1000	850	ug/L			01/17/24 12:59	1000
1,1-Dichloroethane	ND		1000	500	ug/L			01/17/24 12:59	1000
1,2-Dichloroethane	ND		1000	190	ug/L			01/17/24 12:59	1000
1,1-Dichloroethene	ND		1000	500	ug/L			01/17/24 12:59	1000
1,2-Dichloropropane	ND		1000	500	ug/L			01/17/24 12:59	1000
1,3-Dichloropropane	ND		1000	500	ug/L			01/17/24 12:59	1000
2,2-Dichloropropane	ND		1000	500	ug/L			01/17/24 12:59	1000
1,1-Dichloropropene	ND		1000	500	ug/L			01/17/24 12:59	1000
Ethylbenzene	ND		1000	500	ug/L			01/17/24 12:59	1000
Ethyl methacrylate	ND		1000	600	ug/L			01/17/24 12:59	1000
Hexachlorobutadiene	ND		5000	900	ug/L			01/17/24 12:59	1000
2-Hexanone	ND		25000	1400	ug/L			01/17/24 12:59	1000
Isopropylbenzene	ND		1000	530	ug/L			01/17/24 12:59	1000
Methylene bromide	ND		5000	220	ug/L			01/17/24 12:59	1000
Methylene Chloride	ND		5000	3000	ug/L			01/17/24 12:59	1000
4-Methyl-2-pentanone (MIBK)	ND		25000	1800	ug/L			01/17/24 12:59	1000
Methyl tert-butyl ether	ND		1000	220	ug/L			01/17/24 12:59	1000
m-Xylene & p-Xylene	ND		5000	630	ug/L			01/17/24 12:59	1000
Naphthalene	ND		5000	3000	ug/L			01/17/24 12:59	1000
n-Butylbenzene	ND		1000	760	ug/L			01/17/24 12:59	1000
N-Propylbenzene	ND		1000	690	ug/L			01/17/24 12:59	1000
o-Chlorotoluene	ND		1000	570	ug/L			01/17/24 12:59	1000
o-Xylene	ND		5000	600	ug/L			01/17/24 12:59	1000
p-Chlorotoluene	ND		1000	560	ug/L			01/17/24 12:59	1000
p-Isopropyltoluene	ND		1000	710	ug/L			01/17/24 12:59	1000

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

Job ID: 400-249691-1

Client Sample ID: P58-ROX-011224
Date Collected: 01/12/24 11:10
Date Received: 01/15/24 09:32

Lab Sample ID: 400-249691-9
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1000	700	ug/L			01/17/24 12:59	1000
Styrene	ND		1000	1000	ug/L			01/17/24 12:59	1000
tert-Butylbenzene	ND		1000	630	ug/L			01/17/24 12:59	1000
1,1,1,2-Tetrachloroethane	ND		1000	160	ug/L			01/17/24 12:59	1000
1,1,2,2-Tetrachloroethane	ND		1000	500	ug/L			01/17/24 12:59	1000
Tetrachloroethene	ND		1000	900	ug/L			01/17/24 12:59	1000
Toluene	ND		1000	900	ug/L			01/17/24 12:59	1000
trans-1,2-Dichloroethene	ND		1000	500	ug/L			01/17/24 12:59	1000
trans-1,3-Dichloropropene	ND		5000	200	ug/L			01/17/24 12:59	1000
1,2,3-Trichlorobenzene	ND		1000	900	ug/L			01/17/24 12:59	1000
1,2,4-Trichlorobenzene	ND		1000	820	ug/L			01/17/24 12:59	1000
1,1,1-Trichloroethane	ND		1000	180	ug/L			01/17/24 12:59	1000
1,1,2-Trichloroethane	ND		5000	210	ug/L			01/17/24 12:59	1000
Trichloroethene	ND		1000	150	ug/L			01/17/24 12:59	1000
Trichlorofluoromethane	ND		1000	520	ug/L			01/17/24 12:59	1000
1,2,3-Trichloropropane	ND		5000	840	ug/L			01/17/24 12:59	1000
1,2,4-Trimethylbenzene	ND		1000	820	ug/L			01/17/24 12:59	1000
1,3,5-Trimethylbenzene	ND		1000	560	ug/L			01/17/24 12:59	1000
Vinyl acetate	ND		25000	930	ug/L			01/17/24 12:59	1000
Vinyl chloride	ND		1000	500	ug/L			01/17/24 12:59	1000
Xylenes, Total	ND		10000	1600	ug/L			01/17/24 12:59	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*01/17/24 12:59*	*1000*
Dibromofluoromethane	*113*		*75 - 126*		*01/17/24 12:59*	*1000*
Toluene-d8 (Surr)	*89*		*64 - 132*		*01/17/24 12:59*	*1000*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.58**		0.21	0.10	ug/L		01/16/24 11:18	01/17/24 22:04	1
Acenaphthylene	ND		0.21	0.046	ug/L		01/16/24 11:18	01/17/24 22:04	1
Anthracene	**0.36**		0.21	0.049	ug/L		01/16/24 11:18	01/17/24 22:04	1
Benzo[a]anthracene	**0.34**		0.21	0.035	ug/L		01/16/24 11:18	01/17/24 22:04	1
Benzo[a]pyrene	**0.29**		0.21	0.066	ug/L		01/16/24 11:18	01/17/24 22:04	1
Benzo[b]fluoranthene	**0.16**	**J**	0.21	0.038	ug/L		01/16/24 11:18	01/17/24 22:04	1
Benzo[g,h,i]perylene	**0.13**	**J**	0.21	0.028	ug/L		01/16/24 11:18	01/17/24 22:04	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		01/16/24 11:18	01/17/24 22:04	1
Chrysene	**0.56**		0.21	0.034	ug/L		01/16/24 11:18	01/17/24 22:04	1
Dibenz(a,h)anthracene	**0.071**	**J**	0.21	0.050	ug/L		01/16/24 11:18	01/17/24 22:04	1
Fluoranthene	**0.20**	**J**	0.21	0.035	ug/L		01/16/24 11:18	01/17/24 22:04	1
Fluorene	**1.4**		0.21	0.092	ug/L		01/16/24 11:18	01/17/24 22:04	1
Indeno[1,2,3-cd]pyrene	**0.073**	**J**	0.21	0.035	ug/L		01/16/24 11:18	01/17/24 22:04	1
Phenanthrene	**2.1**		0.21	0.093	ug/L		01/16/24 11:18	01/17/24 22:04	1
Pyrene	**0.88**		0.21	0.040	ug/L		01/16/24 11:18	01/17/24 22:04	1
2-Methylnaphthalene	**19**		0.21	0.068	ug/L		01/16/24 11:18	01/17/24 22:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*60*		*18 - 147*	*01/16/24 11:18*	*01/17/24 22:04*	*1*
2-Fluorobiphenyl	*32*		*15 - 128*	*01/16/24 11:18*	*01/17/24 22:04*	*1*
Nitrobenzene-d5	*61*		*10 - 144*	*01/16/24 11:18*	*01/17/24 22:04*	*1*

Client Sample ID: P58-ROX-011224
Lab Sample ID: 400-249691-9
Date Collected: 01/12/24 11:10
Matrix: Water
Date Received: 01/15/24 09:32

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	58		0.41	0.17	ug/L		01/16/24 11:18	01/19/24 14:08	2

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	9.0	ug/L		01/16/24 11:18	01/16/24 19:26	1
Benzenethiol	ND		10	10	ug/L		01/16/24 11:18	01/16/24 19:26	1
Benzoic acid	ND		31	25	ug/L		01/16/24 11:18	01/16/24 19:26	1
Benzyl alcohol	ND		10	7.6	ug/L		01/16/24 11:18	01/16/24 19:26	1
Bis(2-chloroethoxy)methane	ND		10	4.8	ug/L		01/16/24 11:18	01/16/24 19:26	1
Bis(2-chloroethyl)ether	ND		10	4.0	ug/L		01/16/24 11:18	01/16/24 19:26	1
bis (2-chloroisopropyl) ether	ND		10	1.9	ug/L		01/16/24 11:18	01/16/24 19:26	1
Bis(2-ethylhexyl) phthalate	ND		10	9.2	ug/L		01/16/24 11:18	01/16/24 19:26	1
4-Bromophenyl phenyl ether	ND		10	8.9	ug/L		01/16/24 11:18	01/16/24 19:26	1
Butyl benzyl phthalate	ND		10	6.0	ug/L		01/16/24 11:18	01/16/24 19:26	1
4-Chloroaniline	ND		10	4.9	ug/L		01/16/24 11:18	01/16/24 19:26	1
4-Chloro-3-methylphenol	ND		10	5.5	ug/L		01/16/24 11:18	01/16/24 19:26	1
2-Chloronaphthalene	ND		10	3.9	ug/L		01/16/24 11:18	01/16/24 19:26	1
2-Chlorophenol	ND		10	4.2	ug/L		01/16/24 11:18	01/16/24 19:26	1
4-Chlorophenyl phenyl ether	ND		10	3.8	ug/L		01/16/24 11:18	01/16/24 19:26	1
Dibenz[a,h]acridine	ND		10	2.9	ug/L		01/16/24 11:18	01/16/24 19:26	1
Dibenzofuran	ND		10	4.1	ug/L		01/16/24 11:18	01/16/24 19:26	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/16/24 11:18	01/16/24 19:26	1
2,4-Dichlorophenol	ND		10	4.5	ug/L		01/16/24 11:18	01/16/24 19:26	1
Diethyl phthalate	ND		10	4.6	ug/L		01/16/24 11:18	01/16/24 19:26	1
2,4-Dimethylphenol	ND		10	5.4	ug/L		01/16/24 11:18	01/16/24 19:26	1
Dimethyl phthalate	ND		10	4.3	ug/L		01/16/24 11:18	01/16/24 19:26	1
Di-n-butyl phthalate	ND		10	4.8	ug/L		01/16/24 11:18	01/16/24 19:26	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/16/24 11:18	01/16/24 19:26	1
2,4-Dinitrophenol	ND		31	4.8	ug/L		01/16/24 11:18	01/16/24 19:26	1
2,4-Dinitrotoluene	ND		10	5.3	ug/L		01/16/24 11:18	01/16/24 19:26	1
2,6-Dinitrotoluene	ND		10	4.0	ug/L		01/16/24 11:18	01/16/24 19:26	1
Di-n-octyl phthalate	ND		10	6.2	ug/L		01/16/24 11:18	01/16/24 19:26	1
1,4-Dioxane	ND		10	4.5	ug/L		01/16/24 11:18	01/16/24 19:26	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.4	ug/L		01/16/24 11:18	01/16/24 19:26	1
Hexachlorobenzene	ND		10	10	ug/L		01/16/24 11:18	01/16/24 19:26	1
Hexachlorocyclopentadiene	ND		21	4.7	ug/L		01/16/24 11:18	01/16/24 19:26	1
Hexachloroethane	ND		10	5.4	ug/L		01/16/24 11:18	01/16/24 19:26	1
Indene	ND		10	3.7	ug/L		01/16/24 11:18	01/16/24 19:26	1
Isophorone	ND		10	5.4	ug/L		01/16/24 11:18	01/16/24 19:26	1
2-Methylphenol	ND		10	3.3	ug/L		01/16/24 11:18	01/16/24 19:26	1
3 & 4 Methylphenol	ND		21	4.8	ug/L		01/16/24 11:18	01/16/24 19:26	1
2-Nitroaniline	ND		10	5.2	ug/L		01/16/24 11:18	01/16/24 19:26	1
3-Nitroaniline	ND		10	4.9	ug/L		01/16/24 11:18	01/16/24 19:26	1
4-Nitroaniline	ND		10	4.2	ug/L		01/16/24 11:18	01/16/24 19:26	1
Nitrobenzene	ND		10	4.9	ug/L		01/16/24 11:18	01/16/24 19:26	1
2-Nitrophenol	ND		10	4.8	ug/L		01/16/24 11:18	01/16/24 19:26	1
4-Nitrophenol	ND		10	3.4	ug/L		01/16/24 11:18	01/16/24 19:26	1
N-Nitrosodimethylamine	ND		10	2.3	ug/L		01/16/24 11:18	01/16/24 19:26	1
N-Nitrosodi-n-propylamine	ND		10	2.6	ug/L		01/16/24 11:18	01/16/24 19:26	1

Client: AECOM Technical Services Inc.
Job ID: 400-249691-1
Project/Site: SHELL ROXANA QUARTERLY GW

Client Sample ID: P58-ROX-011224
Lab Sample ID: 400-249691-9
Date Collected: 01/12/24 11:10
Matrix: Water
Date Received: 01/15/24 09:32

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		10	3.8	ug/L		01/16/24 11:18	01/16/24 19:26	1
Pentachlorophenol	ND		21	12	ug/L		01/16/24 11:18	01/16/24 19:26	1
Phenol	**310**		10	4.3	ug/L		01/16/24 11:18	01/16/24 19:26	1
Pyridine	ND		10	10	ug/L		01/16/24 11:18	01/16/24 19:26	1
Quinoline	ND		10	2.5	ug/L		01/16/24 11:18	01/16/24 19:26	1
2,4,5-Trichlorophenol	ND		10	4.1	ug/L		01/16/24 11:18	01/16/24 19:26	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		01/16/24 11:18	01/16/24 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*21 - 114*	*01/16/24 11:18*	*01/16/24 19:26*	*1*
2-Fluorophenol	*53*		*10 - 105*	*01/16/24 11:18*	*01/16/24 19:26*	*1*
Nitrobenzene-d5	*78*		*16 - 127*	*01/16/24 11:18*	*01/16/24 19:26*	*1*
Phenol-d5	*39*		*10 - 129*	*01/16/24 11:18*	*01/16/24 19:26*	*1*
Terphenyl-d14	*91*		*13 - 150*	*01/16/24 11:18*	*01/16/24 19:26*	*1*
2,4,6-Tribromophenol	*96*		*10 - 150*	*01/16/24 11:18*	*01/16/24 19:26*	*1*

Method: EPA 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		01/18/24 11:45	01/18/24 20:49	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/24 11:45	01/18/24 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*124*		*51 - 149*	*01/18/24 11:45*	*01/18/24 20:49*	*1*

Client: AECOM Technical Services Inc.
Job ID: 400-249691-1
Project/Site: SHELL ROXANA QUARTERLY GW

Client Sample ID: P58-ROX-011224-DUP
Lab Sample ID: 400-249691-10
Date Collected: 01/12/24 11:10
Matrix: Water
Date Received: 01/15/24 09:32

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	10000	ug/L			01/17/24 18:40	1000
Acrolein	ND		20000	3300	ug/L			01/17/24 18:40	1000
Acrylonitrile	ND		10000	2800	ug/L			01/17/24 18:40	1000
Benzene	**250000**		1000	500	ug/L			01/17/24 18:40	1000
Bromobenzene	ND		1000	540	ug/L			01/17/24 18:40	1000
Bromochloromethane	ND		1000	210	ug/L			01/17/24 18:40	1000
Bromodichloromethane	ND		1000	500	ug/L			01/17/24 18:40	1000
Bromoform	ND		5000	250	ug/L			01/17/24 18:40	1000
Bromomethane	ND		1000	980	ug/L			01/17/24 18:40	1000
2-Butanone (MEK)	ND		25000	2600	ug/L			01/17/24 18:40	1000
Carbon disulfide	ND		1000	500	ug/L			01/17/24 18:40	1000
Carbon tetrachloride	ND		1000	190	ug/L			01/17/24 18:40	1000
Chlorobenzene	ND		1000	900	ug/L			01/17/24 18:40	1000
Chloroethane	ND		1000	760	ug/L			01/17/24 18:40	1000
2-Chloroethyl vinyl ether	ND		5000	2000	ug/L			01/17/24 18:40	1000
Chloroform	ND		1000	900	ug/L			01/17/24 18:40	1000
1-Chlorohexane	ND		1000	320	ug/L			01/17/24 18:40	1000
Chloromethane	ND		1000	900	ug/L			01/17/24 18:40	1000
cis-1,2-Dichloroethene	ND		1000	200	ug/L			01/17/24 18:40	1000
cis-1,3-Dichloropropene	ND		5000	500	ug/L			01/17/24 18:40	1000
Dibromochloromethane	ND		1000	240	ug/L			01/17/24 18:40	1000
1,2-Dichlorobenzene	ND		1000	500	ug/L			01/17/24 18:40	1000
1,3-Dichlorobenzene	ND		1000	540	ug/L			01/17/24 18:40	1000
1,4-Dichlorobenzene	ND		1000	640	ug/L			01/17/24 18:40	1000
Dichlorodifluoromethane	ND		1000	850	ug/L			01/17/24 18:40	1000
1,1-Dichloroethane	ND		1000	500	ug/L			01/17/24 18:40	1000
1,2-Dichloroethane	ND		1000	190	ug/L			01/17/24 18:40	1000
1,1-Dichloroethene	ND		1000	500	ug/L			01/17/24 18:40	1000
1,2-Dichloropropane	ND		1000	500	ug/L			01/17/24 18:40	1000
1,3-Dichloropropane	ND		1000	500	ug/L			01/17/24 18:40	1000
2,2-Dichloropropane	ND		1000	500	ug/L			01/17/24 18:40	1000
1,1-Dichloropropene	ND		1000	500	ug/L			01/17/24 18:40	1000
Ethylbenzene	ND		1000	500	ug/L			01/17/24 18:40	1000
Ethyl methacrylate	ND		1000	600	ug/L			01/17/24 18:40	1000
Hexachlorobutadiene	ND		5000	900	ug/L			01/17/24 18:40	1000
2-Hexanone	ND		25000	1400	ug/L			01/17/24 18:40	1000
Isopropylbenzene	ND		1000	530	ug/L			01/17/24 18:40	1000
Methylene bromide	ND		5000	220	ug/L			01/17/24 18:40	1000
Methylene Chloride	ND		5000	3000	ug/L			01/17/24 18:40	1000
4-Methyl-2-pentanone (MIBK)	ND		25000	1800	ug/L			01/17/24 18:40	1000
Methyl tert-butyl ether	ND		1000	220	ug/L			01/17/24 18:40	1000
m-Xylene & p-Xylene	ND		5000	630	ug/L			01/17/24 18:40	1000
Naphthalene	ND		5000	3000	ug/L			01/17/24 18:40	1000
n-Butylbenzene	ND		1000	760	ug/L			01/17/24 18:40	1000
N-Propylbenzene	ND		1000	690	ug/L			01/17/24 18:40	1000
o-Chlorotoluene	ND		1000	570	ug/L			01/17/24 18:40	1000
o-Xylene	ND		5000	600	ug/L			01/17/24 18:40	1000
p-Chlorotoluene	ND		1000	560	ug/L			01/17/24 18:40	1000
p-Isopropyltoluene	ND		1000	710	ug/L			01/17/24 18:40	1000

Client Sample ID: P58-ROX-011224-DUP
Date Collected: 01/12/24 11:10
Date Received: 01/15/24 09:32

Lab Sample ID: 400-249691-10
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1000	700	ug/L			01/17/24 18:40	1000
Styrene	ND		1000	1000	ug/L			01/17/24 18:40	1000
tert-Butylbenzene	ND		1000	630	ug/L			01/17/24 18:40	1000
1,1,1,2-Tetrachloroethane	ND		1000	160	ug/L			01/17/24 18:40	1000
1,1,2,2-Tetrachloroethane	ND		1000	500	ug/L			01/17/24 18:40	1000
Tetrachloroethene	ND		1000	900	ug/L			01/17/24 18:40	1000
Toluene	ND		1000	900	ug/L			01/17/24 18:40	1000
trans-1,2-Dichloroethene	ND		1000	500	ug/L			01/17/24 18:40	1000
trans-1,3-Dichloropropene	ND		5000	200	ug/L			01/17/24 18:40	1000
1,2,3-Trichlorobenzene	ND		1000	900	ug/L			01/17/24 18:40	1000
1,2,4-Trichlorobenzene	ND		1000	820	ug/L			01/17/24 18:40	1000
1,1,1-Trichloroethane	ND		1000	180	ug/L			01/17/24 18:40	1000
1,1,2-Trichloroethane	ND		5000	210	ug/L			01/17/24 18:40	1000
Trichloroethene	ND		1000	150	ug/L			01/17/24 18:40	1000
Trichlorofluoromethane	ND		1000	520	ug/L			01/17/24 18:40	1000
1,2,3-Trichloropropane	ND		5000	840	ug/L			01/17/24 18:40	1000
1,2,4-Trimethylbenzene	ND		1000	820	ug/L			01/17/24 18:40	1000
1,3,5-Trimethylbenzene	ND		1000	560	ug/L			01/17/24 18:40	1000
Vinyl acetate	ND		25000	930	ug/L			01/17/24 18:40	1000
Vinyl chloride	ND		1000	500	ug/L			01/17/24 18:40	1000
Xylenes, Total	ND		10000	1600	ug/L			01/17/24 18:40	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*72 - 130*		*01/17/24 18:40*	*1000*
Dibromofluoromethane	*113*		*75 - 126*		*01/17/24 18:40*	*1000*
Toluene-d8 (Surr)	*87*		*64 - 132*		*01/17/24 18:40*	*1000*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.60**		0.20	0.10	ug/L		01/16/24 11:18	01/17/24 22:24	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/16/24 11:18	01/17/24 22:24	1
Anthracene	**0.46**		0.20	0.048	ug/L		01/16/24 11:18	01/17/24 22:24	1
Benzo[a]anthracene	**0.33**		0.20	0.035	ug/L		01/16/24 11:18	01/17/24 22:24	1
Benzo[a]pyrene	**0.28**		0.20	0.065	ug/L		01/16/24 11:18	01/17/24 22:24	1
Benzo[b]fluoranthene	**0.18**	**J**	0.20	0.038	ug/L		01/16/24 11:18	01/17/24 22:24	1
Benzo[g,h,i]perylene	**0.12**	**J**	0.20	0.028	ug/L		01/16/24 11:18	01/17/24 22:24	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		01/16/24 11:18	01/17/24 22:24	1
Chrysene	**0.61**		0.20	0.034	ug/L		01/16/24 11:18	01/17/24 22:24	1
Dibenz(a,h)anthracene	**0.087**	**J**	0.20	0.049	ug/L		01/16/24 11:18	01/17/24 22:24	1
Fluoranthene	**0.19**	**J**	0.20	0.035	ug/L		01/16/24 11:18	01/17/24 22:24	1
Fluorene	**1.4**		0.20	0.091	ug/L		01/16/24 11:18	01/17/24 22:24	1
Indeno[1,2,3-cd]pyrene	**0.070**	**J**	0.20	0.035	ug/L		01/16/24 11:18	01/17/24 22:24	1
Phenanthrene	**2.1**		0.20	0.092	ug/L		01/16/24 11:18	01/17/24 22:24	1
Pyrene	**0.94**		0.20	0.040	ug/L		01/16/24 11:18	01/17/24 22:24	1
2-Methylnaphthalene	**19**		0.20	0.067	ug/L		01/16/24 11:18	01/17/24 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*70*		*18 - 147*	*01/16/24 11:18*	*01/17/24 22:24*	*1*
2-Fluorobiphenyl	*34*		*15 - 128*	*01/16/24 11:18*	*01/17/24 22:24*	*1*
Nitrobenzene-d5	*64*		*10 - 144*	*01/16/24 11:18*	*01/17/24 22:24*	*1*

Client Sample ID: P58-ROX-011224-DUP
Lab Sample ID: 400-249691-10
Date Collected: 01/12/24 11:10
Matrix: Water
Date Received: 01/15/24 09:32

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	58		0.41	0.16	ug/L		01/16/24 11:18	01/19/24 14:29	2

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.9	ug/L		01/16/24 11:18	01/16/24 19:49	1
Benzenethiol	ND		10	10	ug/L		01/16/24 11:18	01/16/24 19:49	1
Benzoic acid	ND		31	24	ug/L		01/16/24 11:18	01/16/24 19:49	1
Benzyl alcohol	ND		10	7.4	ug/L		01/16/24 11:18	01/16/24 19:49	1
Bis(2-chloroethoxy)methane	ND		10	4.7	ug/L		01/16/24 11:18	01/16/24 19:49	1
Bis(2-chloroethyl)ether	ND		10	4.0	ug/L		01/16/24 11:18	01/16/24 19:49	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		01/16/24 11:18	01/16/24 19:49	1
Bis(2-ethylhexyl) phthalate	ND		10	9.1	ug/L		01/16/24 11:18	01/16/24 19:49	1
4-Bromophenyl phenyl ether	ND		10	8.8	ug/L		01/16/24 11:18	01/16/24 19:49	1
Butyl benzyl phthalate	ND		10	5.9	ug/L		01/16/24 11:18	01/16/24 19:49	1
4-Chloroaniline	ND		10	4.8	ug/L		01/16/24 11:18	01/16/24 19:49	1
4-Chloro-3-methylphenol	ND		10	5.4	ug/L		01/16/24 11:18	01/16/24 19:49	1
2-Chloronaphthalene	ND		10	3.9	ug/L		01/16/24 11:18	01/16/24 19:49	1
2-Chlorophenol	ND		10	4.2	ug/L		01/16/24 11:18	01/16/24 19:49	1
4-Chlorophenyl phenyl ether	ND		10	3.8	ug/L		01/16/24 11:18	01/16/24 19:49	1
Dibenz[a,h]acridine	ND		10	2.9	ug/L		01/16/24 11:18	01/16/24 19:49	1
Dibenzofuran	ND		10	4.1	ug/L		01/16/24 11:18	01/16/24 19:49	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/16/24 11:18	01/16/24 19:49	1
2,4-Dichlorophenol	ND		10	4.4	ug/L		01/16/24 11:18	01/16/24 19:49	1
Diethyl phthalate	ND		10	4.5	ug/L		01/16/24 11:18	01/16/24 19:49	1
2,4-Dimethylphenol	ND		10	5.3	ug/L		01/16/24 11:18	01/16/24 19:49	1
Dimethyl phthalate	ND		10	4.3	ug/L		01/16/24 11:18	01/16/24 19:49	1
Di-n-butyl phthalate	ND		10	4.7	ug/L		01/16/24 11:18	01/16/24 19:49	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/16/24 11:18	01/16/24 19:49	1
2,4-Dinitrophenol	ND		31	4.7	ug/L		01/16/24 11:18	01/16/24 19:49	1
2,4-Dinitrotoluene	ND		10	5.2	ug/L		01/16/24 11:18	01/16/24 19:49	1
2,6-Dinitrotoluene	ND		10	4.0	ug/L		01/16/24 11:18	01/16/24 19:49	1
Di-n-octyl phthalate	ND		10	6.1	ug/L		01/16/24 11:18	01/16/24 19:49	1
1,4-Dioxane	ND		10	4.4	ug/L		01/16/24 11:18	01/16/24 19:49	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.4	ug/L		01/16/24 11:18	01/16/24 19:49	1
Hexachlorobenzene	ND		10	9.9	ug/L		01/16/24 11:18	01/16/24 19:49	1
Hexachlorocyclopentadiene	ND		20	4.6	ug/L		01/16/24 11:18	01/16/24 19:49	1
Hexachloroethane	ND		10	5.3	ug/L		01/16/24 11:18	01/16/24 19:49	1
Indene	ND		10	3.7	ug/L		01/16/24 11:18	01/16/24 19:49	1
Isophorone	ND		10	5.3	ug/L		01/16/24 11:18	01/16/24 19:49	1
2-Methylphenol	ND		10	3.3	ug/L		01/16/24 11:18	01/16/24 19:49	1
3 & 4 Methylphenol	ND		20	4.7	ug/L		01/16/24 11:18	01/16/24 19:49	1
2-Nitroaniline	ND		10	5.1	ug/L		01/16/24 11:18	01/16/24 19:49	1
3-Nitroaniline	ND		10	4.8	ug/L		01/16/24 11:18	01/16/24 19:49	1
4-Nitroaniline	ND		10	4.2	ug/L		01/16/24 11:18	01/16/24 19:49	1
Nitrobenzene	ND		10	4.8	ug/L		01/16/24 11:18	01/16/24 19:49	1
2-Nitrophenol	ND		10	4.7	ug/L		01/16/24 11:18	01/16/24 19:49	1
4-Nitrophenol	ND		10	3.4	ug/L		01/16/24 11:18	01/16/24 19:49	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		01/16/24 11:18	01/16/24 19:49	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		01/16/24 11:18	01/16/24 19:49	1

Client: AECOM Technical Services Inc.
Job ID: 400-249691-1
Project/Site: SHELL ROXANA QUARTERLY GW

Client Sample ID: P58-ROX-011224-DUP
Lab Sample ID: 400-249691-10
Date Collected: 01/12/24 11:10
Matrix: Water
Date Received: 01/15/24 09:32

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		10	3.8	ug/L		01/16/24 11:18	01/16/24 19:49	1
Pentachlorophenol	ND		20	12	ug/L		01/16/24 11:18	01/16/24 19:49	1
Phenol	**280**		10	4.3	ug/L		01/16/24 11:18	01/16/24 19:49	1
Pyridine	ND		10	10	ug/L		01/16/24 11:18	01/16/24 19:49	1
Quinoline	ND		10	2.4	ug/L		01/16/24 11:18	01/16/24 19:49	1
2,4,5-Trichlorophenol	ND		10	4.1	ug/L		01/16/24 11:18	01/16/24 19:49	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		01/16/24 11:18	01/16/24 19:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*21 - 114*	*01/16/24 11:18*	*01/16/24 19:49*	*1*
2-Fluorophenol	*47*		*10 - 105*	*01/16/24 11:18*	*01/16/24 19:49*	*1*
Nitrobenzene-d5	*74*		*16 - 127*	*01/16/24 11:18*	*01/16/24 19:49*	*1*
Phenol-d5	*34*		*10 - 129*	*01/16/24 11:18*	*01/16/24 19:49*	*1*
Terphenyl-d14	*84*		*13 - 150*	*01/16/24 11:18*	*01/16/24 19:49*	*1*
2,4,6-Tribromophenol	*86*		*10 - 150*	*01/16/24 11:18*	*01/16/24 19:49*	*1*

Method: EPA 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		01/18/24 11:45	01/18/24 21:10	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/24 11:45	01/18/24 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*134*		*51 - 149*	*01/18/24 11:45*	*01/18/24 21:10*	*1*

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

Job ID: 400-249691-1

Client Sample ID: P93B-ROX-011224
Date Collected: 01/12/24 12:25
Date Received: 01/15/24 09:32

Lab Sample ID: 400-249691-11
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		63000	25000	ug/L			01/17/24 13:23	2500
Acrolein	ND		50000	8300	ug/L			01/17/24 13:23	2500
Acrylonitrile	ND		25000	7000	ug/L			01/17/24 13:23	2500
Benzene	**690000**		2500	1300	ug/L			01/17/24 13:23	2500
Bromobenzene	ND		2500	1400	ug/L			01/17/24 13:23	2500
Bromochloromethane	ND		2500	530	ug/L			01/17/24 13:23	2500
Bromodichloromethane	ND		2500	1300	ug/L			01/17/24 13:23	2500
Bromoform	ND		13000	630	ug/L			01/17/24 13:23	2500
Bromomethane	ND		2500	2500	ug/L			01/17/24 13:23	2500
2-Butanone (MEK)	ND		63000	6500	ug/L			01/17/24 13:23	2500
Carbon disulfide	ND		2500	1300	ug/L			01/17/24 13:23	2500
Carbon tetrachloride	ND		2500	480	ug/L			01/17/24 13:23	2500
Chlorobenzene	ND		2500	2300	ug/L			01/17/24 13:23	2500
Chloroethane	ND		2500	1900	ug/L			01/17/24 13:23	2500
2-Chloroethyl vinyl ether	ND		13000	5000	ug/L			01/17/24 13:23	2500
Chloroform	ND		2500	2300	ug/L			01/17/24 13:23	2500
1-Chlorohexane	ND		2500	800	ug/L			01/17/24 13:23	2500
Chloromethane	ND		2500	2300	ug/L			01/17/24 13:23	2500
cis-1,2-Dichloroethene	ND		2500	500	ug/L			01/17/24 13:23	2500
cis-1,3-Dichloropropene	ND		13000	1300	ug/L			01/17/24 13:23	2500
Dibromochloromethane	ND		2500	600	ug/L			01/17/24 13:23	2500
1,2-Dichlorobenzene	ND		2500	1300	ug/L			01/17/24 13:23	2500
1,3-Dichlorobenzene	ND		2500	1400	ug/L			01/17/24 13:23	2500
1,4-Dichlorobenzene	ND		2500	1600	ug/L			01/17/24 13:23	2500
Dichlorodifluoromethane	ND		2500	2100	ug/L			01/17/24 13:23	2500
1,1-Dichloroethane	ND		2500	1300	ug/L			01/17/24 13:23	2500
1,2-Dichloroethane	ND		2500	480	ug/L			01/17/24 13:23	2500
1,1-Dichloroethene	ND		2500	1300	ug/L			01/17/24 13:23	2500
1,2-Dichloropropane	ND		2500	1300	ug/L			01/17/24 13:23	2500
1,3-Dichloropropane	ND		2500	1300	ug/L			01/17/24 13:23	2500
2,2-Dichloropropane	ND		2500	1300	ug/L			01/17/24 13:23	2500
1,1-Dichloropropene	ND		2500	1300	ug/L			01/17/24 13:23	2500
Ethylbenzene	ND		2500	1300	ug/L			01/17/24 13:23	2500
Ethyl methacrylate	ND		2500	1500	ug/L			01/17/24 13:23	2500
Hexachlorobutadiene	ND		13000	2300	ug/L			01/17/24 13:23	2500
2-Hexanone	ND		63000	3500	ug/L			01/17/24 13:23	2500
Isopropylbenzene	ND		2500	1300	ug/L			01/17/24 13:23	2500
Methylene bromide	ND		13000	550	ug/L			01/17/24 13:23	2500
Methylene Chloride	ND		13000	7500	ug/L			01/17/24 13:23	2500
4-Methyl-2-pentanone (MIBK)	ND		63000	4500	ug/L			01/17/24 13:23	2500
Methyl tert-butyl ether	ND		2500	550	ug/L			01/17/24 13:23	2500
m-Xylene & p-Xylene	ND		13000	1600	ug/L			01/17/24 13:23	2500
Naphthalene	ND		13000	7500	ug/L			01/17/24 13:23	2500
n-Butylbenzene	ND		2500	1900	ug/L			01/17/24 13:23	2500
N-Propylbenzene	ND		2500	1700	ug/L			01/17/24 13:23	2500
o-Chlorotoluene	ND		2500	1400	ug/L			01/17/24 13:23	2500
o-Xylene	ND		13000	1500	ug/L			01/17/24 13:23	2500
p-Chlorotoluene	ND		2500	1400	ug/L			01/17/24 13:23	2500
p-Isopropyltoluene	ND		2500	1800	ug/L			01/17/24 13:23	2500

Client Sample ID: P93B-ROX-011224
Lab Sample ID: 400-249691-11
Date Collected: 01/12/24 12:25
Matrix: Water
Date Received: 01/15/24 09:32

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		2500	1800	ug/L			01/17/24 13:23	2500
Styrene	ND		2500	2500	ug/L			01/17/24 13:23	2500
tert-Butylbenzene	ND		2500	1600	ug/L			01/17/24 13:23	2500
1,1,1,2-Tetrachloroethane	ND		2500	400	ug/L			01/17/24 13:23	2500
1,1,2,2-Tetrachloroethane	ND		2500	1300	ug/L			01/17/24 13:23	2500
Tetrachloroethene	ND		2500	2300	ug/L			01/17/24 13:23	2500
Toluene	ND		2500	2300	ug/L			01/17/24 13:23	2500
trans-1,2-Dichloroethene	ND		2500	1300	ug/L			01/17/24 13:23	2500
trans-1,3-Dichloropropene	ND		13000	500	ug/L			01/17/24 13:23	2500
1,2,3-Trichlorobenzene	ND		2500	2300	ug/L			01/17/24 13:23	2500
1,2,4-Trichlorobenzene	ND		2500	2100	ug/L			01/17/24 13:23	2500
1,1,1-Trichloroethane	ND		2500	450	ug/L			01/17/24 13:23	2500
1,1,2-Trichloroethane	ND		13000	530	ug/L			01/17/24 13:23	2500
Trichloroethene	ND		2500	380	ug/L			01/17/24 13:23	2500
Trichlorofluoromethane	ND		2500	1300	ug/L			01/17/24 13:23	2500
1,2,3-Trichloropropane	ND		13000	2100	ug/L			01/17/24 13:23	2500
1,2,4-Trimethylbenzene	ND		2500	2100	ug/L			01/17/24 13:23	2500
1,3,5-Trimethylbenzene	ND		2500	1400	ug/L			01/17/24 13:23	2500
Vinyl acetate	ND		63000	2300	ug/L			01/17/24 13:23	2500
Vinyl chloride	ND		2500	1300	ug/L			01/17/24 13:23	2500
Xylenes, Total	ND		25000	4000	ug/L			01/17/24 13:23	2500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 130*		*01/17/24 13:23*	*2500*
Dibromofluoromethane	*115*		*75 - 126*		*01/17/24 13:23*	*2500*
Toluene-d8 (Surr)	*89*		*64 - 132*		*01/17/24 13:23*	*2500*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.10	ug/L		01/16/24 11:18	01/17/24 22:45	1
Acenaphthylene	**0.10**	**J**	0.21	0.046	ug/L		01/16/24 11:18	01/17/24 22:45	1
Anthracene	ND		0.21	0.050	ug/L		01/16/24 11:18	01/17/24 22:45	1
Benzo[a]anthracene	ND		0.21	0.036	ug/L		01/16/24 11:18	01/17/24 22:45	1
Benzo[a]pyrene	ND		0.21	0.068	ug/L		01/16/24 11:18	01/17/24 22:45	1
Benzo[b]fluoranthene	ND		0.21	0.039	ug/L		01/16/24 11:18	01/17/24 22:45	1
Benzo[g,h,i]perylene	ND		0.21	0.029	ug/L		01/16/24 11:18	01/17/24 22:45	1
Benzo[k]fluoranthene	ND		0.21	0.066	ug/L		01/16/24 11:18	01/17/24 22:45	1
Chrysene	ND		0.21	0.035	ug/L		01/16/24 11:18	01/17/24 22:45	1
Dibenz(a,h)anthracene	ND		0.21	0.051	ug/L		01/16/24 11:18	01/17/24 22:45	1
Fluoranthene	ND		0.21	0.036	ug/L		01/16/24 11:18	01/17/24 22:45	1
Fluorene	ND		0.21	0.094	ug/L		01/16/24 11:18	01/17/24 22:45	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.036	ug/L		01/16/24 11:18	01/17/24 22:45	1
Phenanthrene	ND		0.21	0.095	ug/L		01/16/24 11:18	01/17/24 22:45	1
Pyrene	ND		0.21	0.041	ug/L		01/16/24 11:18	01/17/24 22:45	1
1-Methylnaphthalene	**0.22**		0.21	0.085	ug/L		01/16/24 11:18	01/19/24 14:49	1
2-Methylnaphthalene	**0.17**	**J**	0.21	0.070	ug/L		01/16/24 11:18	01/19/24 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*64*		*18 - 147*	*01/16/24 11:18*	*01/17/24 22:45*	*1*
2-Fluorobiphenyl	*56*		*15 - 128*	*01/16/24 11:18*	*01/17/24 22:45*	*1*

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

Job ID: 400-249691-1

Client Sample ID: P93B-ROX-011224
Date Collected: 01/12/24 12:25
Date Received: 01/15/24 09:32

Lab Sample ID: 400-249691-11
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*55*		*10 - 144*	*01/16/24 11:18*	*01/19/24 14:49*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	9.2	ug/L		01/16/24 11:18	01/16/24 20:11	1
Benzenethiol	ND		11	10	ug/L		01/16/24 11:18	01/16/24 20:11	1
Benzoic acid	ND		32	25	ug/L		01/16/24 11:18	01/16/24 20:11	1
Benzyl alcohol	ND		11	7.7	ug/L		01/16/24 11:18	01/16/24 20:11	1
Bis(2-chloroethoxy)methane	ND		11	4.9	ug/L		01/16/24 11:18	01/16/24 20:11	1
Bis(2-chloroethyl)ether	ND		11	4.1	ug/L		01/16/24 11:18	01/16/24 20:11	1
bis (2-chloroisopropyl) ether	ND		11	1.9	ug/L		01/16/24 11:18	01/16/24 20:11	1
Bis(2-ethylhexyl) phthalate	ND		11	9.4	ug/L		01/16/24 11:18	01/16/24 20:11	1
4-Bromophenyl phenyl ether	ND		11	9.1	ug/L		01/16/24 11:18	01/16/24 20:11	1
Butyl benzyl phthalate	ND		11	6.1	ug/L		01/16/24 11:18	01/16/24 20:11	1
4-Chloroaniline	ND		11	5.0	ug/L		01/16/24 11:18	01/16/24 20:11	1
4-Chloro-3-methylphenol	ND		11	5.6	ug/L		01/16/24 11:18	01/16/24 20:11	1
2-Chloronaphthalene	ND		11	4.0	ug/L		01/16/24 11:18	01/16/24 20:11	1
2-Chlorophenol	ND		11	4.3	ug/L		01/16/24 11:18	01/16/24 20:11	1
4-Chlorophenyl phenyl ether	ND		11	3.9	ug/L		01/16/24 11:18	01/16/24 20:11	1
Dibenz[a,h]acridine	ND		11	3.0	ug/L		01/16/24 11:18	01/16/24 20:11	1
Dibenzofuran	ND		11	4.2	ug/L		01/16/24 11:18	01/16/24 20:11	1
3,3'-Dichlorobenzidine	ND		12	12	ug/L		01/16/24 11:18	01/16/24 20:11	1
2,4-Dichlorophenol	ND		11	4.5	ug/L		01/16/24 11:18	01/16/24 20:11	1
Diethyl phthalate	ND		11	4.6	ug/L		01/16/24 11:18	01/16/24 20:11	1
2,4-Dimethylphenol	ND		11	5.5	ug/L		01/16/24 11:18	01/16/24 20:11	1
Dimethyl phthalate	ND		11	4.4	ug/L		01/16/24 11:18	01/16/24 20:11	1
Di-n-butyl phthalate	ND		11	4.9	ug/L		01/16/24 11:18	01/16/24 20:11	1
4,6-Dinitro-ortho-cresol	ND		11	11	ug/L		01/16/24 11:18	01/16/24 20:11	1
2,4-Dinitrophenol	ND		32	4.9	ug/L		01/16/24 11:18	01/16/24 20:11	1
2,4-Dinitrotoluene	ND		11	5.4	ug/L		01/16/24 11:18	01/16/24 20:11	1
2,6-Dinitrotoluene	ND		11	4.1	ug/L		01/16/24 11:18	01/16/24 20:11	1
Di-n-octyl phthalate	ND		11	6.3	ug/L		01/16/24 11:18	01/16/24 20:11	1
1,4-Dioxane	ND		11	4.5	ug/L		01/16/24 11:18	01/16/24 20:11	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	3.5	ug/L		01/16/24 11:18	01/16/24 20:11	1
Hexachlorobenzene	ND		11	10	ug/L		01/16/24 11:18	01/16/24 20:11	1
Hexachlorocyclopentadiene	ND		21	4.8	ug/L		01/16/24 11:18	01/16/24 20:11	1
Hexachloroethane	ND		11	5.5	ug/L		01/16/24 11:18	01/16/24 20:11	1
Indene	ND		11	3.8	ug/L		01/16/24 11:18	01/16/24 20:11	1
Isophorone	ND		11	5.5	ug/L		01/16/24 11:18	01/16/24 20:11	1
2-Methylphenol	ND		11	3.4	ug/L		01/16/24 11:18	01/16/24 20:11	1
3 & 4 Methylphenol	ND		21	4.9	ug/L		01/16/24 11:18	01/16/24 20:11	1
2-Nitroaniline	ND		11	5.3	ug/L		01/16/24 11:18	01/16/24 20:11	1
3-Nitroaniline	ND		11	5.0	ug/L		01/16/24 11:18	01/16/24 20:11	1
4-Nitroaniline	ND		11	4.3	ug/L		01/16/24 11:18	01/16/24 20:11	1
Nitrobenzene	ND		11	5.0	ug/L		01/16/24 11:18	01/16/24 20:11	1
2-Nitrophenol	ND		11	4.9	ug/L		01/16/24 11:18	01/16/24 20:11	1
4-Nitrophenol	ND		11	3.5	ug/L		01/16/24 11:18	01/16/24 20:11	1
N-Nitrosodimethylamine	ND		11	2.3	ug/L		01/16/24 11:18	01/16/24 20:11	1

Client Sample ID: P93B-ROX-011224 **Lab Sample ID: 400-249691-11**
Date Collected: 01/12/24 12:25 **Matrix: Water**
Date Received: 01/15/24 09:32

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		11	2.6	ug/L		01/16/24 11:18	01/16/24 20:11	1
N-Nitrosodiphenylamine	ND		11	3.9	ug/L		01/16/24 11:18	01/16/24 20:11	1
Pentachlorophenol	ND		21	13	ug/L		01/16/24 11:18	01/16/24 20:11	1
Phenol	**200**		11	4.4	ug/L		01/16/24 11:18	01/16/24 20:11	1
Pyridine	ND		11	11	ug/L		01/16/24 11:18	01/16/24 20:11	1
Quinoline	ND		11	2.5	ug/L		01/16/24 11:18	01/16/24 20:11	1
2,4,5-Trichlorophenol	ND		11	4.2	ug/L		01/16/24 11:18	01/16/24 20:11	1
2,4,6-Trichlorophenol	ND		11	3.7	ug/L		01/16/24 11:18	01/16/24 20:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*21 - 114*	*01/16/24 11:18*	*01/16/24 20:11*	*1*
2-Fluorophenol	*56*		*10 - 105*	*01/16/24 11:18*	*01/16/24 20:11*	*1*
Nitrobenzene-d5	*74*		*16 - 127*	*01/16/24 11:18*	*01/16/24 20:11*	*1*
Phenol-d5	*41*		*10 - 129*	*01/16/24 11:18*	*01/16/24 20:11*	*1*
Terphenyl-d14	*89*		*13 - 150*	*01/16/24 11:18*	*01/16/24 20:11*	*1*
2,4,6-Tribromophenol	*83*		*10 - 150*	*01/16/24 11:18*	*01/16/24 20:11*	*1*

Method: EPA 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		01/18/24 11:45	01/18/24 21:31	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/24 11:45	01/18/24 21:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*129*		*51 - 149*	*01/18/24 11:45*	*01/18/24 21:31*	*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
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: SHELL ROXANA QUARTERLY GW

Job ID: 400-249691-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-130)	(75-126)	(64-132)
400-249691-1	TB-ROX-011224-8260-A	90	105	88
400-249691-3	MW22-ROX-011224-EB	90	106	90
400-249691-4	MW22-ROX-011224	91	106	85
400-249691-5	MW22-ROX-011224-DUP	92	101	84
400-249691-7	TB-ROX-011224-8260-B	91	107	88
400-249691-8	P59-ROX-011224	90	99	88
400-249691-9	P58-ROX-011224	90	113	89
400-249691-10	P58-ROX-011224-DUP	88	113	87
400-249691-11	P93B-ROX-011224	91	115	89
LCS 400-657865/1002	Lab Control Sample	96	104	97
MB 400-657865/5	Method Blank	89	105	89

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - 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	(21-114)	(10-105)	(16-127)	(10-129)	(13-150)	(10-150)
400-249691-3	MW22-ROX-011224-EB	69	49	67	37	83	59
400-249691-4	MW22-ROX-011224	68	32	66	39	80	71
400-249691-5	MW22-ROX-011224-DUP	70	34	68	40	82	75
400-249691-8	P59-ROX-011224	58	43	56	35	83	75
400-249691-9	P58-ROX-011224	80	53	78	39	91	96
400-249691-10	P58-ROX-011224-DUP	72	47	74	34	84	86
400-249691-11	P93B-ROX-011224	73	56	74	41	89	83
LCS 400-657808/15-A	Lab Control Sample	69	25	69	20	88	29
LCS 400-657808/2-A	Lab Control Sample	76	61	75	52	85	75
LCSD 400-657808/16-A	Lab Control Sample Dup	71	25	67	19	87	27
LCSD 400-657808/3-A	Lab Control Sample Dup	73	60	72	51	82	71
MB 400-657808/1-A	Method Blank	60	47	58	36	71	51

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-249691-3	MW22-ROX-011224-EB	81	72	74

Surrogate Summary

Client: AECOM Technical Services Inc. Job ID: 400-249691-1
Project/Site: SHELL ROXANA QUARTERLY GW

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	TPHL (18-147)	FBP (15-128)	NBZ (10-144)
400-249691-4	MW22-ROX-011224	69	49	57
400-249691-5	MW22-ROX-011224-DUP	65	47	57
400-249691-8	P59-ROX-011224	58	43	49
400-249691-9	P58-ROX-011224	60	32	61
400-249691-10	P58-ROX-011224-DUP	70	34	64
400-249691-11	P93B-ROX-011224	64	56	
400-249691-11	P93B-ROX-011224			55
LCS 400-657808/2-A	Lab Control Sample	74	78	56
LCSD 400-657808/3-A	Lab Control Sample Dup	74	80	68
MB 400-657808/1-A	Method Blank	79	66	76

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

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	BFB1 (51-149)
400-249691-2	TB-ROX-011224-8011-A	84 p
400-249691-3	MW22-ROX-011224-EB	86 p
400-249691-4	MW22-ROX-011224	119
400-249691-5	MW22-ROX-011224-DUP	123
400-249691-6	TB-ROX-011224-8011-B	86
400-249691-8	P59-ROX-011224	126
400-249691-9	P58-ROX-011224	124
400-249691-10	P58-ROX-011224-DUP	134
400-249691-11	P93B-ROX-011224	129
LCS 400-658010/2-A	Lab Control Sample	119
LCSD 400-658010/3-A	Lab Control Sample Dup	120
MB 400-658010/1-A	Method Blank	125

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-249691-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

Client: AECOM Technical Services Inc.
Job ID: 400-249691-1
Project/Site: SHELL ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-011224-8260-A
Lab Sample ID: 400-249691-1
Date Collected: 01/12/24 00:00
Matrix: Water
Date Received: 01/15/24 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657865	01/17/24 09:48	WPD	EET PEN

Client Sample ID: TB-ROX-011224-8011-A
Lab Sample ID: 400-249691-2
Date Collected: 01/12/24 00:00
Matrix: Water
Date Received: 01/15/24 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			33.3 mL	35 mL	658010	01/18/24 11:45	JAW	EET PEN
Total/NA	Analysis	8011		1			658027	01/18/24 18:23	JAW	EET PEN

Client Sample ID: MW22-ROX-011224-EB
Lab Sample ID: 400-249691-3
Date Collected: 01/12/24 10:20
Matrix: Water
Date Received: 01/15/24 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657865	01/17/24 09:23	WPD	EET PEN
Total/NA	Prep	3510C			261.2 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657845	01/16/24 17:56	VC1	EET PEN
Total/NA	Prep	3510C			261.2 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657939	01/17/24 20:43	TH	EET PEN
Total/NA	Prep	8011			35.8 mL	35 mL	658010	01/18/24 11:45	JAW	EET PEN
Total/NA	Analysis	8011		1			658027	01/18/24 18:44	JAW	EET PEN

Client Sample ID: MW22-ROX-011224
Lab Sample ID: 400-249691-4
Date Collected: 01/12/24 11:00
Matrix: Water
Date Received: 01/15/24 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		5	5 mL	5 mL	657865	01/17/24 17:51	WPD	EET PEN
Total/NA	Prep	3510C			254.4 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657845	01/16/24 18:19	VC1	EET PEN
Total/NA	Prep	3510C			254.4 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657939	01/17/24 21:03	TH	EET PEN
Total/NA	Prep	8011			34.5 mL	35 mL	658010	01/18/24 11:45	JAW	EET PEN
Total/NA	Analysis	8011		1			658027	01/18/24 19:05	JAW	EET PEN

Client Sample ID: MW22-ROX-011224-DUP
Lab Sample ID: 400-249691-5
Date Collected: 01/12/24 11:00
Matrix: Water
Date Received: 01/15/24 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		5	5 mL	5 mL	657865	01/17/24 18:16	WPD	EET PEN
Total/NA	Prep	3510C			261.2 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657845	01/16/24 18:41	VC1	EET PEN

Client Sample ID: MW22-ROX-011224-DUP
Lab Sample ID: 400-249691-5
Date Collected: 01/12/24 11:00
Matrix: Water
Date Received: 01/15/24 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			261.2 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657939	01/17/24 21:24	TH	EET PEN
Total/NA	Prep	8011			34.7 mL	35 mL	658010	01/18/24 11:45	JAW	EET PEN
Total/NA	Analysis	8011		1			658027	01/18/24 19:26	JAW	EET PEN

Client Sample ID: TB-ROX-011224-8011-B
Lab Sample ID: 400-249691-6
Date Collected: 01/12/24 00:00
Matrix: Water
Date Received: 01/15/24 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			32.6 mL	35 mL	658010	01/18/24 11:45	JAW	EET PEN
Total/NA	Analysis	8011		1			658027	01/18/24 20:08	JAW	EET PEN

Client Sample ID: TB-ROX-011224-8260-B
Lab Sample ID: 400-249691-7
Date Collected: 01/12/24 00:00
Matrix: Water
Date Received: 01/15/24 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	657865	01/17/24 14:59	WPD	EET PEN

Client Sample ID: P59-ROX-011224
Lab Sample ID: 400-249691-8
Date Collected: 01/12/24 10:15
Matrix: Water
Date Received: 01/15/24 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		10	5 mL	5 mL	657865	01/17/24 12:36	WPD	EET PEN
Total/NA	Prep	3510C			237.2 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657845	01/16/24 19:04	VC1	EET PEN
Total/NA	Prep	3510C			237.2 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657939	01/17/24 21:44	TH	EET PEN
Total/NA	Prep	8011			34.3 mL	35 mL	658010	01/18/24 11:45	JAW	EET PEN
Total/NA	Analysis	8011		1			658027	01/18/24 20:28	JAW	EET PEN

Client Sample ID: P58-ROX-011224
Lab Sample ID: 400-249691-9
Date Collected: 01/12/24 11:10
Matrix: Water
Date Received: 01/15/24 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1000	5 mL	5 mL	657865	01/17/24 12:59	WPD	EET PEN
Total/NA	Prep	3510C			241.4 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657845	01/16/24 19:26	VC1	EET PEN
Total/NA	Prep	3510C			241.4 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657939	01/17/24 22:04	TH	EET PEN
Total/NA	Prep	3510C	DL		241.4 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E SIM	DL	2	0.4 mL	0.4 mL	658137	01/19/24 14:08	TH	EET PEN

Client Sample ID: P58-ROX-011224
Lab Sample ID: 400-249691-9
Date Collected: 01/12/24 11:10
Matrix: Water
Date Received: 01/15/24 09:32

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	658010	01/18/24 11:45	JAW	EET PEN
Total/NA	Analysis	8011		1			658027	01/18/24 20:49	JAW	EET PEN

Client Sample ID: P58-ROX-011224-DUP
Lab Sample ID: 400-249691-10
Date Collected: 01/12/24 11:10
Matrix: Water
Date Received: 01/15/24 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1000	5 mL	5 mL	657865	01/17/24 18:40	WPD	EET PEN
Total/NA	Prep	3510C			245.2 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657845	01/16/24 19:49	VC1	EET PEN
Total/NA	Prep	3510C			245.2 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657939	01/17/24 22:24	TH	EET PEN
Total/NA	Prep	3510C	DL		245.2 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E SIM	DL	2	0.4 mL	0.4 mL	658137	01/19/24 14:29	TH	EET PEN
Total/NA	Prep	8011			35 mL	35 mL	658010	01/18/24 11:45	JAW	EET PEN
Total/NA	Analysis	8011		1			658027	01/18/24 21:10	JAW	EET PEN

Client Sample ID: P93B-ROX-011224
Lab Sample ID: 400-249691-11
Date Collected: 01/12/24 12:25
Matrix: Water
Date Received: 01/15/24 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2500	5 mL	5 mL	657865	01/17/24 13:23	WPD	EET PEN
Total/NA	Prep	3510C			236.6 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657845	01/16/24 20:11	VC1	EET PEN
Total/NA	Prep	3510C			236.6 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657939	01/17/24 22:45	TH	EET PEN
Total/NA	Prep	3510C			236.6 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	658137	01/19/24 14:49	TH	EET PEN
Total/NA	Prep	8011			35.2 mL	35 mL	658010	01/18/24 11:45	JAW	EET PEN
Total/NA	Analysis	8011		1			658027	01/18/24 21:31	JAW	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-657808/1-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	3510C			250 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657845	01/16/24 16:05	VC1	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	657939	01/17/24 19:42	TH	EET PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Job ID: 400-249691-1
Project/Site: SHELL ROXANA QUARTERLY GW

Client Sample ID: Method Blank
Lab Sample ID: MB 400-657865/5
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	8260D		1	5 mL	5 mL	657865	01/17/24 08:59	WPD	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-658010/1-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	658010	01/18/24 11:45	JAW	EET PEN
Total/NA	Analysis	8011		1			658027	01/18/24 16:17	JAW	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657808/15-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	3510C			250 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657845	01/16/24 17:12	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657808/2-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	3510C			250 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657845	01/16/24 16:28	VC1	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	657939	01/17/24 20:02	TH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-657865/1002
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	8260D		1	5 mL	5 mL	657865	01/17/24 07:48	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-658010/2-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	658010	01/18/24 11:45	JAW	EET PEN
Total/NA	Analysis	8011		1			658027	01/18/24 16:38	JAW	EET PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Job ID: 400-249691-1
Project/Site: SHELL ROXANA QUARTERLY GW

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657808/16-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	3510C			250 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657845	01/16/24 17:34	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-657808/3-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	3510C			250 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	657845	01/16/24 16:50	VC1	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	657808	01/16/24 11:18	STC	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	657939	01/17/24 20:22	TH	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-658010/3-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	658010	01/18/24 11:45	JAW	EET PEN
Total/NA	Analysis	8011		1			658027	01/18/24 16:59	JAW	EET PEN

Laboratory References:
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 657865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249691-1	TB-ROX-011224-8260-A	Total/NA	Water	8260D	
400-249691-3	MW22-ROX-011224-EB	Total/NA	Water	8260D	
400-249691-4	MW22-ROX-011224	Total/NA	Water	8260D	
400-249691-5	MW22-ROX-011224-DUP	Total/NA	Water	8260D	
400-249691-7	TB-ROX-011224-8260-B	Total/NA	Water	8260D	
400-249691-8	P59-ROX-011224	Total/NA	Water	8260D	
400-249691-9	P58-ROX-011224	Total/NA	Water	8260D	
400-249691-10	P58-ROX-011224-DUP	Total/NA	Water	8260D	
400-249691-11	P93B-ROX-011224	Total/NA	Water	8260D	
MB 400-657865/5	Method Blank	Total/NA	Water	8260D	
LCS 400-657865/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 657808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249691-3	MW22-ROX-011224-EB	Total/NA	Water	3510C	
400-249691-4	MW22-ROX-011224	Total/NA	Water	3510C	
400-249691-5	MW22-ROX-011224-DUP	Total/NA	Water	3510C	
400-249691-8	P59-ROX-011224	Total/NA	Water	3510C	
400-249691-9	P58-ROX-011224	Total/NA	Water	3510C	
400-249691-9 - DL	P58-ROX-011224	Total/NA	Water	3510C	
400-249691-10 - DL	P58-ROX-011224-DUP	Total/NA	Water	3510C	
400-249691-10	P58-ROX-011224-DUP	Total/NA	Water	3510C	
400-249691-11	P93B-ROX-011224	Total/NA	Water	3510C	
MB 400-657808/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-657808/15-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-657808/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-657808/16-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-657808/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 657845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249691-3	MW22-ROX-011224-EB	Total/NA	Water	8270E	657808
400-249691-4	MW22-ROX-011224	Total/NA	Water	8270E	657808
400-249691-5	MW22-ROX-011224-DUP	Total/NA	Water	8270E	657808
400-249691-8	P59-ROX-011224	Total/NA	Water	8270E	657808
400-249691-9	P58-ROX-011224	Total/NA	Water	8270E	657808
400-249691-10	P58-ROX-011224-DUP	Total/NA	Water	8270E	657808
400-249691-11	P93B-ROX-011224	Total/NA	Water	8270E	657808
MB 400-657808/1-A	Method Blank	Total/NA	Water	8270E	657808
LCS 400-657808/15-A	Lab Control Sample	Total/NA	Water	8270E	657808
LCS 400-657808/2-A	Lab Control Sample	Total/NA	Water	8270E	657808
LCSD 400-657808/16-A	Lab Control Sample Dup	Total/NA	Water	8270E	657808
LCSD 400-657808/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	657808

Analysis Batch: 657939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249691-3	MW22-ROX-011224-EB	Total/NA	Water	8270E SIM	657808
400-249691-4	MW22-ROX-011224	Total/NA	Water	8270E SIM	657808
400-249691-5	MW22-ROX-011224-DUP	Total/NA	Water	8270E SIM	657808

GC/MS Semi VOA (Continued)

Analysis Batch: 657939 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249691-8	P59-ROX-011224	Total/NA	Water	8270E SIM	657808
400-249691-9	P58-ROX-011224	Total/NA	Water	8270E SIM	657808
400-249691-10	P58-ROX-011224-DUP	Total/NA	Water	8270E SIM	657808
400-249691-11	P93B-ROX-011224	Total/NA	Water	8270E SIM	657808
MB 400-657808/1-A	Method Blank	Total/NA	Water	8270E SIM	657808
LCS 400-657808/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	657808
LCSD 400-657808/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	657808

Analysis Batch: 658137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249691-9 - DL	P58-ROX-011224	Total/NA	Water	8270E SIM	657808
400-249691-10 - DL	P58-ROX-011224-DUP	Total/NA	Water	8270E SIM	657808
400-249691-11	P93B-ROX-011224	Total/NA	Water	8270E SIM	657808

GC Semi VOA

Prep Batch: 658010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249691-2	TB-ROX-011224-8011-A	Total/NA	Water	8011	
400-249691-3	MW22-ROX-011224-EB	Total/NA	Water	8011	
400-249691-4	MW22-ROX-011224	Total/NA	Water	8011	
400-249691-5	MW22-ROX-011224-DUP	Total/NA	Water	8011	
400-249691-6	TB-ROX-011224-8011-B	Total/NA	Water	8011	
400-249691-8	P59-ROX-011224	Total/NA	Water	8011	
400-249691-9	P58-ROX-011224	Total/NA	Water	8011	
400-249691-10	P58-ROX-011224-DUP	Total/NA	Water	8011	
400-249691-11	P93B-ROX-011224	Total/NA	Water	8011	
MB 400-658010/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-658010/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-658010/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 658027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249691-2	TB-ROX-011224-8011-A	Total/NA	Water	8011	658010
400-249691-3	MW22-ROX-011224-EB	Total/NA	Water	8011	658010
400-249691-4	MW22-ROX-011224	Total/NA	Water	8011	658010
400-249691-5	MW22-ROX-011224-DUP	Total/NA	Water	8011	658010
400-249691-6	TB-ROX-011224-8011-B	Total/NA	Water	8011	658010
400-249691-8	P59-ROX-011224	Total/NA	Water	8011	658010
400-249691-9	P58-ROX-011224	Total/NA	Water	8011	658010
400-249691-10	P58-ROX-011224-DUP	Total/NA	Water	8011	658010
400-249691-11	P93B-ROX-011224	Total/NA	Water	8011	658010
MB 400-658010/1-A	Method Blank	Total/NA	Water	8011	658010
LCS 400-658010/2-A	Lab Control Sample	Total/NA	Water	8011	658010
LCSD 400-658010/3-A	Lab Control Sample Dup	Total/NA	Water	8011	658010

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-657865/5
Matrix: Water
Analysis Batch: 657865

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			01/17/24 08:59	1
Acrolein	ND		20	3.3	ug/L			01/17/24 08:59	1
Acrylonitrile	ND		10	2.8	ug/L			01/17/24 08:59	1
Benzene	ND		1.0	0.50	ug/L			01/17/24 08:59	1
Bromobenzene	ND		1.0	0.54	ug/L			01/17/24 08:59	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/17/24 08:59	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/17/24 08:59	1
Bromoform	ND		5.0	0.25	ug/L			01/17/24 08:59	1
Bromomethane	ND		1.0	0.98	ug/L			01/17/24 08:59	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/17/24 08:59	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/17/24 08:59	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/17/24 08:59	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/17/24 08:59	1
Chloroethane	ND		1.0	0.76	ug/L			01/17/24 08:59	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/17/24 08:59	1
Chloroform	ND		1.0	0.90	ug/L			01/17/24 08:59	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/17/24 08:59	1
Chloromethane	ND		1.0	0.90	ug/L			01/17/24 08:59	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/17/24 08:59	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/17/24 08:59	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/17/24 08:59	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/17/24 08:59	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/17/24 08:59	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/17/24 08:59	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/17/24 08:59	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/17/24 08:59	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/17/24 08:59	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 08:59	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 08:59	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 08:59	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/17/24 08:59	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/17/24 08:59	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/17/24 08:59	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/17/24 08:59	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/17/24 08:59	1
2-Hexanone	ND		25	1.4	ug/L			01/17/24 08:59	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/17/24 08:59	1
Methylene bromide	ND		5.0	0.22	ug/L			01/17/24 08:59	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/17/24 08:59	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/17/24 08:59	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/17/24 08:59	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/17/24 08:59	1
Naphthalene	ND		5.0	3.0	ug/L			01/17/24 08:59	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/17/24 08:59	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/17/24 08:59	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/17/24 08:59	1
o-Xylene	ND		5.0	0.60	ug/L			01/17/24 08:59	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/17/24 08:59	1

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

Lab Sample ID: MB 400-657865/5
Matrix: Water
Analysis Batch: 657865

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			01/17/24 08:59	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/17/24 08:59	1
Styrene	ND		1.0	1.0	ug/L			01/17/24 08:59	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/17/24 08:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/17/24 08:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/17/24 08:59	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/17/24 08:59	1
Toluene	ND		1.0	0.90	ug/L			01/17/24 08:59	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/17/24 08:59	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/17/24 08:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/17/24 08:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/17/24 08:59	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/17/24 08:59	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/17/24 08:59	1
Trichloroethene	ND		1.0	0.15	ug/L			01/17/24 08:59	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/17/24 08:59	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/17/24 08:59	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/17/24 08:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/17/24 08:59	1
Vinyl acetate	ND		25	0.93	ug/L			01/17/24 08:59	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/17/24 08:59	1
Xylenes, Total	ND		10	1.6	ug/L			01/17/24 08:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*72 - 130*		*01/17/24 08:59*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/17/24 08:59*	*1*
Toluene-d8 (Surr)	*89*		*64 - 132*		*01/17/24 08:59*	*1*

Lab Sample ID: LCS 400-657865/1002
Matrix: Water
Analysis Batch: 657865

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	223		ug/L		112	43 - 160
Acrolein	500	523		ug/L		105	38 - 160
Acrylonitrile	500	498		ug/L		100	64 - 142
Benzene	50.0	52.3		ug/L		105	70 - 130
Bromobenzene	50.0	49.1		ug/L		98	70 - 132
Bromochloromethane	50.0	54.6		ug/L		109	70 - 130
Bromodichloromethane	50.0	55.9		ug/L		112	67 - 133
Bromoform	50.0	58.3		ug/L		117	57 - 140
Bromomethane	50.0	50.4		ug/L		101	10 - 160
2-Butanone (MEK)	200	226		ug/L		113	61 - 145
Carbon disulfide	50.0	47.0		ug/L		94	61 - 137
Carbon tetrachloride	50.0	56.6		ug/L		113	61 - 137
Chlorobenzene	50.0	51.8		ug/L		104	70 - 130
Chloroethane	50.0	48.7		ug/L		97	55 - 141
2-Chloroethyl vinyl ether	50.0	46.6		ug/L		93	10 - 160

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

Lab Sample ID: LCS 400-657865/1002
Matrix: Water
Analysis Batch: 657865

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	49.9		ug/L		100	69 - 130
1-Chlorohexane	50.0	46.0		ug/L		92	69 - 130
Chloromethane	50.0	41.2		ug/L		82	58 - 137
cis-1,2-Dichloroethene	50.0	53.6		ug/L		107	68 - 130
cis-1,3-Dichloropropene	50.0	56.5		ug/L		113	69 - 132
Dibromochloromethane	50.0	56.3		ug/L		113	67 - 135
1,2-Dichlorobenzene	50.0	50.2		ug/L		100	67 - 130
1,3-Dichlorobenzene	50.0	48.5		ug/L		97	70 - 130
1,4-Dichlorobenzene	50.0	50.7		ug/L		101	70 - 130
Dichlorodifluoromethane	50.0	41.5		ug/L		83	41 - 146
1,1-Dichloroethane	50.0	49.7		ug/L		99	70 - 130
1,2-Dichloroethane	50.0	53.5		ug/L		107	69 - 130
1,1-Dichloroethene	50.0	47.6		ug/L		95	63 - 134
1,2-Dichloropropane	50.0	50.7		ug/L		101	70 - 130
1,3-Dichloropropane	50.0	49.6		ug/L		99	70 - 130
2,2-Dichloropropane	50.0	50.4		ug/L		101	52 - 135
1,1-Dichloropropene	50.0	51.6		ug/L		103	70 - 130
Ethylbenzene	50.0	49.0		ug/L		98	70 - 130
Ethyl methacrylate	50.0	52.7		ug/L		105	68 - 130
Hexachlorobutadiene	50.0	50.6		ug/L		101	53 - 140
2-Hexanone	200	202		ug/L		101	65 - 137
Isopropylbenzene	50.0	50.0		ug/L		100	70 - 130
Methylene bromide	50.0	54.9		ug/L		110	70 - 130
Methylene Chloride	50.0	51.7		ug/L		103	66 - 135
4-Methyl-2-pentanone (MIBK)	200	220		ug/L		110	69 - 138
Methyl tert-butyl ether	50.0	54.3		ug/L		109	66 - 130
m-Xylene & p-Xylene	50.0	50.3		ug/L		101	70 - 130
Naphthalene	50.0	50.2		ug/L		100	47 - 149
n-Butylbenzene	50.0	46.9		ug/L		94	67 - 130
N-Propylbenzene	50.0	48.3		ug/L		97	70 - 130
o-Chlorotoluene	50.0	45.3		ug/L		91	70 - 130
o-Xylene	50.0	50.4		ug/L		101	70 - 130
p-Chlorotoluene	50.0	45.8		ug/L		92	70 - 130
p-Isopropyltoluene	50.0	48.2		ug/L		96	65 - 130
sec-Butylbenzene	50.0	48.9		ug/L		98	66 - 130
Styrene	50.0	50.1		ug/L		100	70 - 130
tert-Butylbenzene	50.0	47.7		ug/L		95	64 - 139
1,1,1,2-Tetrachloroethane	50.0	54.0		ug/L		108	67 - 131
1,1,2,2-Tetrachloroethane	50.0	49.1		ug/L		98	70 - 131
Tetrachloroethene	50.0	51.5		ug/L		103	65 - 130
Toluene	50.0	49.9		ug/L		100	70 - 130
trans-1,2-Dichloroethene	50.0	49.5		ug/L		99	70 - 130
trans-1,3-Dichloropropene	50.0	51.8		ug/L		104	63 - 130
1,2,3-Trichlorobenzene	50.0	50.5		ug/L		101	60 - 138
1,2,4-Trichlorobenzene	50.0	50.0		ug/L		100	60 - 140
1,1,1-Trichloroethane	50.0	52.3		ug/L		105	68 - 130
1,1,2-Trichloroethane	50.0	51.4		ug/L		103	70 - 130
Trichloroethene	50.0	56.0		ug/L		112	70 - 130
Trichlorofluoromethane	50.0	47.1		ug/L		94	65 - 138

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

Lab Sample ID: LCS 400-657865/1002
Matrix: Water
Analysis Batch: 657865

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	50.3		ug/L		101	70 - 130
1,2,4-Trimethylbenzene	50.0	47.3		ug/L		95	70 - 130
1,3,5-Trimethylbenzene	50.0	47.9		ug/L		96	69 - 130
Vinyl acetate	100	110		ug/L		110	26 - 160
Vinyl chloride	50.0	43.7		ug/L		87	59 - 136
Xylenes, Total	100	101		ug/L		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*72 - 130*
Dibromofluoromethane	*104*		*75 - 126*
Toluene-d8 (Surr)	*97*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-657808/1-A
Matrix: Water
Analysis Batch: 657845

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657808

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		01/16/24 11:18	01/16/24 16:05	1
Benzenethiol	ND		10	9.9	ug/L		01/16/24 11:18	01/16/24 16:05	1
Benzoic acid	ND		30	24	ug/L		01/16/24 11:18	01/16/24 16:05	1
Benzyl alcohol	ND		10	7.3	ug/L		01/16/24 11:18	01/16/24 16:05	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		01/16/24 11:18	01/16/24 16:05	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		01/16/24 11:18	01/16/24 16:05	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		01/16/24 11:18	01/16/24 16:05	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		01/16/24 11:18	01/16/24 16:05	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		01/16/24 11:18	01/16/24 16:05	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		01/16/24 11:18	01/16/24 16:05	1
4-Chloroaniline	ND		10	4.7	ug/L		01/16/24 11:18	01/16/24 16:05	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		01/16/24 11:18	01/16/24 16:05	1
2-Chloronaphthalene	ND		10	3.8	ug/L		01/16/24 11:18	01/16/24 16:05	1
2-Chlorophenol	ND		10	4.1	ug/L		01/16/24 11:18	01/16/24 16:05	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		01/16/24 11:18	01/16/24 16:05	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		01/16/24 11:18	01/16/24 16:05	1
Dibenzofuran	ND		10	4.0	ug/L		01/16/24 11:18	01/16/24 16:05	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/16/24 11:18	01/16/24 16:05	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		01/16/24 11:18	01/16/24 16:05	1
Diethyl phthalate	ND		10	4.4	ug/L		01/16/24 11:18	01/16/24 16:05	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		01/16/24 11:18	01/16/24 16:05	1
Dimethyl phthalate	ND		10	4.2	ug/L		01/16/24 11:18	01/16/24 16:05	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		01/16/24 11:18	01/16/24 16:05	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/16/24 11:18	01/16/24 16:05	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		01/16/24 11:18	01/16/24 16:05	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		01/16/24 11:18	01/16/24 16:05	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		01/16/24 11:18	01/16/24 16:05	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		01/16/24 11:18	01/16/24 16:05	1
1,4-Dioxane	ND		10	4.3	ug/L		01/16/24 11:18	01/16/24 16:05	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-657808/1-A
Matrix: Water
Analysis Batch: 657845

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657808

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		01/16/24 11:18	01/16/24 16:05	1
Hexachlorobenzene	ND		10	9.7	ug/L		01/16/24 11:18	01/16/24 16:05	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		01/16/24 11:18	01/16/24 16:05	1
Hexachloroethane	ND		10	5.2	ug/L		01/16/24 11:18	01/16/24 16:05	1
Indene	ND		10	3.6	ug/L		01/16/24 11:18	01/16/24 16:05	1
Isophorone	ND		10	5.2	ug/L		01/16/24 11:18	01/16/24 16:05	1
2-Methylphenol	ND		10	3.2	ug/L		01/16/24 11:18	01/16/24 16:05	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		01/16/24 11:18	01/16/24 16:05	1
2-Nitroaniline	ND		10	5.0	ug/L		01/16/24 11:18	01/16/24 16:05	1
3-Nitroaniline	ND		10	4.7	ug/L		01/16/24 11:18	01/16/24 16:05	1
4-Nitroaniline	ND		10	4.1	ug/L		01/16/24 11:18	01/16/24 16:05	1
Nitrobenzene	ND		10	4.7	ug/L		01/16/24 11:18	01/16/24 16:05	1
2-Nitrophenol	ND		10	4.6	ug/L		01/16/24 11:18	01/16/24 16:05	1
4-Nitrophenol	ND		10	3.3	ug/L		01/16/24 11:18	01/16/24 16:05	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		01/16/24 11:18	01/16/24 16:05	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		01/16/24 11:18	01/16/24 16:05	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		01/16/24 11:18	01/16/24 16:05	1
Pentachlorophenol	ND		20	12	ug/L		01/16/24 11:18	01/16/24 16:05	1
Phenol	ND		10	4.2	ug/L		01/16/24 11:18	01/16/24 16:05	1
Pyridine	ND		10	10	ug/L		01/16/24 11:18	01/16/24 16:05	1
Quinoline	ND		10	2.4	ug/L		01/16/24 11:18	01/16/24 16:05	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		01/16/24 11:18	01/16/24 16:05	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/16/24 11:18	01/16/24 16:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*60*		*21 - 114*	*01/16/24 11:18*	*01/16/24 16:05*	*1*
2-Fluorophenol	*47*		*10 - 105*	*01/16/24 11:18*	*01/16/24 16:05*	*1*
Nitrobenzene-d5	*58*		*16 - 127*	*01/16/24 11:18*	*01/16/24 16:05*	*1*
Phenol-d5	*36*		*10 - 129*	*01/16/24 11:18*	*01/16/24 16:05*	*1*
Terphenyl-d14	*71*		*13 - 150*	*01/16/24 11:18*	*01/16/24 16:05*	*1*
2,4,6-Tribromophenol	*51*		*10 - 150*	*01/16/24 11:18*	*01/16/24 16:05*	*1*

Lab Sample ID: LCS 400-657808/15-A
Matrix: Water
Analysis Batch: 657845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657808

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	116		ug/L		97	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*69*		*21 - 114*
2-Fluorophenol	*25*		*10 - 105*
Nitrobenzene-d5	*69*		*16 - 127*
Phenol-d5	*20*		*10 - 129*
Terphenyl-d14	*88*		*13 - 150*
2,4,6-Tribromophenol	*29*		*10 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-657808/2-A
Matrix: Water
Analysis Batch: 657845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657808

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	62.1		ug/L		52	10 - 127
Benzoic acid	120	149		ug/L		124	19 - 126
Benzyl alcohol	120	85.2		ug/L		71	17 - 109
Bis(2-chloroethoxy)methane	120	80.9		ug/L		67	24 - 125
Bis(2-chloroethyl)ether	120	88.9		ug/L		74	10 - 121
bis (2-chloroisopropyl) ether	120	93.6		ug/L		78	14 - 123
Bis(2-ethylhexyl) phthalate	120	86.8		ug/L		72	16 - 150
4-Bromophenyl phenyl ether	120	92.1		ug/L		77	17 - 150
Butyl benzyl phthalate	120	92.2		ug/L		77	21 - 150
4-Chloroaniline	120	80.3		ug/L		67	10 - 124
4-Chloro-3-methylphenol	120	93.7		ug/L		78	37 - 131
2-Chloronaphthalene	120	90.4		ug/L		75	24 - 132
2-Chlorophenol	120	92.5		ug/L		77	27 - 124
4-Chlorophenyl phenyl ether	120	97.2		ug/L		81	27 - 147
Dibenz[a,h]acridine	114	83.7		ug/L		73	40 - 140
Dibenzofuran	120	95.6		ug/L		80	30 - 135
3,3'-Dichlorobenzidine	160	144		ug/L		90	10 - 150
2,4-Dichlorophenol	120	92.2		ug/L		77	33 - 132
Diethyl phthalate	120	98.3		ug/L		82	37 - 145
2,4-Dimethylphenol	120	109		ug/L		91	38 - 132
Dimethyl phthalate	120	91.5		ug/L		76	32 - 137
Di-n-butyl phthalate	120	97.0		ug/L		81	27 - 150
4,6-Dinitro-ortho-cresol	240	193		ug/L		80	14 - 150
2,4-Dinitrophenol	240	189		ug/L		79	15 - 150
2,4-Dinitrotoluene	120	101		ug/L		84	35 - 136
2,6-Dinitrotoluene	120	96.0		ug/L		80	29 - 140
Di-n-octyl phthalate	120	92.0		ug/L		77	26 - 150
1,4-Dioxane	120	49.4		ug/L		41	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	91.9		ug/L		77	23 - 138
Hexachlorobenzene	120	105		ug/L		87	10 - 150
Hexachlorocyclopentadiene	120	104		ug/L		87	10 - 124
Hexachloroethane	120	71.9		ug/L		60	10 - 127
Indene	120	100		ug/L		84	18 - 150
Isophorone	120	83.9		ug/L		70	28 - 127
2-Methylphenol	120	93.3		ug/L		78	34 - 124
3 & 4 Methylphenol	120	88.8		ug/L		74	32 - 122
2-Nitroaniline	120	101		ug/L		84	24 - 139
3-Nitroaniline	120	104		ug/L		87	10 - 128
4-Nitroaniline	120	106		ug/L		89	28 - 118
Nitrobenzene	120	80.9		ug/L		67	29 - 120
2-Nitrophenol	120	97.3		ug/L		81	25 - 148
4-Nitrophenol	240	170		ug/L		71	12 - 129
N-Nitrosodimethylamine	120	66.9		ug/L		56	10 - 115
N-Nitrosodi-n-propylamine	120	94.7		ug/L		79	24 - 142
N-Nitrosodiphenylamine	119	93.4		ug/L		78	29 - 138
Pentachlorophenol	240	160		ug/L		67	19 - 150
Phenol	120	71.2		ug/L		59	11 - 95
Pyridine	240	60.8		ug/L		25	10 - 82

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-657808/2-A
Matrix: Water
Analysis Batch: 657845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657808

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Quinoline			114	94.3		ug/L		83	40 - 140		
2,4,5-Trichlorophenol			120	105		ug/L		87	30 - 144		
2,4,6-Trichlorophenol			120	96.9		ug/L		81	27 - 147		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*21 - 114*
2-Fluorophenol	*61*		*10 - 105*
Nitrobenzene-d5	*75*		*16 - 127*
Phenol-d5	*52*		*10 - 129*
Terphenyl-d14	*85*		*13 - 150*
2,4,6-Tribromophenol	*75*		*10 - 150*

Lab Sample ID: LCSD 400-657808/16-A
Matrix: Water
Analysis Batch: 657845

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657808

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	109		ug/L		91	40 - 140	7	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*71*		*21 - 114*
2-Fluorophenol	*25*		*10 - 105*
Nitrobenzene-d5	*67*		*16 - 127*
Phenol-d5	*19*		*10 - 129*
Terphenyl-d14	*87*		*13 - 150*
2,4,6-Tribromophenol	*27*		*10 - 150*

Lab Sample ID: LCSD 400-657808/3-A
Matrix: Water
Analysis Batch: 657845

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657808

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	57.1		ug/L		48	10 - 127	9	40
Benzoic acid			120	149		ug/L		124	19 - 126	0	40
Benzyl alcohol			120	84.9		ug/L		71	17 - 109	0	40
Bis(2-chloroethoxy)methane			120	78.8		ug/L		66	24 - 125	3	40
Bis(2-chloroethyl)ether			120	86.9		ug/L		72	10 - 121	2	40
bis (2-chloroisopropyl) ether			120	93.0		ug/L		78	14 - 123	1	40
Bis(2-ethylhexyl) phthalate			120	86.6		ug/L		72	16 - 150	0	40
4-Bromophenyl phenyl ether			120	89.8		ug/L		75	17 - 150	2	40
Butyl benzyl phthalate			120	91.6		ug/L		76	21 - 150	1	40
4-Chloroaniline			120	77.2		ug/L		64	10 - 124	4	40
4-Chloro-3-methylphenol			120	90.2		ug/L		75	37 - 131	4	40
2-Chloronaphthalene			120	89.1		ug/L		74	24 - 132	1	40
2-Chlorophenol			120	92.4		ug/L		77	27 - 124	0	40
4-Chlorophenyl phenyl ether			120	95.1		ug/L		79	27 - 147	2	40
Dibenz[a,h]acridine			114	99.4		ug/L		87	40 - 140	17	40
Dibenzofuran			120	94.3		ug/L		79	30 - 135	1	40

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-657808/3-A
Matrix: Water
Analysis Batch: 657845

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657808

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine			160	141		ug/L		88	10 - 150	2	40
2,4-Dichlorophenol			120	88.7		ug/L		74	33 - 132	4	40
Diethyl phthalate			120	97.4		ug/L		81	37 - 145	1	40
2,4-Dimethylphenol			120	107		ug/L		89	38 - 132	2	40
Dimethyl phthalate			120	89.5		ug/L		75	32 - 137	2	40
Di-n-butyl phthalate			120	97.1		ug/L		81	27 - 150	0	40
4,6-Dinitro-ortho-cresol			240	178		ug/L		74	14 - 150	8	40
2,4-Dinitrophenol			240	171		ug/L		71	15 - 150	10	40
2,4-Dinitrotoluene			120	98.6		ug/L		82	35 - 136	2	40
2,6-Dinitrotoluene			120	93.5		ug/L		78	29 - 140	3	40
Di-n-octyl phthalate			120	92.8		ug/L		77	26 - 150	1	40
1,4-Dioxane			120	48.6		ug/L		40	10 - 87	2	40
1,2-Diphenylhydrazine (as Azobenzene)			120	91.1		ug/L		76	23 - 138	1	40
Hexachlorobenzene			120	103		ug/L		86	10 - 150	2	40
Hexachlorocyclopentadiene			120	92.8		ug/L		77	10 - 124	12	40
Hexachloroethane			120	70.3		ug/L		59	10 - 127	2	40
Indene			120	99.0		ug/L		82	18 - 150	1	40
Isophorone			120	81.5		ug/L		68	28 - 127	3	40
2-Methylphenol			120	93.5		ug/L		78	34 - 124	0	40
3 & 4 Methylphenol			120	87.7		ug/L		73	32 - 122	1	40
2-Nitroaniline			120	97.9		ug/L		82	24 - 139	3	40
3-Nitroaniline			120	103		ug/L		86	10 - 128	1	40
4-Nitroaniline			120	104		ug/L		86	28 - 118	3	40
Nitrobenzene			120	79.6		ug/L		66	29 - 120	2	40
2-Nitrophenol			120	92.4		ug/L		77	25 - 148	5	40
4-Nitrophenol			240	159		ug/L		66	12 - 129	7	40
N-Nitrosodimethylamine			120	66.0		ug/L		55	10 - 115	1	40
N-Nitrosodi-n-propylamine			120	94.2		ug/L		79	24 - 142	1	40
N-Nitrosodiphenylamine			119	91.9		ug/L		77	29 - 138	2	40
Pentachlorophenol			240	154		ug/L		64	19 - 150	4	40
Phenol			120	69.4		ug/L		58	11 - 95	3	40
Pyridine			240	45.1		ug/L		19	10 - 82	30	40
Quinoline			114	90.2		ug/L		79	40 - 140	4	40
2,4,5-Trichlorophenol			120	101		ug/L		84	30 - 144	4	40
2,4,6-Trichlorophenol			120	94.0		ug/L		78	27 - 147	3	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*21 - 114*
2-Fluorophenol	*60*		*10 - 105*
Nitrobenzene-d5	*72*		*16 - 127*
Phenol-d5	*51*		*10 - 129*
Terphenyl-d14	*82*		*13 - 150*
2,4,6-Tribromophenol	*71*		*10 - 150*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-657808/1-A
Matrix: Water
Analysis Batch: 657939

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657808

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		01/16/24 11:18	01/17/24 19:42	1
Acenaphthylene	ND		0.20	0.044	ug/L		01/16/24 11:18	01/17/24 19:42	1
Anthracene	ND		0.20	0.047	ug/L		01/16/24 11:18	01/17/24 19:42	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		01/16/24 11:18	01/17/24 19:42	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		01/16/24 11:18	01/17/24 19:42	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		01/16/24 11:18	01/17/24 19:42	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/16/24 11:18	01/17/24 19:42	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		01/16/24 11:18	01/17/24 19:42	1
Chrysene	ND		0.20	0.033	ug/L		01/16/24 11:18	01/17/24 19:42	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		01/16/24 11:18	01/17/24 19:42	1
Fluoranthene	ND		0.20	0.034	ug/L		01/16/24 11:18	01/17/24 19:42	1
Fluorene	ND		0.20	0.089	ug/L		01/16/24 11:18	01/17/24 19:42	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		01/16/24 11:18	01/17/24 19:42	1
Phenanthrene	ND		0.20	0.090	ug/L		01/16/24 11:18	01/17/24 19:42	1
Pyrene	ND		0.20	0.039	ug/L		01/16/24 11:18	01/17/24 19:42	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		01/16/24 11:18	01/17/24 19:42	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		01/16/24 11:18	01/17/24 19:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*79*		*18 - 147*	*01/16/24 11:18*	*01/17/24 19:42*	*1*
2-Fluorobiphenyl	*66*		*15 - 128*	*01/16/24 11:18*	*01/17/24 19:42*	*1*
Nitrobenzene-d5	*76*		*10 - 144*	*01/16/24 11:18*	*01/17/24 19:42*	*1*

Lab Sample ID: LCS 400-657808/2-A
Matrix: Water
Analysis Batch: 657939

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657808

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	96.6		ug/L		81	40 - 140
Acenaphthylene	120	97.9		ug/L		82	40 - 140
Anthracene	120	101		ug/L		84	40 - 140
Benzo[a]anthracene	120	97.0		ug/L		81	40 - 140
Benzo[a]pyrene	120	101		ug/L		84	40 - 140
Benzo[b]fluoranthene	120	110		ug/L		92	40 - 140
Benzo[g,h,i]perylene	120	94.8		ug/L		79	40 - 140
Benzo[k]fluoranthene	120	109		ug/L		91	40 - 140
Chrysene	120	97.9		ug/L		82	40 - 140
Dibenz(a,h)anthracene	120	103		ug/L		86	40 - 140
Fluoranthene	120	95.0		ug/L		79	40 - 140
Fluorene	120	98.3		ug/L		82	40 - 140
Indeno[1,2,3-cd]pyrene	120	104		ug/L		87	40 - 140
Phenanthrene	120	98.0		ug/L		82	40 - 140
Pyrene	120	97.6		ug/L		81	40 - 140
1-Methylnaphthalene	120	62.8		ug/L		52	40 - 140
2-Methylnaphthalene	120	64.8		ug/L		54	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*74*		*18 - 147*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 400-657808/2-A
Matrix: Water
Analysis Batch: 657939

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657808

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	78		15 - 128
Nitrobenzene-d5	56		10 - 144

Lab Sample ID: LCSD 400-657808/3-A
Matrix: Water
Analysis Batch: 657939

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 657808

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	100		ug/L		83	40 - 140	4	40
Acenaphthylene			120	99.8		ug/L		83	40 - 140	2	40
Anthracene			120	103		ug/L		85	40 - 140	2	40
Benzo[a]anthracene			120	101		ug/L		85	40 - 140	4	40
Benzo[a]pyrene			120	105		ug/L		87	40 - 140	3	40
Benzo[b]fluoranthene			120	107		ug/L		89	40 - 140	3	40
Benzo[g,h,i]perylene			120	99.6		ug/L		83	40 - 140	5	40
Benzo[k]fluoranthene			120	118		ug/L		98	40 - 140	7	40
Chrysene			120	99.6		ug/L		83	40 - 140	2	40
Dibenz(a,h)anthracene			120	113		ug/L		94	40 - 140	10	40
Fluoranthene			120	101		ug/L		84	40 - 140	6	40
Fluorene			120	101		ug/L		84	40 - 140	3	40
Indeno[1,2,3-cd]pyrene			120	112		ug/L		93	40 - 140	8	40
Phenanthrene			120	101		ug/L		85	40 - 140	3	40
Pyrene			120	96.8		ug/L		81	40 - 140	1	40
1-Methylnaphthalene			120	77.0		ug/L		64	40 - 140	20	40
2-Methylnaphthalene			120	79.7		ug/L		66	40 - 140	21	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	74		18 - 147
2-Fluorobiphenyl	80		15 - 128
Nitrobenzene-d5	68		10 - 144

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-658010/1-A
Matrix: Water
Analysis Batch: 658027

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 658010

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		01/18/24 11:45	01/18/24 16:17	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/24 11:45	01/18/24 16:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	125		51 - 149	01/18/24 11:45	01/18/24 16:17	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCS 400-658010/2-A
Matrix: Water
Analysis Batch: 658027

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 658010

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.105		ug/L		104	60 - 140		
1,2-Dibromoethane			0.100	0.104		ug/L		104	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*119*		*51 - 149*

Lab Sample ID: LCSD 400-658010/3-A
Matrix: Water
Analysis Batch: 658027

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 658010

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.105		ug/L		104	60 - 140	0	30
1,2-Dibromoethane			0.100	0.101		ug/L		101	60 - 140	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*120*		*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 Recor

AECOM

400-249691 COC

Please Check Appropriate Box:		
☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES	

Print Bill To Contact Name:	PlaNet Site or I
Melissa Remiger	25278
PO #	**GSAP Project ID**
60721927 3.1.2	USPC/00114/R/02

☐ CK IF NO INCIDENT # APPLIES

DATE: 1/12/2024

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: Roxana Quarterly GW 60721927 3.1.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO.: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

SAMPLER NAME(S) (Print): C. McDavid, T. Jenkins

LAB USE ONLY

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C° | Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

*** Please include "J" values on Reports.**
*** Please provide sample receipt upon login.**
*** Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com**

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 3.1.2

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 8270 SIMS
	TB-ROX-011224-8260-A	1/12/2024	0000	Water	2					2	X			
	TB-ROX-011224-8011-A	1/12/2024	0000	Water	2					2		X		
	MW22-ROX-011224-EB	1/12/2024	1020	Water	6			2		8	X	X	X	X
	MW22-ROX-011224	1/12/2024	1100	Water	6			2		8	X	X	X	X
	MW22-ROX-011224-DUP	1/12/2024	1100	Water	6			2		8	X	X	X	X

C McDavid 01/12/24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 6339 6598 2645	1/12/2024	1600
	J. Earnest 0.10CTR8	1.15.24	0932

CUSTODY SEALS: 1599824, 1599825

Version: 27Sept23

1/22/2024

LAB (LOCATION)

Shell Oil Products US Chain Of Custody Record

AECOM

☐ 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
Melissa Remiger	25278	DATE: 1/12/2024
PO #	**GSAP Project ID**	PAGE: 2 of 2
60721927 – 3.1.2	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 60721927 – 3.1.2
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions
PHONE NO.: 314-802-1207
E-MAIL: melissa.remiger@aecom.com
AECOM Other ID:
PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell
SAMPLER NAME(S) (Print): J. MAYER ; E. CHALFANT
LAB USE ONLY
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____
TEMPERATURE ON RECEIPT C° | Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
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- Please include "J" values on Reports.
- Please provide sample receipt upon login.
- Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS 60721927 – 3.1.2

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 8270 SIMS
	TB-ROX-011224-8011-B	1/12/2024	0000	Water	2					2		X		
	TB-ROX-011224-8260-B	1/12/2024	0000	Water	2					2	X			
	P59-ROX-011224	1/12/2024	1015	Water	6			2		8	X	X	X	X
	P58-ROX-011224	1/12/2024	1110	Water	6			2		8	X	X	X	X
	P58-ROX-011224-DUP	1/12/2024	1110	Water	6			2		8	X	X	X	X
	P93B-ROX-011224	1/12/2024	1225	Water	6			2		8	X	X	X	X

EOC 1/12/24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
E. CHALFANT	FEDEX: see Page 1	1/12/2024	1600
Relinquished by: (Signature)	Received by: (Signature) J. Earnest 0.1°C Id 8	Date: 1.15.24	Time: 0923
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS - see Page 1

1/22/2024

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-249691-1

Login Number: 249691
List Number: 1
Creator: Earnest, Tamantha

List Source: Eurofins 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	0.1°C IR8
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").	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. Job ID: 400-249691-1
Project/Site: SHELL ROXANA QUARTERLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Roxana Groundwater Quarterly – 1st Quarter 2024 Data Review

Laboratory SDG: 400- 249894-1

Data Reviewer: Adelina Gita

Peer Reviewer: Cheyana Cokley

Date Reviewed: 2/29/2024

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

Sample Identification	Sample Identification
TB-ROX-011724-8260	TB-ROX-011724-8011
MW4-ROX-011724-EB	MW4-ROX-011724
MW14-ROX-011724	MW7-ROX-011724
MW7-ROX-011724-DUP	-

1.0 Data Package Completeness

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

Yes, the laboratory case narrative indicated that the container label for the sample MW14-ROX-011724 did not match the information listed on the Chain-of-Custody (COC). The container labels listed MW14-ROX-011724, while the COC listed MW25-ROX-011724. The container labels were correctly used to log and report data; no qualification of data was required.

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, the results for benzene in field duplicate pair MW7-ROX-011724/MW7-ROX-011724-DUP were qualified as estimated **(J/J)** due to field duplicate RPD above evaluation criteria. VOCs in field duplicate pair MW7-ROX-011724/MW7-ROX-011724-DUP were diluted to bring target analytes into calibration range of the instrument. The initial calibration verification (ICV) for 3,3'-dichlorobenzidine was outside evaluation criteria, biased low. The continuing calibration verification (CCV) for several analytes were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (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 (%)
MB 400-658257/1-A	PAHs	Terphenyl-d_{14}	**162**	18-147
MW4-ROX-011724-EB	PAHs	Terphenyl-d_{14}	**156**	18-147

Method blanks and equipment 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
MW7-ROX-011724	MW7-ROX-011724-DUP

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
MW7-ROX-011724	MW7-ROX-011724-DUP	VOCs	Benzene	**38**	**J/J**

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution with the exception of non-detect VOCs in field duplicate pair MW7-ROX-011724/MW7-ROX-011724-DUP to bring

benzene into calibration range of the instrument. VOCs were non-detect at a dilution factor of 2000X, with raised reporting limits of between 2,000 and 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, the initial calibration verification (ICV) for 3,3'-dichlorobenzidine was outside evaluation criteria, biased low. The continuing calibration verifications (CCV) for methylene chloride, acrylonitrile, chloroethane, pyridine, and 4,6-dinitro-ortho-cresol were outside evaluation criteria, biased low. Methylene chloride, acrylonitrile, and chloroethane in field duplicate pair MW7-ROX-011724/MW7-ROX-011724-DUP were previously qualified in Section 11.0 of this data review due to a sample dilution; no further qualification is required. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW4-ROX-011724	VOCs	Methylene Chloride	**UJ**
MW14-ROX-011724	VOCs	Methylene Chloride	**UJ**
MW4-ROX-011724	VOCs	Acrylonitrile	**UJ**
MW14-ROX-011724	VOCs	Acrylonitrile	**UJ**
MW4-ROX-011724	VOCs	Chloroethane	**UJ**
MW14-ROX-011724	VOCs	Chloroethane	**UJ**
MW4-ROX-011724	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW14-ROX-011724	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW7-ROX-011724	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW7-ROX-011724-DUP	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW4-ROX-011724	SVOCs	Pyridine	**UJ**
MW14-ROX-011724	SVOCs	Pyridine	**UJ**
MW7-ROX-011724	SVOCs	Pyridine	**UJ**
MW7-ROX-011724-DUP	SVOCs	Pyridine	**UJ**
MW4-ROX-011724	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW14-ROX-011724	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW7-ROX-011724	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW7-ROX-011724-DUP	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**

VOCs in field duplicate pair MW7-ROX-011724/MW7-ROX-011724-DUP were qualified as estimated non-detect due to sample dilution and historical detections.

Sample ID	Parameter	Analyte	Qualification
MW7-ROX-011724	VOCs	All non-detects	**UJ**
MW7-ROX-011724-DUP	VOCs	All non-detects	**UJ**

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 1/26/2024 2:01:48 PM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-249894-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



Generated
1/26/2024 2:01:48 PM

Authorized for release by
Leah Klingensmith, Senior Project Manager
Leah.Klingensmith@et.eurofinsus.com
(615)301-5038

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Job Narrative
400-249894-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 1/20/2024 11:07 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 time was 0.0°C

Receipt Exceptions
The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): MW14-ROX-011724 (400-249894-5). The container labels list MW14-ROX-011724, while the COC lists MW25-ROX-011724.

GC/MS VOA
Method 8260D: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW7-ROX-011724 (400-249894-6) and MW7-ROX-011724-DUP (400-249894-7). Elevated reporting limits (RLs) are provided.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-658371 recovered outside acceptance criteria, low biased, for Chloroethane, Acrylonitrile, Trichlorofluoromethane and Methylene Chloride. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: 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: MW4-ROX-011724 (400-249894-4), MW14-ROX-011724 (400-249894-5), MW7-ROX-011724 (400-249894-6) and MW7-ROX-011724-DUP (400-249894-7). 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 8260D: 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-011724-8260 (400-249894-1) and MW4-ROX-011724-EB (400-249894-3). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260D: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW7-ROX-011724 (400-249894-6) and MW7-ROX-011724-DUP (400-249894-7). 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 8270E: The initial calibration verification (ICV) analyzed in batch 400-654856 was outside method criteria for the following analyte(s): 3,3'-Dichlorobenzidine, 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-658299 recovered outside acceptance criteria, low biased, for 4,6-Dinitro-2-methylphenol and Pyridine. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E_SIM: 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: MW4-ROX-011724-EB (400-249894-3) and (MB 400-658257/1-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 additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

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

Job ID: 400-249894-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-249894-1	TB-ROX-011724-8260	Water	01/17/24 12:00	01/20/24 11:07
400-249894-2	TB-ROX-011724-8011	Water	01/17/24 12:00	01/20/24 11:07
400-249894-3	MW4-ROX-011724-EB	Water	01/17/24 09:35	01/20/24 11:07
400-249894-4	MW4-ROX-011724	Water	01/17/24 10:55	01/20/24 11:07
400-249894-5	MW14-ROX-011724	Water	01/17/24 13:05	01/20/24 11:07
400-249894-6	MW7-ROX-011724	Water	01/17/24 14:20	01/20/24 11:07
400-249894-7	MW7-ROX-011724-DUP	Water	01/17/24 14:20	01/20/24 11:07

Detection Summary

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

Job ID: 400-249894-1

Client Sample ID: TB-ROX-011724-8260 — Lab Sample ID: 400-249894-1

No Detections.

Client Sample ID: TB-ROX-011724-8011 — Lab Sample ID: 400-249894-2

No Detections.

Client Sample ID: MW4-ROX-011724-EB — Lab Sample ID: 400-249894-3

No Detections.

Client Sample ID: MW4-ROX-011724 — Lab Sample ID: 400-249894-4

No Detections.

Client Sample ID: MW14-ROX-011724 — Lab Sample ID: 400-249894-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.070	J	0.22	0.048	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW7-ROX-011724 — Lab Sample ID: 400-249894-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	680000		5000	2500	ug/L	5000		8260D	Total/NA
Acenaphthene	0.26		0.24	0.12	ug/L	1		8270E SIM	Total/NA
Acenaphthylene	0.12	J	0.24	0.053	ug/L	1		8270E SIM	Total/NA
Fluorene	0.14	J	0.24	0.11	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.24		0.24	0.11	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	1.3		0.24	0.096	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	1.7		0.24	0.079	ug/L	1		8270E SIM	Total/NA
Phenol	95		12	5.0	ug/L	1		8270E	Total/NA

Client Sample ID: MW7-ROX-011724-DUP — Lab Sample ID: 400-249894-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1000000		5000	2500	ug/L	5000		8260D	Total/NA
Acenaphthene	0.30		0.23	0.11	ug/L	1		8270E SIM	Total/NA
Acenaphthylene	0.13	J	0.23	0.050	ug/L	1		8270E SIM	Total/NA
Fluorene	0.16	J	0.23	0.10	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.24		0.23	0.10	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	1.2		0.23	0.090	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	1.6		0.23	0.074	ug/L	1		8270E SIM	Total/NA
Phenol	88		11	4.7	ug/L	1		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-249894-1

Client Sample ID: TB-ROX-011724-8260
Date Collected: 01/17/24 12:00
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/23/24 18:09	1
Acrolein	ND		20	3.3	ug/L			01/23/24 18:09	1
Acrylonitrile	ND		10	2.8	ug/L			01/23/24 18:09	1
Benzene	ND		1.0	0.50	ug/L			01/23/24 18:09	1
Bromobenzene	ND		1.0	0.54	ug/L			01/23/24 18:09	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/23/24 18:09	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/23/24 18:09	1
Bromoform	ND		5.0	0.25	ug/L			01/23/24 18:09	1
Bromomethane	ND		1.0	0.98	ug/L			01/23/24 18:09	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/23/24 18:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/23/24 18:09	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/23/24 18:09	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/23/24 18:09	1
Chloroethane	ND		1.0	0.76	ug/L			01/23/24 18:09	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/23/24 18:09	1
Chloroform	ND		1.0	0.90	ug/L			01/23/24 18:09	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/23/24 18:09	1
Chloromethane	ND		1.0	0.90	ug/L			01/23/24 18:09	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/23/24 18:09	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/23/24 18:09	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/23/24 18:09	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/23/24 18:09	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/23/24 18:09	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/23/24 18:09	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/23/24 18:09	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/23/24 18:09	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/23/24 18:09	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/23/24 18:09	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/23/24 18:09	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/23/24 18:09	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/23/24 18:09	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/23/24 18:09	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/23/24 18:09	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/23/24 18:09	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/23/24 18:09	1
2-Hexanone	ND		25	1.4	ug/L			01/23/24 18:09	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/23/24 18:09	1
Methylene bromide	ND		5.0	0.22	ug/L			01/23/24 18:09	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/23/24 18:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/23/24 18:09	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/23/24 18:09	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/23/24 18:09	1
Naphthalene	ND		5.0	3.0	ug/L			01/23/24 18:09	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/23/24 18:09	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/23/24 18:09	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/23/24 18:09	1
o-Xylene	ND		5.0	0.60	ug/L			01/23/24 18:09	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/23/24 18:09	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/23/24 18:09	1

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

Job ID: 400-249894-1

Client Sample ID: TB-ROX-011724-8260
Date Collected: 01/17/24 12:00
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/23/24 18:09	1
Styrene	ND		1.0	1.0	ug/L			01/23/24 18:09	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/23/24 18:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/23/24 18:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/23/24 18:09	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/23/24 18:09	1
Toluene	ND		1.0	0.90	ug/L			01/23/24 18:09	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/23/24 18:09	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/23/24 18:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/23/24 18:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/23/24 18:09	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/23/24 18:09	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/23/24 18:09	1
Trichloroethene	ND		1.0	0.15	ug/L			01/23/24 18:09	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/23/24 18:09	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/23/24 18:09	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/23/24 18:09	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/23/24 18:09	1
Vinyl acetate	ND		25	0.93	ug/L			01/23/24 18:09	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/23/24 18:09	1
Xylenes, Total	ND		10	1.6	ug/L			01/23/24 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 130*		*01/23/24 18:09*	*1*
Dibromofluoromethane	*111*		*75 - 126*		*01/23/24 18:09*	*1*
Toluene-d8 (Surr)	*87*		*64 - 132*		*01/23/24 18:09*	*1*

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

Job ID: 400-249894-1

Client Sample ID: TB-ROX-011724-8011
Date Collected: 01/17/24 12:00
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-2
Matrix: Water

Method: EPA 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		01/22/24 11:12	01/22/24 20:28	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/22/24 11:12	01/22/24 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*51 - 149*	*01/22/24 11:12*	*01/22/24 20:28*	*1*

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

Job ID: 400-249894-1

Client Sample ID: MW4-ROX-011724-EB
Date Collected: 01/17/24 09:35
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/23/24 18:33	1
Acrolein	ND		20	3.3	ug/L			01/23/24 18:33	1
Acrylonitrile	ND		10	2.8	ug/L			01/23/24 18:33	1
Benzene	ND		1.0	0.50	ug/L			01/23/24 18:33	1
Bromobenzene	ND		1.0	0.54	ug/L			01/23/24 18:33	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/23/24 18:33	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/23/24 18:33	1
Bromoform	ND		5.0	0.25	ug/L			01/23/24 18:33	1
Bromomethane	ND		1.0	0.98	ug/L			01/23/24 18:33	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/23/24 18:33	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/23/24 18:33	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/23/24 18:33	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/23/24 18:33	1
Chloroethane	ND		1.0	0.76	ug/L			01/23/24 18:33	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/23/24 18:33	1
Chloroform	ND		1.0	0.90	ug/L			01/23/24 18:33	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/23/24 18:33	1
Chloromethane	ND		1.0	0.90	ug/L			01/23/24 18:33	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/23/24 18:33	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/23/24 18:33	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/23/24 18:33	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/23/24 18:33	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/23/24 18:33	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/23/24 18:33	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/23/24 18:33	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/23/24 18:33	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/23/24 18:33	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/23/24 18:33	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/23/24 18:33	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/23/24 18:33	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/23/24 18:33	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/23/24 18:33	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/23/24 18:33	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/23/24 18:33	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/23/24 18:33	1
2-Hexanone	ND		25	1.4	ug/L			01/23/24 18:33	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/23/24 18:33	1
Methylene bromide	ND		5.0	0.22	ug/L			01/23/24 18:33	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/23/24 18:33	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/23/24 18:33	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/23/24 18:33	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/23/24 18:33	1
Naphthalene	ND		5.0	3.0	ug/L			01/23/24 18:33	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/23/24 18:33	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/23/24 18:33	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/23/24 18:33	1
o-Xylene	ND		5.0	0.60	ug/L			01/23/24 18:33	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/23/24 18:33	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/23/24 18:33	1

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

Job ID: 400-249894-1

Client Sample ID: MW4-ROX-011724-EB

Date Collected: 01/17/24 09:35
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-3

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/23/24 18:33	1
Styrene	ND		1.0	1.0	ug/L			01/23/24 18:33	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/23/24 18:33	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/23/24 18:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/23/24 18:33	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/23/24 18:33	1
Toluene	ND		1.0	0.90	ug/L			01/23/24 18:33	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/23/24 18:33	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/23/24 18:33	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/23/24 18:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/23/24 18:33	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/23/24 18:33	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/23/24 18:33	1
Trichloroethene	ND		1.0	0.15	ug/L			01/23/24 18:33	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/23/24 18:33	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/23/24 18:33	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/23/24 18:33	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/23/24 18:33	1
Vinyl acetate	ND		25	0.93	ug/L			01/23/24 18:33	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/23/24 18:33	1
Xylenes, Total	ND		10	1.6	ug/L			01/23/24 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*01/23/24 18:33*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/23/24 18:33*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*01/23/24 18:33*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.098	ug/L		01/22/24 09:09	01/22/24 18:13	1
Acenaphthylene	ND		0.20	0.044	ug/L		01/22/24 09:09	01/22/24 18:13	1
Anthracene	ND		0.20	0.046	ug/L		01/22/24 09:09	01/22/24 18:13	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		01/22/24 09:09	01/22/24 18:13	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		01/22/24 09:09	01/22/24 18:13	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		01/22/24 09:09	01/22/24 18:13	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/22/24 09:09	01/22/24 18:13	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		01/22/24 09:09	01/22/24 18:13	1
Chrysene	ND		0.20	0.033	ug/L		01/22/24 09:09	01/22/24 18:13	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		01/22/24 09:09	01/22/24 18:13	1
Fluoranthene	ND		0.20	0.034	ug/L		01/22/24 09:09	01/22/24 18:13	1
Fluorene	ND		0.20	0.088	ug/L		01/22/24 09:09	01/22/24 18:13	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		01/22/24 09:09	01/22/24 18:13	1
Phenanthrene	ND		0.20	0.089	ug/L		01/22/24 09:09	01/22/24 18:13	1
Pyrene	ND		0.20	0.039	ug/L		01/22/24 09:09	01/22/24 18:13	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		01/22/24 09:09	01/22/24 18:13	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		01/22/24 09:09	01/22/24 18:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*156*	*S1+*	*18 - 147*	*01/22/24 09:09*	*01/22/24 18:13*	*1*
2-Fluorobiphenyl	*79*		*15 - 128*	*01/22/24 09:09*	*01/22/24 18:13*	*1*

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

Job ID: 400-249894-1

Client Sample ID: MW4-ROX-011724-EB

Date Collected: 01/17/24 09:35
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-3

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*83*		*10 - 144*	*01/22/24 09:09*	*01/22/24 18:13*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.9	8.6	ug/L		01/22/24 09:09	01/22/24 16:14	1
Benzenethiol	ND		9.9	9.8	ug/L		01/22/24 09:09	01/22/24 16:14	1
Benzoic acid	ND		30	24	ug/L		01/22/24 09:09	01/22/24 16:14	1
Benzyl alcohol	ND		9.9	7.2	ug/L		01/22/24 09:09	01/22/24 16:14	1
Bis(2-chloroethoxy)methane	ND		9.9	4.5	ug/L		01/22/24 09:09	01/22/24 16:14	1
Bis(2-chloroethyl)ether	ND		9.9	3.9	ug/L		01/22/24 09:09	01/22/24 16:14	1
bis (2-chloroisopropyl) ether	ND		9.9	1.8	ug/L		01/22/24 09:09	01/22/24 16:14	1
Bis(2-ethylhexyl) phthalate	ND		9.9	8.8	ug/L		01/22/24 09:09	01/22/24 16:14	1
4-Bromophenyl phenyl ether	ND		9.9	8.5	ug/L		01/22/24 09:09	01/22/24 16:14	1
Butyl benzyl phthalate	ND		9.9	5.7	ug/L		01/22/24 09:09	01/22/24 16:14	1
4-Chloroaniline	ND		9.9	4.6	ug/L		01/22/24 09:09	01/22/24 16:14	1
4-Chloro-3-methylphenol	ND		9.9	5.2	ug/L		01/22/24 09:09	01/22/24 16:14	1
2-Chloronaphthalene	ND		9.9	3.8	ug/L		01/22/24 09:09	01/22/24 16:14	1
2-Chlorophenol	ND		9.9	4.1	ug/L		01/22/24 09:09	01/22/24 16:14	1
4-Chlorophenyl phenyl ether	ND		9.9	3.7	ug/L		01/22/24 09:09	01/22/24 16:14	1
Dibenz[a,h]acridine	ND		9.9	2.8	ug/L		01/22/24 09:09	01/22/24 16:14	1
Dibenzofuran	ND		9.9	4.0	ug/L		01/22/24 09:09	01/22/24 16:14	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/22/24 09:09	01/22/24 16:14	1
2,4-Dichlorophenol	ND		9.9	4.3	ug/L		01/22/24 09:09	01/22/24 16:14	1
Diethyl phthalate	ND		9.9	4.4	ug/L		01/22/24 09:09	01/22/24 16:14	1
2,4-Dimethylphenol	ND		9.9	5.1	ug/L		01/22/24 09:09	01/22/24 16:14	1
Dimethyl phthalate	ND		9.9	4.2	ug/L		01/22/24 09:09	01/22/24 16:14	1
Di-n-butyl phthalate	ND		9.9	4.5	ug/L		01/22/24 09:09	01/22/24 16:14	1
4,6-Dinitro-ortho-cresol	ND		9.9	9.9	ug/L		01/22/24 09:09	01/22/24 16:14	1
2,4-Dinitrophenol	ND		30	4.5	ug/L		01/22/24 09:09	01/22/24 16:14	1
2,4-Dinitrotoluene	ND		9.9	5.0	ug/L		01/22/24 09:09	01/22/24 16:14	1
2,6-Dinitrotoluene	ND		9.9	3.9	ug/L		01/22/24 09:09	01/22/24 16:14	1
Di-n-octyl phthalate	ND		9.9	5.9	ug/L		01/22/24 09:09	01/22/24 16:14	1
1,4-Dioxane	ND		9.9	4.3	ug/L		01/22/24 09:09	01/22/24 16:14	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	3.3	ug/L		01/22/24 09:09	01/22/24 16:14	1
Hexachlorobenzene	ND		9.9	9.6	ug/L		01/22/24 09:09	01/22/24 16:14	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		01/22/24 09:09	01/22/24 16:14	1
Hexachloroethane	ND		9.9	5.1	ug/L		01/22/24 09:09	01/22/24 16:14	1
Indene	ND		9.9	3.6	ug/L		01/22/24 09:09	01/22/24 16:14	1
Isophorone	ND		9.9	5.1	ug/L		01/22/24 09:09	01/22/24 16:14	1
2-Methylphenol	ND		9.9	3.2	ug/L		01/22/24 09:09	01/22/24 16:14	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		01/22/24 09:09	01/22/24 16:14	1
2-Nitroaniline	ND		9.9	4.9	ug/L		01/22/24 09:09	01/22/24 16:14	1
3-Nitroaniline	ND		9.9	4.6	ug/L		01/22/24 09:09	01/22/24 16:14	1
4-Nitroaniline	ND		9.9	4.1	ug/L		01/22/24 09:09	01/22/24 16:14	1
Nitrobenzene	ND		9.9	4.6	ug/L		01/22/24 09:09	01/22/24 16:14	1
2-Nitrophenol	ND		9.9	4.5	ug/L		01/22/24 09:09	01/22/24 16:14	1
4-Nitrophenol	ND		9.9	3.3	ug/L		01/22/24 09:09	01/22/24 16:14	1
N-Nitrosodimethylamine	ND		9.9	2.2	ug/L		01/22/24 09:09	01/22/24 16:14	1

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

Job ID: 400-249894-1

Client Sample ID: MW4-ROX-011724-EB

Date Collected: 01/17/24 09:35
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-3

Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.9	2.5	ug/L		01/22/24 09:09	01/22/24 16:14	1
N-Nitrosodiphenylamine	ND		9.9	3.7	ug/L		01/22/24 09:09	01/22/24 16:14	1
Pentachlorophenol	ND		20	12	ug/L		01/22/24 09:09	01/22/24 16:14	1
Phenol	ND		9.9	4.2	ug/L		01/22/24 09:09	01/22/24 16:14	1
Pyridine	ND		9.9	9.9	ug/L		01/22/24 09:09	01/22/24 16:14	1
Quinoline	ND		9.9	2.4	ug/L		01/22/24 09:09	01/22/24 16:14	1
2,4,5-Trichlorophenol	ND		9.9	4.0	ug/L		01/22/24 09:09	01/22/24 16:14	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		01/22/24 09:09	01/22/24 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*21 - 114*	*01/22/24 09:09*	*01/22/24 16:14*	*1*
2-Fluorophenol	*53*		*10 - 105*	*01/22/24 09:09*	*01/22/24 16:14*	*1*
Nitrobenzene-d5	*65*		*16 - 127*	*01/22/24 09:09*	*01/22/24 16:14*	*1*
Phenol-d5	*40*		*10 - 129*	*01/22/24 09:09*	*01/22/24 16:14*	*1*
Terphenyl-d14	*96*		*13 - 150*	*01/22/24 09:09*	*01/22/24 16:14*	*1*
2,4,6-Tribromophenol	*57*		*10 - 150*	*01/22/24 09:09*	*01/22/24 16:14*	*1*

Method: EPA 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		01/22/24 11:12	01/22/24 20:49	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/22/24 11:12	01/22/24 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*141*		*51 - 149*	*01/22/24 11:12*	*01/22/24 20:49*	*1*

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

Job ID: 400-249894-1

Client Sample ID: MW4-ROX-011724
Date Collected: 01/17/24 10:55
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/23/24 16:32	1
Acrolein	ND		20	3.3	ug/L			01/23/24 16:32	1
Acrylonitrile	ND		10	2.8	ug/L			01/23/24 16:32	1
Benzene	ND		1.0	0.50	ug/L			01/23/24 16:32	1
Bromobenzene	ND		1.0	0.54	ug/L			01/23/24 16:32	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/23/24 16:32	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/23/24 16:32	1
Bromoform	ND		5.0	0.25	ug/L			01/23/24 16:32	1
Bromomethane	ND		1.0	0.98	ug/L			01/23/24 16:32	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/23/24 16:32	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/23/24 16:32	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/23/24 16:32	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/23/24 16:32	1
Chloroethane	ND		1.0	0.76	ug/L			01/23/24 16:32	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/23/24 16:32	1
Chloroform	ND		1.0	0.90	ug/L			01/23/24 16:32	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/23/24 16:32	1
Chloromethane	ND		1.0	0.90	ug/L			01/23/24 16:32	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/23/24 16:32	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/23/24 16:32	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/23/24 16:32	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/23/24 16:32	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/23/24 16:32	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/23/24 16:32	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/23/24 16:32	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/23/24 16:32	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/23/24 16:32	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/23/24 16:32	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/23/24 16:32	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/23/24 16:32	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/23/24 16:32	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/23/24 16:32	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/23/24 16:32	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/23/24 16:32	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/23/24 16:32	1
2-Hexanone	ND		25	1.4	ug/L			01/23/24 16:32	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/23/24 16:32	1
Methylene bromide	ND		5.0	0.22	ug/L			01/23/24 16:32	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/23/24 16:32	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/23/24 16:32	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/23/24 16:32	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/23/24 16:32	1
Naphthalene	ND		5.0	3.0	ug/L			01/23/24 16:32	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/23/24 16:32	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/23/24 16:32	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/23/24 16:32	1
o-Xylene	ND		5.0	0.60	ug/L			01/23/24 16:32	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/23/24 16:32	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/23/24 16:32	1

Client Sample ID: MW4-ROX-011724
Date Collected: 01/17/24 10:55
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/23/24 16:32	1
Styrene	ND		1.0	1.0	ug/L			01/23/24 16:32	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/23/24 16:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/23/24 16:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/23/24 16:32	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/23/24 16:32	1
Toluene	ND		1.0	0.90	ug/L			01/23/24 16:32	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/23/24 16:32	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/23/24 16:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/23/24 16:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/23/24 16:32	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/23/24 16:32	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/23/24 16:32	1
Trichloroethene	ND		1.0	0.15	ug/L			01/23/24 16:32	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/23/24 16:32	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/23/24 16:32	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/23/24 16:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/23/24 16:32	1
Vinyl acetate	ND		25	0.93	ug/L			01/23/24 16:32	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/23/24 16:32	1
Xylenes, Total	ND		10	1.6	ug/L			01/23/24 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*01/23/24 16:32*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/23/24 16:32*	*1*
Toluene-d8 (Surr)	*104*		*64 - 132*		*01/23/24 16:32*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.23	0.11	ug/L		01/22/24 09:09	01/22/24 18:33	1
Acenaphthylene	ND		0.23	0.050	ug/L		01/22/24 09:09	01/22/24 18:33	1
Anthracene	ND		0.23	0.053	ug/L		01/22/24 09:09	01/22/24 18:33	1
Benzo[a]anthracene	ND		0.23	0.038	ug/L		01/22/24 09:09	01/22/24 18:33	1
Benzo[a]pyrene	ND		0.23	0.072	ug/L		01/22/24 09:09	01/22/24 18:33	1
Benzo[b]fluoranthene	ND		0.23	0.042	ug/L		01/22/24 09:09	01/22/24 18:33	1
Benzo[g,h,i]perylene	ND		0.23	0.030	ug/L		01/22/24 09:09	01/22/24 18:33	1
Benzo[k]fluoranthene	ND		0.23	0.070	ug/L		01/22/24 09:09	01/22/24 18:33	1
Chrysene	ND		0.23	0.037	ug/L		01/22/24 09:09	01/22/24 18:33	1
Dibenz(a,h)anthracene	ND		0.23	0.054	ug/L		01/22/24 09:09	01/22/24 18:33	1
Fluoranthene	ND		0.23	0.038	ug/L		01/22/24 09:09	01/22/24 18:33	1
Fluorene	ND		0.23	0.10	ug/L		01/22/24 09:09	01/22/24 18:33	1
Indeno[1,2,3-cd]pyrene	ND		0.23	0.038	ug/L		01/22/24 09:09	01/22/24 18:33	1
Phenanthrene	ND		0.23	0.10	ug/L		01/22/24 09:09	01/22/24 18:33	1
Pyrene	ND		0.23	0.044	ug/L		01/22/24 09:09	01/22/24 18:33	1
1-Methylnaphthalene	ND		0.23	0.090	ug/L		01/22/24 09:09	01/22/24 18:33	1
2-Methylnaphthalene	ND		0.23	0.074	ug/L		01/22/24 09:09	01/22/24 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*116*		*18 - 147*	*01/22/24 09:09*	*01/22/24 18:33*	*1*
2-Fluorobiphenyl	*64*		*15 - 128*	*01/22/24 09:09*	*01/22/24 18:33*	*1*

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

Job ID: 400-249894-1

Client Sample ID: MW4-ROX-011724
Date Collected: 01/17/24 10:55
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-4
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*64*		*10 - 144*	*01/22/24 09:09*	*01/22/24 18:33*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	9.8	ug/L		01/22/24 09:09	01/22/24 16:37	1
Benzenethiol	ND		11	11	ug/L		01/22/24 09:09	01/22/24 16:37	1
Benzoic acid	ND		34	27	ug/L		01/22/24 09:09	01/22/24 16:37	1
Benzyl alcohol	ND		11	8.2	ug/L		01/22/24 09:09	01/22/24 16:37	1
Bis(2-chloroethoxy)methane	ND		11	5.2	ug/L		01/22/24 09:09	01/22/24 16:37	1
Bis(2-chloroethyl)ether	ND		11	4.4	ug/L		01/22/24 09:09	01/22/24 16:37	1
bis (2-chloroisopropyl) ether	ND		11	2.0	ug/L		01/22/24 09:09	01/22/24 16:37	1
Bis(2-ethylhexyl) phthalate	ND		11	10	ug/L		01/22/24 09:09	01/22/24 16:37	1
4-Bromophenyl phenyl ether	ND		11	9.7	ug/L		01/22/24 09:09	01/22/24 16:37	1
Butyl benzyl phthalate	ND		11	6.5	ug/L		01/22/24 09:09	01/22/24 16:37	1
4-Chloroaniline	ND		11	5.3	ug/L		01/22/24 09:09	01/22/24 16:37	1
4-Chloro-3-methylphenol	ND		11	6.0	ug/L		01/22/24 09:09	01/22/24 16:37	1
2-Chloronaphthalene	ND		11	4.3	ug/L		01/22/24 09:09	01/22/24 16:37	1
2-Chlorophenol	ND		11	4.6	ug/L		01/22/24 09:09	01/22/24 16:37	1
4-Chlorophenyl phenyl ether	ND		11	4.2	ug/L		01/22/24 09:09	01/22/24 16:37	1
Dibenz[a,h]acridine	ND		11	3.2	ug/L		01/22/24 09:09	01/22/24 16:37	1
Dibenzofuran	ND		11	4.5	ug/L		01/22/24 09:09	01/22/24 16:37	1
3,3'-Dichlorobenzidine	ND		12	12	ug/L		01/22/24 09:09	01/22/24 16:37	1
2,4-Dichlorophenol	ND		11	4.8	ug/L		01/22/24 09:09	01/22/24 16:37	1
Diethyl phthalate	ND		11	5.0	ug/L		01/22/24 09:09	01/22/24 16:37	1
2,4-Dimethylphenol	ND		11	5.9	ug/L		01/22/24 09:09	01/22/24 16:37	1
Dimethyl phthalate	ND		11	4.7	ug/L		01/22/24 09:09	01/22/24 16:37	1
Di-n-butyl phthalate	ND		11	5.2	ug/L		01/22/24 09:09	01/22/24 16:37	1
4,6-Dinitro-ortho-cresol	ND		11	11	ug/L		01/22/24 09:09	01/22/24 16:37	1
2,4-Dinitrophenol	ND		34	5.2	ug/L		01/22/24 09:09	01/22/24 16:37	1
2,4-Dinitrotoluene	ND		11	5.7	ug/L		01/22/24 09:09	01/22/24 16:37	1
2,6-Dinitrotoluene	ND		11	4.4	ug/L		01/22/24 09:09	01/22/24 16:37	1
Di-n-octyl phthalate	ND		11	6.8	ug/L		01/22/24 09:09	01/22/24 16:37	1
1,4-Dioxane	ND		11	4.8	ug/L		01/22/24 09:09	01/22/24 16:37	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	3.7	ug/L		01/22/24 09:09	01/22/24 16:37	1
Hexachlorobenzene	ND		11	11	ug/L		01/22/24 09:09	01/22/24 16:37	1
Hexachlorocyclopentadiene	ND		23	5.1	ug/L		01/22/24 09:09	01/22/24 16:37	1
Hexachloroethane	ND		11	5.9	ug/L		01/22/24 09:09	01/22/24 16:37	1
Indene	ND		11	4.1	ug/L		01/22/24 09:09	01/22/24 16:37	1
Isophorone	ND		11	5.9	ug/L		01/22/24 09:09	01/22/24 16:37	1
2-Methylphenol	ND		11	3.6	ug/L		01/22/24 09:09	01/22/24 16:37	1
3 & 4 Methylphenol	ND		23	5.2	ug/L		01/22/24 09:09	01/22/24 16:37	1
2-Nitroaniline	ND		11	5.6	ug/L		01/22/24 09:09	01/22/24 16:37	1
3-Nitroaniline	ND		11	5.3	ug/L		01/22/24 09:09	01/22/24 16:37	1
4-Nitroaniline	ND		11	4.6	ug/L		01/22/24 09:09	01/22/24 16:37	1
Nitrobenzene	ND		11	5.3	ug/L		01/22/24 09:09	01/22/24 16:37	1
2-Nitrophenol	ND		11	5.2	ug/L		01/22/24 09:09	01/22/24 16:37	1
4-Nitrophenol	ND		11	3.7	ug/L		01/22/24 09:09	01/22/24 16:37	1
N-Nitrosodimethylamine	ND		11	2.5	ug/L		01/22/24 09:09	01/22/24 16:37	1

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

Job ID: 400-249894-1

Client Sample ID: MW4-ROX-011724

Date Collected: 01/17/24 10:55
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-4

Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		11	2.8	ug/L		01/22/24 09:09	01/22/24 16:37	1
N-Nitrosodiphenylamine	ND		11	4.2	ug/L		01/22/24 09:09	01/22/24 16:37	1
Pentachlorophenol	ND		23	13	ug/L		01/22/24 09:09	01/22/24 16:37	1
Phenol	ND		11	4.7	ug/L		01/22/24 09:09	01/22/24 16:37	1
Pyridine	ND		11	11	ug/L		01/22/24 09:09	01/22/24 16:37	1
Quinoline	ND		11	2.7	ug/L		01/22/24 09:09	01/22/24 16:37	1
2,4,5-Trichlorophenol	ND		11	4.5	ug/L		01/22/24 09:09	01/22/24 16:37	1
2,4,6-Trichlorophenol	ND		11	3.9	ug/L		01/22/24 09:09	01/22/24 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*21 - 114*	*01/22/24 09:09*	*01/22/24 16:37*	*1*
2-Fluorophenol	*44*		*10 - 105*	*01/22/24 09:09*	*01/22/24 16:37*	*1*
Nitrobenzene-d5	*50*		*16 - 127*	*01/22/24 09:09*	*01/22/24 16:37*	*1*
Phenol-d5	*35*		*10 - 129*	*01/22/24 09:09*	*01/22/24 16:37*	*1*
Terphenyl-d14	*76*		*13 - 150*	*01/22/24 09:09*	*01/22/24 16:37*	*1*
2,4,6-Tribromophenol	*53*		*10 - 150*	*01/22/24 09:09*	*01/22/24 16:37*	*1*

Method: EPA 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	0.016	ug/L		01/22/24 11:12	01/22/24 21:10	1
1,2-Dibromoethane	ND		0.019	0.014	ug/L		01/22/24 11:12	01/22/24 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*51 - 149*	*01/22/24 11:12*	*01/22/24 21:10*	*1*

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

Job ID: 400-249894-1

Client Sample ID: MW14-ROX-011724
Date Collected: 01/17/24 13:05
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/23/24 16:54	1
Acrolein	ND		20	3.3	ug/L			01/23/24 16:54	1
Acrylonitrile	ND		10	2.8	ug/L			01/23/24 16:54	1
Benzene	ND		1.0	0.50	ug/L			01/23/24 16:54	1
Bromobenzene	ND		1.0	0.54	ug/L			01/23/24 16:54	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/23/24 16:54	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/23/24 16:54	1
Bromoform	ND		5.0	0.25	ug/L			01/23/24 16:54	1
Bromomethane	ND		1.0	0.98	ug/L			01/23/24 16:54	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/23/24 16:54	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/23/24 16:54	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/23/24 16:54	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/23/24 16:54	1
Chloroethane	ND		1.0	0.76	ug/L			01/23/24 16:54	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/23/24 16:54	1
Chloroform	ND		1.0	0.90	ug/L			01/23/24 16:54	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/23/24 16:54	1
Chloromethane	ND		1.0	0.90	ug/L			01/23/24 16:54	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/23/24 16:54	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/23/24 16:54	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/23/24 16:54	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/23/24 16:54	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/23/24 16:54	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/23/24 16:54	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/23/24 16:54	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/23/24 16:54	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/23/24 16:54	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/23/24 16:54	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/23/24 16:54	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/23/24 16:54	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/23/24 16:54	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/23/24 16:54	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/23/24 16:54	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/23/24 16:54	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/23/24 16:54	1
2-Hexanone	ND		25	1.4	ug/L			01/23/24 16:54	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/23/24 16:54	1
Methylene bromide	ND		5.0	0.22	ug/L			01/23/24 16:54	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/23/24 16:54	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/23/24 16:54	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/23/24 16:54	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/23/24 16:54	1
Naphthalene	ND		5.0	3.0	ug/L			01/23/24 16:54	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/23/24 16:54	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/23/24 16:54	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/23/24 16:54	1
o-Xylene	ND		5.0	0.60	ug/L			01/23/24 16:54	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/23/24 16:54	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/23/24 16:54	1

Client Sample ID: MW14-ROX-011724

Date Collected: 01/17/24 13:05
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-5

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/23/24 16:54	1
Styrene	ND		1.0	1.0	ug/L			01/23/24 16:54	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/23/24 16:54	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/23/24 16:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/23/24 16:54	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/23/24 16:54	1
Toluene	ND		1.0	0.90	ug/L			01/23/24 16:54	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/23/24 16:54	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/23/24 16:54	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/23/24 16:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/23/24 16:54	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/23/24 16:54	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/23/24 16:54	1
Trichloroethene	ND		1.0	0.15	ug/L			01/23/24 16:54	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/23/24 16:54	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/23/24 16:54	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/23/24 16:54	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/23/24 16:54	1
Vinyl acetate	ND		25	0.93	ug/L			01/23/24 16:54	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/23/24 16:54	1
Xylenes, Total	ND		10	1.6	ug/L			01/23/24 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*01/23/24 16:54*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*01/23/24 16:54*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*01/23/24 16:54*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.22	0.11	ug/L		01/22/24 09:09	01/22/24 18:54	1
Acenaphthylene	**0.070**	**J**	0.22	0.048	ug/L		01/22/24 09:09	01/22/24 18:54	1
Anthracene	ND		0.22	0.051	ug/L		01/22/24 09:09	01/22/24 18:54	1
Benzo[a]anthracene	ND		0.22	0.037	ug/L		01/22/24 09:09	01/22/24 18:54	1
Benzo[a]pyrene	ND		0.22	0.070	ug/L		01/22/24 09:09	01/22/24 18:54	1
Benzo[b]fluoranthene	ND		0.22	0.040	ug/L		01/22/24 09:09	01/22/24 18:54	1
Benzo[g,h,i]perylene	ND		0.22	0.030	ug/L		01/22/24 09:09	01/22/24 18:54	1
Benzo[k]fluoranthene	ND		0.22	0.068	ug/L		01/22/24 09:09	01/22/24 18:54	1
Chrysene	ND		0.22	0.036	ug/L		01/22/24 09:09	01/22/24 18:54	1
Dibenz(a,h)anthracene	ND		0.22	0.052	ug/L		01/22/24 09:09	01/22/24 18:54	1
Fluoranthene	ND		0.22	0.037	ug/L		01/22/24 09:09	01/22/24 18:54	1
Fluorene	ND		0.22	0.097	ug/L		01/22/24 09:09	01/22/24 18:54	1
Indeno[1,2,3-cd]pyrene	ND		0.22	0.037	ug/L		01/22/24 09:09	01/22/24 18:54	1
Phenanthrene	ND		0.22	0.098	ug/L		01/22/24 09:09	01/22/24 18:54	1
Pyrene	ND		0.22	0.043	ug/L		01/22/24 09:09	01/22/24 18:54	1
1-Methylnaphthalene	ND		0.22	0.087	ug/L		01/22/24 09:09	01/22/24 18:54	1
2-Methylnaphthalene	ND		0.22	0.072	ug/L		01/22/24 09:09	01/22/24 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*121*		*18 - 147*	*01/22/24 09:09*	*01/22/24 18:54*	*1*
2-Fluorobiphenyl	*71*		*15 - 128*	*01/22/24 09:09*	*01/22/24 18:54*	*1*

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

Job ID: 400-249894-1

Client Sample ID: MW14-ROX-011724
Date Collected: 01/17/24 13:05
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-5
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*81*		*10 - 144*	*01/22/24 09:09*	*01/22/24 18:54*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	9.5	ug/L		01/22/24 09:09	01/22/24 16:59	1
Benzenethiol	ND		11	11	ug/L		01/22/24 09:09	01/22/24 16:59	1
Benzoic acid	ND		33	26	ug/L		01/22/24 09:09	01/22/24 16:59	1
Benzyl alcohol	ND		11	8.0	ug/L		01/22/24 09:09	01/22/24 16:59	1
Bis(2-chloroethoxy)methane	ND		11	5.0	ug/L		01/22/24 09:09	01/22/24 16:59	1
Bis(2-chloroethyl)ether	ND		11	4.3	ug/L		01/22/24 09:09	01/22/24 16:59	1
bis (2-chloroisopropyl) ether	ND		11	2.0	ug/L		01/22/24 09:09	01/22/24 16:59	1
Bis(2-ethylhexyl) phthalate	ND		11	9.7	ug/L		01/22/24 09:09	01/22/24 16:59	1
4-Bromophenyl phenyl ether	ND		11	9.4	ug/L		01/22/24 09:09	01/22/24 16:59	1
Butyl benzyl phthalate	ND		11	6.3	ug/L		01/22/24 09:09	01/22/24 16:59	1
4-Chloroaniline	ND		11	5.1	ug/L		01/22/24 09:09	01/22/24 16:59	1
4-Chloro-3-methylphenol	ND		11	5.8	ug/L		01/22/24 09:09	01/22/24 16:59	1
2-Chloronaphthalene	ND		11	4.2	ug/L		01/22/24 09:09	01/22/24 16:59	1
2-Chlorophenol	ND		11	4.5	ug/L		01/22/24 09:09	01/22/24 16:59	1
4-Chlorophenyl phenyl ether	ND		11	4.0	ug/L		01/22/24 09:09	01/22/24 16:59	1
Dibenz[a,h]acridine	ND		11	3.1	ug/L		01/22/24 09:09	01/22/24 16:59	1
Dibenzofuran	ND		11	4.4	ug/L		01/22/24 09:09	01/22/24 16:59	1
3,3'-Dichlorobenzidine	ND		12	12	ug/L		01/22/24 09:09	01/22/24 16:59	1
2,4-Dichlorophenol	ND		11	4.7	ug/L		01/22/24 09:09	01/22/24 16:59	1
Diethyl phthalate	ND		11	4.8	ug/L		01/22/24 09:09	01/22/24 16:59	1
2,4-Dimethylphenol	ND		11	5.7	ug/L		01/22/24 09:09	01/22/24 16:59	1
Dimethyl phthalate	ND		11	4.6	ug/L		01/22/24 09:09	01/22/24 16:59	1
Di-n-butyl phthalate	ND		11	5.0	ug/L		01/22/24 09:09	01/22/24 16:59	1
4,6-Dinitro-ortho-cresol	ND		11	11	ug/L		01/22/24 09:09	01/22/24 16:59	1
2,4-Dinitrophenol	ND		33	5.0	ug/L		01/22/24 09:09	01/22/24 16:59	1
2,4-Dinitrotoluene	ND		11	5.6	ug/L		01/22/24 09:09	01/22/24 16:59	1
2,6-Dinitrotoluene	ND		11	4.3	ug/L		01/22/24 09:09	01/22/24 16:59	1
Di-n-octyl phthalate	ND		11	6.6	ug/L		01/22/24 09:09	01/22/24 16:59	1
1,4-Dioxane	ND		11	4.7	ug/L		01/22/24 09:09	01/22/24 16:59	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	3.6	ug/L		01/22/24 09:09	01/22/24 16:59	1
Hexachlorobenzene	ND		11	11	ug/L		01/22/24 09:09	01/22/24 16:59	1
Hexachlorocyclopentadiene	ND		22	4.9	ug/L		01/22/24 09:09	01/22/24 16:59	1
Hexachloroethane	ND		11	5.7	ug/L		01/22/24 09:09	01/22/24 16:59	1
Indene	ND		11	3.9	ug/L		01/22/24 09:09	01/22/24 16:59	1
Isophorone	ND		11	5.7	ug/L		01/22/24 09:09	01/22/24 16:59	1
2-Methylphenol	ND		11	3.5	ug/L		01/22/24 09:09	01/22/24 16:59	1
3 & 4 Methylphenol	ND		22	5.0	ug/L		01/22/24 09:09	01/22/24 16:59	1
2-Nitroaniline	ND		11	5.5	ug/L		01/22/24 09:09	01/22/24 16:59	1
3-Nitroaniline	ND		11	5.1	ug/L		01/22/24 09:09	01/22/24 16:59	1
4-Nitroaniline	ND		11	4.5	ug/L		01/22/24 09:09	01/22/24 16:59	1
Nitrobenzene	ND		11	5.1	ug/L		01/22/24 09:09	01/22/24 16:59	1
2-Nitrophenol	ND		11	5.0	ug/L		01/22/24 09:09	01/22/24 16:59	1
4-Nitrophenol	ND		11	3.6	ug/L		01/22/24 09:09	01/22/24 16:59	1
N-Nitrosodimethylamine	ND		11	2.4	ug/L		01/22/24 09:09	01/22/24 16:59	1

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

Job ID: 400-249894-1

Client Sample ID: MW14-ROX-011724

Date Collected: 01/17/24 13:05
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-5

Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		11	2.7	ug/L		01/22/24 09:09	01/22/24 16:59	1
N-Nitrosodiphenylamine	ND		11	4.0	ug/L		01/22/24 09:09	01/22/24 16:59	1
Pentachlorophenol	ND		22	13	ug/L		01/22/24 09:09	01/22/24 16:59	1
Phenol	ND		11	4.6	ug/L		01/22/24 09:09	01/22/24 16:59	1
Pyridine	ND		11	11	ug/L		01/22/24 09:09	01/22/24 16:59	1
Quinoline	ND		11	2.6	ug/L		01/22/24 09:09	01/22/24 16:59	1
2,4,5-Trichlorophenol	ND		11	4.4	ug/L		01/22/24 09:09	01/22/24 16:59	1
2,4,6-Trichlorophenol	ND		11	3.8	ug/L		01/22/24 09:09	01/22/24 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*21 - 114*	*01/22/24 09:09*	*01/22/24 16:59*	*1*
2-Fluorophenol	*51*		*10 - 105*	*01/22/24 09:09*	*01/22/24 16:59*	*1*
Nitrobenzene-d5	*62*		*16 - 127*	*01/22/24 09:09*	*01/22/24 16:59*	*1*
Phenol-d5	*43*		*10 - 129*	*01/22/24 09:09*	*01/22/24 16:59*	*1*
Terphenyl-d14	*89*		*13 - 150*	*01/22/24 09:09*	*01/22/24 16:59*	*1*
2,4,6-Tribromophenol	*71*		*10 - 150*	*01/22/24 09:09*	*01/22/24 16:59*	*1*

Method: EPA 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	0.016	ug/L		01/22/24 11:12	01/22/24 21:31	1
1,2-Dibromoethane	ND		0.019	0.014	ug/L		01/22/24 11:12	01/22/24 21:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*126*		*51 - 149*	*01/22/24 11:12*	*01/22/24 21:31*	*1*

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

Job ID: 400-249894-1

Client Sample ID: MW7-ROX-011724

Date Collected: 01/17/24 14:20
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-6

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		50000	20000	ug/L			01/23/24 17:16	2000
Acrolein	ND		40000	6600	ug/L			01/23/24 17:16	2000
Acrylonitrile	ND		20000	5600	ug/L			01/23/24 17:16	2000
Benzene	**680000**		5000	2500	ug/L			01/24/24 19:08	5000
Bromobenzene	ND		2000	1100	ug/L			01/23/24 17:16	2000
Bromochloromethane	ND		2000	420	ug/L			01/23/24 17:16	2000
Bromodichloromethane	ND		2000	1000	ug/L			01/23/24 17:16	2000
Bromoform	ND		10000	500	ug/L			01/23/24 17:16	2000
Bromomethane	ND		2000	2000	ug/L			01/23/24 17:16	2000
2-Butanone (MEK)	ND		50000	5200	ug/L			01/23/24 17:16	2000
Carbon disulfide	ND		2000	1000	ug/L			01/23/24 17:16	2000
Carbon tetrachloride	ND		2000	380	ug/L			01/23/24 17:16	2000
Chlorobenzene	ND		2000	1800	ug/L			01/23/24 17:16	2000
Chloroethane	ND		2000	1500	ug/L			01/23/24 17:16	2000
2-Chloroethyl vinyl ether	ND		10000	4000	ug/L			01/23/24 17:16	2000
Chloroform	ND		2000	1800	ug/L			01/23/24 17:16	2000
1-Chlorohexane	ND		2000	640	ug/L			01/23/24 17:16	2000
Chloromethane	ND		2000	1800	ug/L			01/23/24 17:16	2000
cis-1,2-Dichloroethene	ND		2000	400	ug/L			01/23/24 17:16	2000
cis-1,3-Dichloropropene	ND		10000	1000	ug/L			01/23/24 17:16	2000
Dibromochloromethane	ND		2000	480	ug/L			01/23/24 17:16	2000
1,2-Dichlorobenzene	ND		2000	1000	ug/L			01/23/24 17:16	2000
1,3-Dichlorobenzene	ND		2000	1100	ug/L			01/23/24 17:16	2000
1,4-Dichlorobenzene	ND		2000	1300	ug/L			01/23/24 17:16	2000
Dichlorodifluoromethane	ND		2000	1700	ug/L			01/23/24 17:16	2000
1,1-Dichloroethane	ND		2000	1000	ug/L			01/23/24 17:16	2000
1,2-Dichloroethane	ND		2000	380	ug/L			01/23/24 17:16	2000
1,1-Dichloroethene	ND		2000	1000	ug/L			01/23/24 17:16	2000
1,2-Dichloropropane	ND		2000	1000	ug/L			01/23/24 17:16	2000
1,3-Dichloropropane	ND		2000	1000	ug/L			01/23/24 17:16	2000
2,2-Dichloropropane	ND		2000	1000	ug/L			01/23/24 17:16	2000
1,1-Dichloropropene	ND		2000	1000	ug/L			01/23/24 17:16	2000
Ethylbenzene	ND		2000	1000	ug/L			01/23/24 17:16	2000
Ethyl methacrylate	ND		2000	1200	ug/L			01/23/24 17:16	2000
Hexachlorobutadiene	ND		10000	1800	ug/L			01/23/24 17:16	2000
2-Hexanone	ND		50000	2800	ug/L			01/23/24 17:16	2000
Isopropylbenzene	ND		2000	1100	ug/L			01/23/24 17:16	2000
Methylene bromide	ND		10000	440	ug/L			01/23/24 17:16	2000
Methylene Chloride	ND		10000	6000	ug/L			01/23/24 17:16	2000
4-Methyl-2-pentanone (MIBK)	ND		50000	3600	ug/L			01/23/24 17:16	2000
Methyl tert-butyl ether	ND		2000	440	ug/L			01/23/24 17:16	2000
m-Xylene & p-Xylene	ND		10000	1300	ug/L			01/23/24 17:16	2000
Naphthalene	ND		10000	6000	ug/L			01/23/24 17:16	2000
n-Butylbenzene	ND		2000	1500	ug/L			01/23/24 17:16	2000
N-Propylbenzene	ND		2000	1400	ug/L			01/23/24 17:16	2000
o-Chlorotoluene	ND		2000	1100	ug/L			01/23/24 17:16	2000
o-Xylene	ND		10000	1200	ug/L			01/23/24 17:16	2000
p-Chlorotoluene	ND		2000	1100	ug/L			01/23/24 17:16	2000
p-Isopropyltoluene	ND		2000	1400	ug/L			01/23/24 17:16	2000

Client Sample ID: MW7-ROX-011724

Date Collected: 01/17/24 14:20
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-6

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		2000	1400	ug/L			01/23/24 17:16	2000
Styrene	ND		2000	2000	ug/L			01/23/24 17:16	2000
tert-Butylbenzene	ND		2000	1300	ug/L			01/23/24 17:16	2000
1,1,1,2-Tetrachloroethane	ND		2000	320	ug/L			01/23/24 17:16	2000
1,1,2,2-Tetrachloroethane	ND		2000	1000	ug/L			01/23/24 17:16	2000
Tetrachloroethene	ND		2000	1800	ug/L			01/23/24 17:16	2000
Toluene	ND		2000	1800	ug/L			01/23/24 17:16	2000
trans-1,2-Dichloroethene	ND		2000	1000	ug/L			01/23/24 17:16	2000
trans-1,3-Dichloropropene	ND		10000	400	ug/L			01/23/24 17:16	2000
1,2,3-Trichlorobenzene	ND		2000	1800	ug/L			01/23/24 17:16	2000
1,2,4-Trichlorobenzene	ND		2000	1600	ug/L			01/23/24 17:16	2000
1,1,1-Trichloroethane	ND		2000	360	ug/L			01/23/24 17:16	2000
1,1,2-Trichloroethane	ND		10000	420	ug/L			01/23/24 17:16	2000
Trichloroethene	ND		2000	300	ug/L			01/23/24 17:16	2000
Trichlorofluoromethane	ND		2000	1000	ug/L			01/23/24 17:16	2000
1,2,3-Trichloropropane	ND		10000	1700	ug/L			01/23/24 17:16	2000
1,2,4-Trimethylbenzene	ND		2000	1600	ug/L			01/23/24 17:16	2000
1,3,5-Trimethylbenzene	ND		2000	1100	ug/L			01/23/24 17:16	2000
Vinyl acetate	ND		50000	1900	ug/L			01/23/24 17:16	2000
Vinyl chloride	ND		2000	1000	ug/L			01/23/24 17:16	2000
Xylenes, Total	ND		20000	3200	ug/L			01/23/24 17:16	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*01/23/24 17:16*	*2000*
4-Bromofluorobenzene	*92*		*72 - 130*		*01/24/24 19:08*	*5000*
Dibromofluoromethane	*111*		*75 - 126*		*01/23/24 17:16*	*2000*
Dibromofluoromethane	*102*		*75 - 126*		*01/24/24 19:08*	*5000*
Toluene-d8 (Surr)	*102*		*64 - 132*		*01/23/24 17:16*	*2000*
Toluene-d8 (Surr)	*100*		*64 - 132*		*01/24/24 19:08*	*5000*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.26**		0.24	0.12	ug/L		01/22/24 09:09	01/22/24 19:14	1
Acenaphthylene	**0.12**	**J**	0.24	0.053	ug/L		01/22/24 09:09	01/22/24 19:14	1
Anthracene	ND		0.24	0.056	ug/L		01/22/24 09:09	01/22/24 19:14	1
Benzo[a]anthracene	ND		0.24	0.041	ug/L		01/22/24 09:09	01/22/24 19:14	1
Benzo[a]pyrene	ND		0.24	0.077	ug/L		01/22/24 09:09	01/22/24 19:14	1
Benzo[b]fluoranthene	ND		0.24	0.044	ug/L		01/22/24 09:09	01/22/24 19:14	1
Benzo[g,h,i]perylene	ND		0.24	0.032	ug/L		01/22/24 09:09	01/22/24 19:14	1
Benzo[k]fluoranthene	ND		0.24	0.074	ug/L		01/22/24 09:09	01/22/24 19:14	1
Chrysene	ND		0.24	0.040	ug/L		01/22/24 09:09	01/22/24 19:14	1
Dibenz(a,h)anthracene	ND		0.24	0.058	ug/L		01/22/24 09:09	01/22/24 19:14	1
Fluoranthene	ND		0.24	0.041	ug/L		01/22/24 09:09	01/22/24 19:14	1
Fluorene	**0.14**	**J**	0.24	0.11	ug/L		01/22/24 09:09	01/22/24 19:14	1
Indeno[1,2,3-cd]pyrene	ND		0.24	0.041	ug/L		01/22/24 09:09	01/22/24 19:14	1
Phenanthrene	**0.24**		0.24	0.11	ug/L		01/22/24 09:09	01/22/24 19:14	1
Pyrene	ND		0.24	0.047	ug/L		01/22/24 09:09	01/22/24 19:14	1
1-Methylnaphthalene	**1.3**		0.24	0.096	ug/L		01/22/24 09:09	01/22/24 19:14	1
2-Methylnaphthalene	**1.7**		0.24	0.079	ug/L		01/22/24 09:09	01/22/24 19:14	1

Client Sample ID: MW7-ROX-011724
Date Collected: 01/17/24 14:20
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-6
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*111*		*18 - 147*	*01/22/24 09:09*	*01/22/24 19:14*	*1*
2-Fluorobiphenyl	*70*		*15 - 128*	*01/22/24 09:09*	*01/22/24 19:14*	*1*
Nitrobenzene-d5	*52*		*10 - 144*	*01/22/24 09:09*	*01/22/24 19:14*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		12	10	ug/L		01/22/24 09:09	01/22/24 17:22	1
Benzenethiol	ND		12	12	ug/L		01/22/24 09:09	01/22/24 17:22	1
Benzoic acid	ND		36	29	ug/L		01/22/24 09:09	01/22/24 17:22	1
Benzyl alcohol	ND		12	8.7	ug/L		01/22/24 09:09	01/22/24 17:22	1
Bis(2-chloroethoxy)methane	ND		12	5.5	ug/L		01/22/24 09:09	01/22/24 17:22	1
Bis(2-chloroethyl)ether	ND		12	4.7	ug/L		01/22/24 09:09	01/22/24 17:22	1
bis (2-chloroisopropyl) ether	ND		12	2.2	ug/L		01/22/24 09:09	01/22/24 17:22	1
Bis(2-ethylhexyl) phthalate	ND		12	11	ug/L		01/22/24 09:09	01/22/24 17:22	1
4-Bromophenyl phenyl ether	ND		12	10	ug/L		01/22/24 09:09	01/22/24 17:22	1
Butyl benzyl phthalate	ND		12	7.0	ug/L		01/22/24 09:09	01/22/24 17:22	1
4-Chloroaniline	ND		12	5.6	ug/L		01/22/24 09:09	01/22/24 17:22	1
4-Chloro-3-methylphenol	ND		12	6.4	ug/L		01/22/24 09:09	01/22/24 17:22	1
2-Chloronaphthalene	ND		12	4.6	ug/L		01/22/24 09:09	01/22/24 17:22	1
2-Chlorophenol	ND		12	4.9	ug/L		01/22/24 09:09	01/22/24 17:22	1
4-Chlorophenyl phenyl ether	ND		12	4.4	ug/L		01/22/24 09:09	01/22/24 17:22	1
Dibenz[a,h]acridine	ND		12	3.4	ug/L		01/22/24 09:09	01/22/24 17:22	1
Dibenzofuran	ND		12	4.8	ug/L		01/22/24 09:09	01/22/24 17:22	1
3,3'-Dichlorobenzidine	ND		13	13	ug/L		01/22/24 09:09	01/22/24 17:22	1
2,4-Dichlorophenol	ND		12	5.2	ug/L		01/22/24 09:09	01/22/24 17:22	1
Diethyl phthalate	ND		12	5.3	ug/L		01/22/24 09:09	01/22/24 17:22	1
2,4-Dimethylphenol	ND		12	6.2	ug/L		01/22/24 09:09	01/22/24 17:22	1
Dimethyl phthalate	ND		12	5.0	ug/L		01/22/24 09:09	01/22/24 17:22	1
Di-n-butyl phthalate	ND		12	5.5	ug/L		01/22/24 09:09	01/22/24 17:22	1
4,6-Dinitro-ortho-cresol	ND		12	12	ug/L		01/22/24 09:09	01/22/24 17:22	1
2,4-Dinitrophenol	ND		36	5.5	ug/L		01/22/24 09:09	01/22/24 17:22	1
2,4-Dinitrotoluene	ND		12	6.1	ug/L		01/22/24 09:09	01/22/24 17:22	1
2,6-Dinitrotoluene	ND		12	4.7	ug/L		01/22/24 09:09	01/22/24 17:22	1
Di-n-octyl phthalate	ND		12	7.2	ug/L		01/22/24 09:09	01/22/24 17:22	1
1,4-Dioxane	ND		12	5.2	ug/L		01/22/24 09:09	01/22/24 17:22	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		12	4.0	ug/L		01/22/24 09:09	01/22/24 17:22	1
Hexachlorobenzene	ND		12	12	ug/L		01/22/24 09:09	01/22/24 17:22	1
Hexachlorocyclopentadiene	ND		24	5.4	ug/L		01/22/24 09:09	01/22/24 17:22	1
Hexachloroethane	ND		12	6.2	ug/L		01/22/24 09:09	01/22/24 17:22	1
Indene	ND		12	4.3	ug/L		01/22/24 09:09	01/22/24 17:22	1
Isophorone	ND		12	6.2	ug/L		01/22/24 09:09	01/22/24 17:22	1
2-Methylphenol	ND		12	3.8	ug/L		01/22/24 09:09	01/22/24 17:22	1
3 & 4 Methylphenol	ND		24	5.5	ug/L		01/22/24 09:09	01/22/24 17:22	1
2-Nitroaniline	ND		12	6.0	ug/L		01/22/24 09:09	01/22/24 17:22	1
3-Nitroaniline	ND		12	5.6	ug/L		01/22/24 09:09	01/22/24 17:22	1
4-Nitroaniline	ND		12	4.9	ug/L		01/22/24 09:09	01/22/24 17:22	1
Nitrobenzene	ND		12	5.6	ug/L		01/22/24 09:09	01/22/24 17:22	1
2-Nitrophenol	ND		12	5.5	ug/L		01/22/24 09:09	01/22/24 17:22	1
4-Nitrophenol	ND		12	4.0	ug/L		01/22/24 09:09	01/22/24 17:22	1

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

Job ID: 400-249894-1

Client Sample ID: MW7-ROX-011724

Lab Sample ID: 400-249894-6

Date Collected: 01/17/24 14:20

Matrix: Water

Date Received: 01/20/24 11:07

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodimethylamine	ND		12	2.6	ug/L		01/22/24 09:09	01/22/24 17:22	1
N-Nitrosodi-n-propylamine	ND		12	3.0	ug/L		01/22/24 09:09	01/22/24 17:22	1
N-Nitrosodiphenylamine	ND		12	4.4	ug/L		01/22/24 09:09	01/22/24 17:22	1
Pentachlorophenol	ND		24	14	ug/L		01/22/24 09:09	01/22/24 17:22	1
Phenol	**95**		12	5.0	ug/L		01/22/24 09:09	01/22/24 17:22	1
Pyridine	ND		12	12	ug/L		01/22/24 09:09	01/22/24 17:22	1
Quinoline	ND		12	2.9	ug/L		01/22/24 09:09	01/22/24 17:22	1
2,4,5-Trichlorophenol	ND		12	4.8	ug/L		01/22/24 09:09	01/22/24 17:22	1
2,4,6-Trichlorophenol	ND		12	4.2	ug/L		01/22/24 09:09	01/22/24 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*21 - 114*	*01/22/24 09:09*	*01/22/24 17:22*	*1*
2-Fluorophenol	*55*		*10 - 105*	*01/22/24 09:09*	*01/22/24 17:22*	*1*
Nitrobenzene-d5	*64*		*16 - 127*	*01/22/24 09:09*	*01/22/24 17:22*	*1*
Phenol-d5	*44*		*10 - 129*	*01/22/24 09:09*	*01/22/24 17:22*	*1*
Terphenyl-d14	*84*		*13 - 150*	*01/22/24 09:09*	*01/22/24 17:22*	*1*
2,4,6-Tribromophenol	*68*		*10 - 150*	*01/22/24 09:09*	*01/22/24 17:22*	*1*

Method: EPA 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	0.016	ug/L		01/22/24 11:12	01/22/24 21:51	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		01/22/24 11:12	01/22/24 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*51 - 149*	*01/22/24 11:12*	*01/22/24 21:51*	*1*

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

Job ID: 400-249894-1

Client Sample ID: MW7-ROX-011724-DUP

Date Collected: 01/17/24 14:20
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-7

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		50000	20000	ug/L			01/23/24 17:38	2000
Acrolein	ND		40000	6600	ug/L			01/23/24 17:38	2000
Acrylonitrile	ND		20000	5600	ug/L			01/23/24 17:38	2000
Benzene	**1000000**		5000	2500	ug/L			01/24/24 19:30	5000
Bromobenzene	ND		2000	1100	ug/L			01/23/24 17:38	2000
Bromochloromethane	ND		2000	420	ug/L			01/23/24 17:38	2000
Bromodichloromethane	ND		2000	1000	ug/L			01/23/24 17:38	2000
Bromoform	ND		10000	500	ug/L			01/23/24 17:38	2000
Bromomethane	ND		2000	2000	ug/L			01/23/24 17:38	2000
2-Butanone (MEK)	ND		50000	5200	ug/L			01/23/24 17:38	2000
Carbon disulfide	ND		2000	1000	ug/L			01/23/24 17:38	2000
Carbon tetrachloride	ND		2000	380	ug/L			01/23/24 17:38	2000
Chlorobenzene	ND		2000	1800	ug/L			01/23/24 17:38	2000
Chloroethane	ND		2000	1500	ug/L			01/23/24 17:38	2000
2-Chloroethyl vinyl ether	ND		10000	4000	ug/L			01/23/24 17:38	2000
Chloroform	ND		2000	1800	ug/L			01/23/24 17:38	2000
1-Chlorohexane	ND		2000	640	ug/L			01/23/24 17:38	2000
Chloromethane	ND		2000	1800	ug/L			01/23/24 17:38	2000
cis-1,2-Dichloroethene	ND		2000	400	ug/L			01/23/24 17:38	2000
cis-1,3-Dichloropropene	ND		10000	1000	ug/L			01/23/24 17:38	2000
Dibromochloromethane	ND		2000	480	ug/L			01/23/24 17:38	2000
1,2-Dichlorobenzene	ND		2000	1000	ug/L			01/23/24 17:38	2000
1,3-Dichlorobenzene	ND		2000	1100	ug/L			01/23/24 17:38	2000
1,4-Dichlorobenzene	ND		2000	1300	ug/L			01/23/24 17:38	2000
Dichlorodifluoromethane	ND		2000	1700	ug/L			01/23/24 17:38	2000
1,1-Dichloroethane	ND		2000	1000	ug/L			01/23/24 17:38	2000
1,2-Dichloroethane	ND		2000	380	ug/L			01/23/24 17:38	2000
1,1-Dichloroethene	ND		2000	1000	ug/L			01/23/24 17:38	2000
1,2-Dichloropropane	ND		2000	1000	ug/L			01/23/24 17:38	2000
1,3-Dichloropropane	ND		2000	1000	ug/L			01/23/24 17:38	2000
2,2-Dichloropropane	ND		2000	1000	ug/L			01/23/24 17:38	2000
1,1-Dichloropropene	ND		2000	1000	ug/L			01/23/24 17:38	2000
Ethylbenzene	ND		2000	1000	ug/L			01/23/24 17:38	2000
Ethyl methacrylate	ND		2000	1200	ug/L			01/23/24 17:38	2000
Hexachlorobutadiene	ND		10000	1800	ug/L			01/23/24 17:38	2000
2-Hexanone	ND		50000	2800	ug/L			01/23/24 17:38	2000
Isopropylbenzene	ND		2000	1100	ug/L			01/23/24 17:38	2000
Methylene bromide	ND		10000	440	ug/L			01/23/24 17:38	2000
Methylene Chloride	ND		10000	6000	ug/L			01/23/24 17:38	2000
4-Methyl-2-pentanone (MIBK)	ND		50000	3600	ug/L			01/23/24 17:38	2000
Methyl tert-butyl ether	ND		2000	440	ug/L			01/23/24 17:38	2000
m-Xylene & p-Xylene	ND		10000	1300	ug/L			01/23/24 17:38	2000
Naphthalene	ND		10000	6000	ug/L			01/23/24 17:38	2000
n-Butylbenzene	ND		2000	1500	ug/L			01/23/24 17:38	2000
N-Propylbenzene	ND		2000	1400	ug/L			01/23/24 17:38	2000
o-Chlorotoluene	ND		2000	1100	ug/L			01/23/24 17:38	2000
o-Xylene	ND		10000	1200	ug/L			01/23/24 17:38	2000
p-Chlorotoluene	ND		2000	1100	ug/L			01/23/24 17:38	2000
p-Isopropyltoluene	ND		2000	1400	ug/L			01/23/24 17:38	2000

Client Sample ID: MW7-ROX-011724-DUP

Date Collected: 01/17/24 14:20
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-7

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		2000	1400	ug/L			01/23/24 17:38	2000
Styrene	ND		2000	2000	ug/L			01/23/24 17:38	2000
tert-Butylbenzene	ND		2000	1300	ug/L			01/23/24 17:38	2000
1,1,1,2-Tetrachloroethane	ND		2000	320	ug/L			01/23/24 17:38	2000
1,1,2,2-Tetrachloroethane	ND		2000	1000	ug/L			01/23/24 17:38	2000
Tetrachloroethene	ND		2000	1800	ug/L			01/23/24 17:38	2000
Toluene	ND		2000	1800	ug/L			01/23/24 17:38	2000
trans-1,2-Dichloroethene	ND		2000	1000	ug/L			01/23/24 17:38	2000
trans-1,3-Dichloropropene	ND		10000	400	ug/L			01/23/24 17:38	2000
1,2,3-Trichlorobenzene	ND		2000	1800	ug/L			01/23/24 17:38	2000
1,2,4-Trichlorobenzene	ND		2000	1600	ug/L			01/23/24 17:38	2000
1,1,1-Trichloroethane	ND		2000	360	ug/L			01/23/24 17:38	2000
1,1,2-Trichloroethane	ND		10000	420	ug/L			01/23/24 17:38	2000
Trichloroethene	ND		2000	300	ug/L			01/23/24 17:38	2000
Trichlorofluoromethane	ND		2000	1000	ug/L			01/23/24 17:38	2000
1,2,3-Trichloropropane	ND		10000	1700	ug/L			01/23/24 17:38	2000
1,2,4-Trimethylbenzene	ND		2000	1600	ug/L			01/23/24 17:38	2000
1,3,5-Trimethylbenzene	ND		2000	1100	ug/L			01/23/24 17:38	2000
Vinyl acetate	ND		50000	1900	ug/L			01/23/24 17:38	2000
Vinyl chloride	ND		2000	1000	ug/L			01/23/24 17:38	2000
Xylenes, Total	ND		20000	3200	ug/L			01/23/24 17:38	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 130*		*01/23/24 17:38*	*2000*
4-Bromofluorobenzene	*92*		*72 - 130*		*01/24/24 19:30*	*5000*
Dibromofluoromethane	*108*		*75 - 126*		*01/23/24 17:38*	*2000*
Dibromofluoromethane	*103*		*75 - 126*		*01/24/24 19:30*	*5000*
Toluene-d8 (Surr)	*104*		*64 - 132*		*01/23/24 17:38*	*2000*
Toluene-d8 (Surr)	*101*		*64 - 132*		*01/24/24 19:30*	*5000*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.30**		0.23	0.11	ug/L		01/22/24 09:09	01/22/24 19:34	1
Acenaphthylene	**0.13**	**J**	0.23	0.050	ug/L		01/22/24 09:09	01/22/24 19:34	1
Anthracene	ND		0.23	0.053	ug/L		01/22/24 09:09	01/22/24 19:34	1
Benzo[a]anthracene	ND		0.23	0.038	ug/L		01/22/24 09:09	01/22/24 19:34	1
Benzo[a]pyrene	ND		0.23	0.072	ug/L		01/22/24 09:09	01/22/24 19:34	1
Benzo[b]fluoranthene	ND		0.23	0.042	ug/L		01/22/24 09:09	01/22/24 19:34	1
Benzo[g,h,i]perylene	ND		0.23	0.030	ug/L		01/22/24 09:09	01/22/24 19:34	1
Benzo[k]fluoranthene	ND		0.23	0.070	ug/L		01/22/24 09:09	01/22/24 19:34	1
Chrysene	ND		0.23	0.037	ug/L		01/22/24 09:09	01/22/24 19:34	1
Dibenz(a,h)anthracene	ND		0.23	0.054	ug/L		01/22/24 09:09	01/22/24 19:34	1
Fluoranthene	ND		0.23	0.038	ug/L		01/22/24 09:09	01/22/24 19:34	1
Fluorene	**0.16**	**J**	0.23	0.10	ug/L		01/22/24 09:09	01/22/24 19:34	1
Indeno[1,2,3-cd]pyrene	ND		0.23	0.038	ug/L		01/22/24 09:09	01/22/24 19:34	1
Phenanthrene	**0.24**		0.23	0.10	ug/L		01/22/24 09:09	01/22/24 19:34	1
Pyrene	ND		0.23	0.044	ug/L		01/22/24 09:09	01/22/24 19:34	1
1-Methylnaphthalene	**1.2**		0.23	0.090	ug/L		01/22/24 09:09	01/22/24 19:34	1
2-Methylnaphthalene	**1.6**		0.23	0.074	ug/L		01/22/24 09:09	01/22/24 19:34	1

Client Sample ID: MW7-ROX-011724-DUP

Date Collected: 01/17/24 14:20
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-7

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*103*		*18 - 147*	*01/22/24 09:09*	*01/22/24 19:34*	*1*
2-Fluorobiphenyl	*72*		*15 - 128*	*01/22/24 09:09*	*01/22/24 19:34*	*1*
Nitrobenzene-d5	*51*		*10 - 144*	*01/22/24 09:09*	*01/22/24 19:34*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	9.8	ug/L		01/22/24 09:09	01/22/24 17:44	1
Benzenethiol	ND		11	11	ug/L		01/22/24 09:09	01/22/24 17:44	1
Benzoic acid	ND		34	27	ug/L		01/22/24 09:09	01/22/24 17:44	1
Benzyl alcohol	ND		11	8.2	ug/L		01/22/24 09:09	01/22/24 17:44	1
Bis(2-chloroethoxy)methane	ND		11	5.2	ug/L		01/22/24 09:09	01/22/24 17:44	1
Bis(2-chloroethyl)ether	ND		11	4.4	ug/L		01/22/24 09:09	01/22/24 17:44	1
bis (2-chloroisopropyl) ether	ND		11	2.0	ug/L		01/22/24 09:09	01/22/24 17:44	1
Bis(2-ethylhexyl) phthalate	ND		11	10	ug/L		01/22/24 09:09	01/22/24 17:44	1
4-Bromophenyl phenyl ether	ND		11	9.7	ug/L		01/22/24 09:09	01/22/24 17:44	1
Butyl benzyl phthalate	ND		11	6.5	ug/L		01/22/24 09:09	01/22/24 17:44	1
4-Chloroaniline	ND		11	5.3	ug/L		01/22/24 09:09	01/22/24 17:44	1
4-Chloro-3-methylphenol	ND		11	6.0	ug/L		01/22/24 09:09	01/22/24 17:44	1
2-Chloronaphthalene	ND		11	4.3	ug/L		01/22/24 09:09	01/22/24 17:44	1
2-Chlorophenol	ND		11	4.6	ug/L		01/22/24 09:09	01/22/24 17:44	1
4-Chlorophenyl phenyl ether	ND		11	4.2	ug/L		01/22/24 09:09	01/22/24 17:44	1
Dibenz[a,h]acridine	ND		11	3.2	ug/L		01/22/24 09:09	01/22/24 17:44	1
Dibenzofuran	ND		11	4.5	ug/L		01/22/24 09:09	01/22/24 17:44	1
3,3'-Dichlorobenzidine	ND		12	12	ug/L		01/22/24 09:09	01/22/24 17:44	1
2,4-Dichlorophenol	ND		11	4.8	ug/L		01/22/24 09:09	01/22/24 17:44	1
Diethyl phthalate	ND		11	5.0	ug/L		01/22/24 09:09	01/22/24 17:44	1
2,4-Dimethylphenol	ND		11	5.9	ug/L		01/22/24 09:09	01/22/24 17:44	1
Dimethyl phthalate	ND		11	4.7	ug/L		01/22/24 09:09	01/22/24 17:44	1
Di-n-butyl phthalate	ND		11	5.2	ug/L		01/22/24 09:09	01/22/24 17:44	1
4,6-Dinitro-ortho-cresol	ND		11	11	ug/L		01/22/24 09:09	01/22/24 17:44	1
2,4-Dinitrophenol	ND		34	5.2	ug/L		01/22/24 09:09	01/22/24 17:44	1
2,4-Dinitrotoluene	ND		11	5.7	ug/L		01/22/24 09:09	01/22/24 17:44	1
2,6-Dinitrotoluene	ND		11	4.4	ug/L		01/22/24 09:09	01/22/24 17:44	1
Di-n-octyl phthalate	ND		11	6.8	ug/L		01/22/24 09:09	01/22/24 17:44	1
1,4-Dioxane	ND		11	4.8	ug/L		01/22/24 09:09	01/22/24 17:44	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	3.7	ug/L		01/22/24 09:09	01/22/24 17:44	1
Hexachlorobenzene	ND		11	11	ug/L		01/22/24 09:09	01/22/24 17:44	1
Hexachlorocyclopentadiene	ND		23	5.1	ug/L		01/22/24 09:09	01/22/24 17:44	1
Hexachloroethane	ND		11	5.9	ug/L		01/22/24 09:09	01/22/24 17:44	1
Indene	ND		11	4.1	ug/L		01/22/24 09:09	01/22/24 17:44	1
Isophorone	ND		11	5.9	ug/L		01/22/24 09:09	01/22/24 17:44	1
2-Methylphenol	ND		11	3.6	ug/L		01/22/24 09:09	01/22/24 17:44	1
3 & 4 Methylphenol	ND		23	5.2	ug/L		01/22/24 09:09	01/22/24 17:44	1
2-Nitroaniline	ND		11	5.6	ug/L		01/22/24 09:09	01/22/24 17:44	1
3-Nitroaniline	ND		11	5.3	ug/L		01/22/24 09:09	01/22/24 17:44	1
4-Nitroaniline	ND		11	4.6	ug/L		01/22/24 09:09	01/22/24 17:44	1
Nitrobenzene	ND		11	5.3	ug/L		01/22/24 09:09	01/22/24 17:44	1
2-Nitrophenol	ND		11	5.2	ug/L		01/22/24 09:09	01/22/24 17:44	1
4-Nitrophenol	ND		11	3.7	ug/L		01/22/24 09:09	01/22/24 17:44	1

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

Job ID: 400-249894-1

Client Sample ID: MW7-ROX-011724-DUP

Date Collected: 01/17/24 14:20
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249894-7

Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodimethylamine	ND		11	2.5	ug/L		01/22/24 09:09	01/22/24 17:44	1
N-Nitrosodi-n-propylamine	ND		11	2.8	ug/L		01/22/24 09:09	01/22/24 17:44	1
N-Nitrosodiphenylamine	ND		11	4.2	ug/L		01/22/24 09:09	01/22/24 17:44	1
Pentachlorophenol	ND		23	13	ug/L		01/22/24 09:09	01/22/24 17:44	1
Phenol	**88**		11	4.7	ug/L		01/22/24 09:09	01/22/24 17:44	1
Pyridine	ND		11	11	ug/L		01/22/24 09:09	01/22/24 17:44	1
Quinoline	ND		11	2.7	ug/L		01/22/24 09:09	01/22/24 17:44	1
2,4,5-Trichlorophenol	ND		11	4.5	ug/L		01/22/24 09:09	01/22/24 17:44	1
2,4,6-Trichlorophenol	ND		11	3.9	ug/L		01/22/24 09:09	01/22/24 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*21 - 114*	*01/22/24 09:09*	*01/22/24 17:44*	*1*
2-Fluorophenol	*53*		*10 - 105*	*01/22/24 09:09*	*01/22/24 17:44*	*1*
Nitrobenzene-d5	*62*		*16 - 127*	*01/22/24 09:09*	*01/22/24 17:44*	*1*
Phenol-d5	*41*		*10 - 129*	*01/22/24 09:09*	*01/22/24 17:44*	*1*
Terphenyl-d14	*82*		*13 - 150*	*01/22/24 09:09*	*01/22/24 17:44*	*1*
2,4,6-Tribromophenol	*68*		*10 - 150*	*01/22/24 09:09*	*01/22/24 17:44*	*1*

Method: EPA 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		01/22/24 11:12	01/22/24 22:12	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/22/24 11:12	01/22/24 22:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*01/22/24 11:12*	*01/22/24 22:12*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Job ID: 400-249894-1
Project/Site: ROXANA QUARTERLY GW

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.
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: 400-249894-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-130)	(75-126)	(64-132)
400-249894-1	TB-ROX-011724-8260	91	111	87
400-249894-3	MW4-ROX-011724-EB	90	104	90
400-249894-4	MW4-ROX-011724	94	105	104
400-249894-5	MW14-ROX-011724	94	102	103
400-249894-6	MW7-ROX-011724	94	111	102
400-249894-6	MW7-ROX-011724	92	102	100
400-249894-7	MW7-ROX-011724-DUP	93	108	104
400-249894-7	MW7-ROX-011724-DUP	92	103	101
LCS 400-658368/1002	Lab Control Sample	97	102	98
LCS 400-658371/1002	Lab Control Sample	100	102	101
LCS 400-658524/1002	Lab Control Sample	102	101	107
MB 400-658368/5	Method Blank	93	108	90
MB 400-658371/4	Method Blank	93	103	100
MB 400-658524/4	Method Blank	94	102	103

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - 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	(21-114)	(10-105)	(16-127)	(10-129)	(13-150)	(10-150)
400-249894-3	MW4-ROX-011724-EB	74	53	65	40	96	57
400-249894-4	MW4-ROX-011724	58	44	50	35	76	53
400-249894-5	MW14-ROX-011724	74	51	62	43	89	71
400-249894-6	MW7-ROX-011724	69	55	64	44	84	68
400-249894-7	MW7-ROX-011724-DUP	70	53	62	41	82	68
LCS 400-658257/15-A	Lab Control Sample	71	63	67	53	92	63
LCS 400-658257/2-A	Lab Control Sample	84	67	72	60	97	82
LCSD 400-658257/16-A	Lab Control Sample Dup	72	59	67	48	96	61
LCSD 400-658257/3-A	Lab Control Sample Dup	78	59	69	54	93	81
MB 400-658257/1-A	Method Blank	68	58	66	45	86	58

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: 400-249894-1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-249894-3	MW4-ROX-011724-EB	156 S1+	79	83
400-249894-4	MW4-ROX-011724	116	64	64
400-249894-5	MW14-ROX-011724	121	71	81
400-249894-6	MW7-ROX-011724	111	70	52
400-249894-7	MW7-ROX-011724-DUP	103	72	51
LCS 400-658257/2-A	Lab Control Sample	114	98	107
LCSD 400-658257/3-A	Lab Control Sample Dup	113	97	83
MB 400-658257/1-A	Method Blank	162 S1+	81	88

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-249894-2	TB-ROX-011724-8011	113
400-249894-3	MW4-ROX-011724-EB	141
400-249894-4	MW4-ROX-011724	114
400-249894-5	MW14-ROX-011724	126
400-249894-6	MW7-ROX-011724	97
400-249894-7	MW7-ROX-011724-DUP	96
LCS 400-658293/2-A	Lab Control Sample	71
LCSD 400-658293/3-A	Lab Control Sample Dup	96
MB 400-658293/1-A	Method Blank	108

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-249894-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins 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: 400-249894-1

Client Sample ID: TB-ROX-011724-8260
Lab Sample ID: 400-249894-1
Date Collected: 01/17/24 12:00
Matrix: Water
Date Received: 01/20/24 11:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	658368	01/23/24 18:09	WPD	EET PEN

Client Sample ID: TB-ROX-011724-8011
Lab Sample ID: 400-249894-2
Date Collected: 01/17/24 12:00
Matrix: Water
Date Received: 01/20/24 11:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.3 mL	35 mL	658293	01/22/24 11:12	PG	EET PEN
Total/NA	Analysis	8011		1			658338	01/22/24 20:28	DS	EET PEN

Client Sample ID: MW4-ROX-011724-EB
Lab Sample ID: 400-249894-3
Date Collected: 01/17/24 09:35
Matrix: Water
Date Received: 01/20/24 11:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	658368	01/23/24 18:33	WPD	EET PEN
Total/NA	Prep	3510C			252.8 mL	1 mL	658257	01/22/24 09:09	SNG	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	658299	01/22/24 16:14	S1B	EET PEN
Total/NA	Prep	3510C			252.8 mL	1 mL	658257	01/22/24 09:09	SNG	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	658308	01/22/24 18:13	S1B	EET PEN
Total/NA	Prep	8011			35 mL	35 mL	658293	01/22/24 11:12	PG	EET PEN
Total/NA	Analysis	8011		1			658338	01/22/24 20:49	DS	EET PEN

Client Sample ID: MW4-ROX-011724
Lab Sample ID: 400-249894-4
Date Collected: 01/17/24 10:55
Matrix: Water
Date Received: 01/20/24 11:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	658371	01/23/24 16:32	WPD	EET PEN
Total/NA	Prep	3510C			222 mL	1 mL	658257	01/22/24 09:09	SNG	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	658299	01/22/24 16:37	S1B	EET PEN
Total/NA	Prep	3510C			222 mL	1 mL	658257	01/22/24 09:09	SNG	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	658308	01/22/24 18:33	S1B	EET PEN
Total/NA	Prep	8011			36.3 mL	35 mL	658293	01/22/24 11:12	PG	EET PEN
Total/NA	Analysis	8011		1			658338	01/22/24 21:10	DS	EET PEN

Client Sample ID: MW14-ROX-011724
Lab Sample ID: 400-249894-5
Date Collected: 01/17/24 13:05
Matrix: Water
Date Received: 01/20/24 11:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	658371	01/23/24 16:54	WPD	EET PEN
Total/NA	Prep	3510C			228.8 mL	1 mL	658257	01/22/24 09:09	SNG	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	658299	01/22/24 16:59	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-249894-1

Client Sample ID: MW14-ROX-011724

Lab Sample ID: 400-249894-5

Date Collected: 01/17/24 13:05

Matrix: Water

Date Received: 01/20/24 11:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			228.8 mL	1 mL	658257	01/22/24 09:09	SNG	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	658308	01/22/24 18:54	S1B	EET PEN
Total/NA	Prep	8011			36.3 mL	35 mL	658293	01/22/24 11:12	PG	EET PEN
Total/NA	Analysis	8011		1			658338	01/22/24 21:31	DS	EET PEN

Client Sample ID: MW7-ROX-011724

Lab Sample ID: 400-249894-6

Date Collected: 01/17/24 14:20

Matrix: Water

Date Received: 01/20/24 11:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2000	5 mL	5 mL	658371	01/23/24 17:16	WPD	EET PEN
Total/NA	Analysis	8260D		5000	5 mL	5 mL	658524	01/24/24 19:08	KR	EET PEN
Total/NA	Prep	3510C			208.6 mL	1 mL	658257	01/22/24 09:09	SNG	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	658299	01/22/24 17:22	S1B	EET PEN
Total/NA	Prep	3510C			208.6 mL	1 mL	658257	01/22/24 09:09	SNG	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	658308	01/22/24 19:14	S1B	EET PEN
Total/NA	Prep	8011			36.1 mL	35 mL	658293	01/22/24 11:12	PG	EET PEN
Total/NA	Analysis	8011		1			658338	01/22/24 21:51	DS	EET PEN

Client Sample ID: MW7-ROX-011724-DUP

Lab Sample ID: 400-249894-7

Date Collected: 01/17/24 14:20

Matrix: Water

Date Received: 01/20/24 11:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2000	5 mL	5 mL	658371	01/23/24 17:38	WPD	EET PEN
Total/NA	Analysis	8260D		5000	5 mL	5 mL	658524	01/24/24 19:30	KR	EET PEN
Total/NA	Prep	3510C			221.8 mL	1 mL	658257	01/22/24 09:09	SNG	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	658299	01/22/24 17:44	S1B	EET PEN
Total/NA	Prep	3510C			221.8 mL	1 mL	658257	01/22/24 09:09	SNG	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	658308	01/22/24 19:34	S1B	EET PEN
Total/NA	Prep	8011			34.5 mL	35 mL	658293	01/22/24 11:12	PG	EET PEN
Total/NA	Analysis	8011		1			658338	01/22/24 22:12	DS	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-658257/1-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	3510C			250 mL	1 mL	658257	01/22/24 09:08	SNG	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	658299	01/22/24 14:22	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	658257	01/22/24 09:08	SNG	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	658308	01/22/24 17:12	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-249894-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-658293/1-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	658293	01/22/24 11:12	PG	EET PEN
Total/NA	Analysis	8011		1			658338	01/22/24 15:58	DS	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-658368/5
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	8260D		1	5 mL	5 mL	658368	01/23/24 08:48	WPD	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-658371/4
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	8260D		1	5 mL	5 mL	658371	01/23/24 09:10	WPD	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-658524/4
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	8260D		1	5 mL	5 mL	658524	01/24/24 11:49	KR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-658257/15-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	3510C			250 mL	1 mL	658257	01/22/24 09:12	SNG	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	658299	01/22/24 15:30	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-658257/2-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	3510C			250 mL	1 mL	658257	01/22/24 09:08	SNG	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	658299	01/22/24 14:45	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	658257	01/22/24 09:08	SNG	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	658308	01/22/24 17:33	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-249894-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-658293/2-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	658293	01/22/24 11:12	PG	EET PEN
Total/NA	Analysis	8011		1			658338	01/22/24 16:19	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-658368/1002
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	8260D		1	5 mL	5 mL	658368	01/23/24 07:36	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-658371/1002
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	8260D		1	5 mL	5 mL	658371	01/23/24 08:12	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-658524/1002
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	8260D		1	5 mL	5 mL	658524	01/24/24 10:19	KR	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-658257/16-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	3510C			250 mL	1 mL	658257	01/22/24 09:12	SNG	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	658299	01/22/24 15:52	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-658257/3-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	3510C			250 mL	1 mL	658257	01/22/24 09:08	SNG	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	658299	01/22/24 15:07	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	658257	01/22/24 09:08	SNG	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	658308	01/22/24 17:53	S1B	EET PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Job ID: 400-249894-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-658293/3-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	658293	01/22/24 11:12	PG	EET PEN
Total/NA	Analysis	8011		1			658338	01/22/24 16:40	DS	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 658368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249894-1	TB-ROX-011724-8260	Total/NA	Water	8260D	
400-249894-3	MW4-ROX-011724-EB	Total/NA	Water	8260D	
MB 400-658368/5	Method Blank	Total/NA	Water	8260D	
LCS 400-658368/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 658371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249894-4	MW4-ROX-011724	Total/NA	Water	8260D	
400-249894-5	MW14-ROX-011724	Total/NA	Water	8260D	
400-249894-6	MW7-ROX-011724	Total/NA	Water	8260D	
400-249894-7	MW7-ROX-011724-DUP	Total/NA	Water	8260D	
MB 400-658371/4	Method Blank	Total/NA	Water	8260D	
LCS 400-658371/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 658524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249894-6	MW7-ROX-011724	Total/NA	Water	8260D	
400-249894-7	MW7-ROX-011724-DUP	Total/NA	Water	8260D	
MB 400-658524/4	Method Blank	Total/NA	Water	8260D	
LCS 400-658524/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 658257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249894-3	MW4-ROX-011724-EB	Total/NA	Water	3510C	
400-249894-4	MW4-ROX-011724	Total/NA	Water	3510C	
400-249894-5	MW14-ROX-011724	Total/NA	Water	3510C	
400-249894-6	MW7-ROX-011724	Total/NA	Water	3510C	
400-249894-7	MW7-ROX-011724-DUP	Total/NA	Water	3510C	
MB 400-658257/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-658257/15-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-658257/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-658257/16-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-658257/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 658299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249894-3	MW4-ROX-011724-EB	Total/NA	Water	8270E	658257
400-249894-4	MW4-ROX-011724	Total/NA	Water	8270E	658257
400-249894-5	MW14-ROX-011724	Total/NA	Water	8270E	658257
400-249894-6	MW7-ROX-011724	Total/NA	Water	8270E	658257
400-249894-7	MW7-ROX-011724-DUP	Total/NA	Water	8270E	658257
MB 400-658257/1-A	Method Blank	Total/NA	Water	8270E	658257
LCS 400-658257/15-A	Lab Control Sample	Total/NA	Water	8270E	658257
LCS 400-658257/2-A	Lab Control Sample	Total/NA	Water	8270E	658257
LCSD 400-658257/16-A	Lab Control Sample Dup	Total/NA	Water	8270E	658257
LCSD 400-658257/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	658257

QC Association Summary

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

Job ID: 400-249894-1

GC/MS Semi VOA

Analysis Batch: 658308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249894-3	MW4-ROX-011724-EB	Total/NA	Water	8270E SIM	658257
400-249894-4	MW4-ROX-011724	Total/NA	Water	8270E SIM	658257
400-249894-5	MW14-ROX-011724	Total/NA	Water	8270E SIM	658257
400-249894-6	MW7-ROX-011724	Total/NA	Water	8270E SIM	658257
400-249894-7	MW7-ROX-011724-DUP	Total/NA	Water	8270E SIM	658257
MB 400-658257/1-A	Method Blank	Total/NA	Water	8270E SIM	658257
LCS 400-658257/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	658257
LCSD 400-658257/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	658257

GC Semi VOA

Prep Batch: 658293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249894-2	TB-ROX-011724-8011	Total/NA	Water	8011	
400-249894-3	MW4-ROX-011724-EB	Total/NA	Water	8011	
400-249894-4	MW4-ROX-011724	Total/NA	Water	8011	
400-249894-5	MW14-ROX-011724	Total/NA	Water	8011	
400-249894-6	MW7-ROX-011724	Total/NA	Water	8011	
400-249894-7	MW7-ROX-011724-DUP	Total/NA	Water	8011	
MB 400-658293/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-658293/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-658293/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 658338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249894-2	TB-ROX-011724-8011	Total/NA	Water	8011	658293
400-249894-3	MW4-ROX-011724-EB	Total/NA	Water	8011	658293
400-249894-4	MW4-ROX-011724	Total/NA	Water	8011	658293
400-249894-5	MW14-ROX-011724	Total/NA	Water	8011	658293
400-249894-6	MW7-ROX-011724	Total/NA	Water	8011	658293
400-249894-7	MW7-ROX-011724-DUP	Total/NA	Water	8011	658293
MB 400-658293/1-A	Method Blank	Total/NA	Water	8011	658293
LCS 400-658293/2-A	Lab Control Sample	Total/NA	Water	8011	658293
LCSD 400-658293/3-A	Lab Control Sample Dup	Total/NA	Water	8011	658293

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-658368/5
Matrix: Water
Analysis Batch: 658368

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			01/23/24 08:48	1
Acrolein	ND		20	3.3	ug/L			01/23/24 08:48	1
Acrylonitrile	ND		10	2.8	ug/L			01/23/24 08:48	1
Benzene	ND		1.0	0.50	ug/L			01/23/24 08:48	1
Bromobenzene	ND		1.0	0.54	ug/L			01/23/24 08:48	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/23/24 08:48	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/23/24 08:48	1
Bromoform	ND		5.0	0.25	ug/L			01/23/24 08:48	1
Bromomethane	ND		1.0	0.98	ug/L			01/23/24 08:48	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/23/24 08:48	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/23/24 08:48	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/23/24 08:48	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/23/24 08:48	1
Chloroethane	ND		1.0	0.76	ug/L			01/23/24 08:48	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/23/24 08:48	1
Chloroform	ND		1.0	0.90	ug/L			01/23/24 08:48	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/23/24 08:48	1
Chloromethane	ND		1.0	0.90	ug/L			01/23/24 08:48	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/23/24 08:48	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/23/24 08:48	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/23/24 08:48	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/23/24 08:48	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/23/24 08:48	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/23/24 08:48	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/23/24 08:48	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/23/24 08:48	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/23/24 08:48	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/23/24 08:48	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/23/24 08:48	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/23/24 08:48	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/23/24 08:48	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/23/24 08:48	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/23/24 08:48	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/23/24 08:48	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/23/24 08:48	1
2-Hexanone	ND		25	1.4	ug/L			01/23/24 08:48	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/23/24 08:48	1
Methylene bromide	ND		5.0	0.22	ug/L			01/23/24 08:48	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/23/24 08:48	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/23/24 08:48	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/23/24 08:48	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/23/24 08:48	1
Naphthalene	ND		5.0	3.0	ug/L			01/23/24 08:48	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/23/24 08:48	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/23/24 08:48	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/23/24 08:48	1
o-Xylene	ND		5.0	0.60	ug/L			01/23/24 08:48	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/23/24 08:48	1

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

Lab Sample ID: MB 400-658368/5
Matrix: Water
Analysis Batch: 658368

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			01/23/24 08:48	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/23/24 08:48	1
Styrene	ND		1.0	1.0	ug/L			01/23/24 08:48	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/23/24 08:48	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/23/24 08:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/23/24 08:48	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/23/24 08:48	1
Toluene	ND		1.0	0.90	ug/L			01/23/24 08:48	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/23/24 08:48	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/23/24 08:48	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/23/24 08:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/23/24 08:48	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/23/24 08:48	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/23/24 08:48	1
Trichloroethene	ND		1.0	0.15	ug/L			01/23/24 08:48	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/23/24 08:48	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/23/24 08:48	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/23/24 08:48	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/23/24 08:48	1
Vinyl acetate	ND		25	0.93	ug/L			01/23/24 08:48	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/23/24 08:48	1
Xylenes, Total	ND		10	1.6	ug/L			01/23/24 08:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 130*		*01/23/24 08:48*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*01/23/24 08:48*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*01/23/24 08:48*	*1*

Lab Sample ID: LCS 400-658368/1002
Matrix: Water
Analysis Batch: 658368

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	205		ug/L		102	43 - 160
Acrolein	500	473		ug/L		95	38 - 160
Acrylonitrile	500	483		ug/L		97	64 - 142
Benzene	50.0	51.7		ug/L		103	70 - 130
Bromobenzene	50.0	48.9		ug/L		98	70 - 132
Bromochloromethane	50.0	53.8		ug/L		108	70 - 130
Bromodichloromethane	50.0	57.4		ug/L		115	67 - 133
Bromoform	50.0	59.2		ug/L		118	57 - 140
Bromomethane	50.0	51.1		ug/L		102	10 - 160
2-Butanone (MEK)	200	207		ug/L		103	61 - 145
Carbon disulfide	50.0	46.1		ug/L		92	61 - 137
Carbon tetrachloride	50.0	56.5		ug/L		113	61 - 137
Chlorobenzene	50.0	51.9		ug/L		104	70 - 130
Chloroethane	50.0	48.2		ug/L		96	55 - 141
2-Chloroethyl vinyl ether	50.0	44.7		ug/L		89	10 - 160

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

Lab Sample ID: LCS 400-658368/1002
Matrix: Water
Analysis Batch: 658368

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	51.0		ug/L		102	69 - 130
1-Chlorohexane	50.0	47.3		ug/L		95	69 - 130
Chloromethane	50.0	41.4		ug/L		83	58 - 137
cis-1,2-Dichloroethene	50.0	53.3		ug/L		107	68 - 130
cis-1,3-Dichloropropene	50.0	56.8		ug/L		114	69 - 132
Dibromochloromethane	50.0	56.5		ug/L		113	67 - 135
1,2-Dichlorobenzene	50.0	51.2		ug/L		102	67 - 130
1,3-Dichlorobenzene	50.0	50.4		ug/L		101	70 - 130
1,4-Dichlorobenzene	50.0	52.4		ug/L		105	70 - 130
Dichlorodifluoromethane	50.0	42.1		ug/L		84	41 - 146
1,1-Dichloroethane	50.0	50.3		ug/L		101	70 - 130
1,2-Dichloroethane	50.0	51.8		ug/L		104	69 - 130
1,1-Dichloroethene	50.0	48.7		ug/L		97	63 - 134
1,2-Dichloropropane	50.0	50.6		ug/L		101	70 - 130
1,3-Dichloropropane	50.0	49.2		ug/L		98	70 - 130
2,2-Dichloropropane	50.0	51.2		ug/L		102	52 - 135
1,1-Dichloropropene	50.0	52.0		ug/L		104	70 - 130
Ethylbenzene	50.0	50.4		ug/L		101	70 - 130
Ethyl methacrylate	50.0	50.6		ug/L		101	68 - 130
Hexachlorobutadiene	50.0	52.0		ug/L		104	53 - 140
2-Hexanone	200	186		ug/L		93	65 - 137
Isopropylbenzene	50.0	51.6		ug/L		103	70 - 130
Methylene bromide	50.0	54.3		ug/L		109	70 - 130
Methylene Chloride	50.0	50.8		ug/L		102	66 - 135
4-Methyl-2-pentanone (MIBK)	200	204		ug/L		102	69 - 138
Methyl tert-butyl ether	50.0	52.4		ug/L		105	66 - 130
m-Xylene & p-Xylene	50.0	51.3		ug/L		103	70 - 130
Naphthalene	50.0	47.9		ug/L		96	47 - 149
n-Butylbenzene	50.0	48.8		ug/L		98	67 - 130
N-Propylbenzene	50.0	49.4		ug/L		99	70 - 130
o-Chlorotoluene	50.0	47.9		ug/L		96	70 - 130
o-Xylene	50.0	51.4		ug/L		103	70 - 130
p-Chlorotoluene	50.0	47.5		ug/L		95	70 - 130
p-Isopropyltoluene	50.0	50.1		ug/L		100	65 - 130
sec-Butylbenzene	50.0	51.0		ug/L		102	66 - 130
Styrene	50.0	50.5		ug/L		101	70 - 130
tert-Butylbenzene	50.0	48.2		ug/L		96	64 - 139
1,1,1,2-Tetrachloroethane	50.0	55.5		ug/L		111	67 - 131
1,1,2,2-Tetrachloroethane	50.0	46.8		ug/L		94	70 - 131
Tetrachloroethene	50.0	51.6		ug/L		103	65 - 130
Toluene	50.0	50.3		ug/L		101	70 - 130
trans-1,2-Dichloroethene	50.0	49.9		ug/L		100	70 - 130
trans-1,3-Dichloropropene	50.0	52.3		ug/L		105	63 - 130
1,2,3-Trichlorobenzene	50.0	48.9		ug/L		98	60 - 138
1,2,4-Trichlorobenzene	50.0	50.7		ug/L		101	60 - 140
1,1,1-Trichloroethane	50.0	53.4		ug/L		107	68 - 130
1,1,2-Trichloroethane	50.0	50.5		ug/L		101	70 - 130
Trichloroethene	50.0	56.1		ug/L		112	70 - 130
Trichlorofluoromethane	50.0	45.1		ug/L		90	65 - 138

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

Lab Sample ID: LCS 400-658368/1002
Matrix: Water
Analysis Batch: 658368

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	50.2		ug/L		100	70 - 130
1,2,4-Trimethylbenzene	50.0	48.6		ug/L		97	70 - 130
1,3,5-Trimethylbenzene	50.0	49.1		ug/L		98	69 - 130
Vinyl acetate	100	102		ug/L		102	26 - 160
Vinyl chloride	50.0	44.9		ug/L		90	59 - 136
Xylenes, Total	100	103		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*72 - 130*
Dibromofluoromethane	*102*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Lab Sample ID: MB 400-658371/4
Matrix: Water
Analysis Batch: 658371

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			01/23/24 09:10	1
Acrolein	ND		20	3.3	ug/L			01/23/24 09:10	1
Acrylonitrile	ND		10	2.8	ug/L			01/23/24 09:10	1
Benzene	ND		1.0	0.50	ug/L			01/23/24 09:10	1
Bromobenzene	ND		1.0	0.54	ug/L			01/23/24 09:10	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/23/24 09:10	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/23/24 09:10	1
Bromoform	ND		5.0	0.25	ug/L			01/23/24 09:10	1
Bromomethane	ND		1.0	0.98	ug/L			01/23/24 09:10	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/23/24 09:10	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/23/24 09:10	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/23/24 09:10	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/23/24 09:10	1
Chloroethane	ND		1.0	0.76	ug/L			01/23/24 09:10	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/23/24 09:10	1
Chloroform	ND		1.0	0.90	ug/L			01/23/24 09:10	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/23/24 09:10	1
Chloromethane	ND		1.0	0.90	ug/L			01/23/24 09:10	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/23/24 09:10	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/23/24 09:10	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/23/24 09:10	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/23/24 09:10	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/23/24 09:10	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/23/24 09:10	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/23/24 09:10	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/23/24 09:10	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/23/24 09:10	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/23/24 09:10	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/23/24 09:10	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/23/24 09:10	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/23/24 09:10	1

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

Lab Sample ID: MB 400-658371/4
Matrix: Water
Analysis Batch: 658371

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			01/23/24 09:10	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/23/24 09:10	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/23/24 09:10	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/23/24 09:10	1
2-Hexanone	ND		25	1.4	ug/L			01/23/24 09:10	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/23/24 09:10	1
Methylene bromide	ND		5.0	0.22	ug/L			01/23/24 09:10	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/23/24 09:10	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/23/24 09:10	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/23/24 09:10	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/23/24 09:10	1
Naphthalene	ND		5.0	3.0	ug/L			01/23/24 09:10	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/23/24 09:10	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/23/24 09:10	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/23/24 09:10	1
o-Xylene	ND		5.0	0.60	ug/L			01/23/24 09:10	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/23/24 09:10	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/23/24 09:10	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/23/24 09:10	1
Styrene	ND		1.0	1.0	ug/L			01/23/24 09:10	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/23/24 09:10	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/23/24 09:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/23/24 09:10	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/23/24 09:10	1
Toluene	ND		1.0	0.90	ug/L			01/23/24 09:10	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/23/24 09:10	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/23/24 09:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/23/24 09:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/23/24 09:10	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/23/24 09:10	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/23/24 09:10	1
Trichloroethene	ND		1.0	0.15	ug/L			01/23/24 09:10	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/23/24 09:10	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/23/24 09:10	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/23/24 09:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/23/24 09:10	1
Vinyl acetate	ND		25	0.93	ug/L			01/23/24 09:10	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/23/24 09:10	1
Xylenes, Total	ND		10	1.6	ug/L			01/23/24 09:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 130*		*01/23/24 09:10*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*01/23/24 09:10*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*01/23/24 09:10*	*1*

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

Lab Sample ID: LCS 400-658371/1002
Matrix: Water
Analysis Batch: 658371

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	127		ug/L		63	43 - 160
Acrolein	500	425		ug/L		85	38 - 160
Acrylonitrile	500	387		ug/L		77	64 - 142
Benzene	50.0	45.5		ug/L		91	70 - 130
Bromobenzene	50.0	47.4		ug/L		95	70 - 132
Bromochloromethane	50.0	44.1		ug/L		88	70 - 130
Bromodichloromethane	50.0	44.9		ug/L		90	67 - 133
Bromoform	50.0	48.9		ug/L		98	57 - 140
Bromomethane	50.0	31.0		ug/L		62	10 - 160
2-Butanone (MEK)	200	151		ug/L		75	61 - 145
Carbon disulfide	50.0	41.3		ug/L		83	61 - 137
Carbon tetrachloride	50.0	44.5		ug/L		89	61 - 137
Chlorobenzene	50.0	44.9		ug/L		90	70 - 130
Chloroethane	50.0	32.6		ug/L		65	55 - 141
2-Chloroethyl vinyl ether	50.0	46.7		ug/L		93	10 - 160
Chloroform	50.0	44.2		ug/L		88	69 - 130
1-Chlorohexane	50.0	44.1		ug/L		88	69 - 130
Chloromethane	50.0	44.4		ug/L		89	58 - 137
cis-1,2-Dichloroethene	50.0	58.0		ug/L		116	68 - 130
cis-1,3-Dichloropropene	50.0	45.6		ug/L		91	69 - 132
Dibromochloromethane	50.0	47.8		ug/L		96	67 - 135
1,2-Dichlorobenzene	50.0	45.1		ug/L		90	67 - 130
1,3-Dichlorobenzene	50.0	45.8		ug/L		92	70 - 130
1,4-Dichlorobenzene	50.0	45.6		ug/L		91	70 - 130
Dichlorodifluoromethane	50.0	42.0		ug/L		84	41 - 146
1,1-Dichloroethane	50.0	47.2		ug/L		94	70 - 130
1,2-Dichloroethane	50.0	42.9		ug/L		86	69 - 130
1,1-Dichloroethene	50.0	40.2		ug/L		80	63 - 134
1,2-Dichloropropane	50.0	45.4		ug/L		91	70 - 130
1,3-Dichloropropane	50.0	46.9		ug/L		94	70 - 130
2,2-Dichloropropane	50.0	44.4		ug/L		89	52 - 135
1,1-Dichloropropene	50.0	45.3		ug/L		91	70 - 130
Ethylbenzene	50.0	44.0		ug/L		88	70 - 130
Ethyl methacrylate	50.0	44.9		ug/L		90	68 - 130
Hexachlorobutadiene	50.0	46.2		ug/L		92	53 - 140
2-Hexanone	200	165		ug/L		82	65 - 137
Isopropylbenzene	50.0	43.6		ug/L		87	70 - 130
Methylene bromide	50.0	43.1		ug/L		86	70 - 130
Methylene Chloride	50.0	39.6		ug/L		79	66 - 135
4-Methyl-2-pentanone (MIBK)	200	160		ug/L		80	69 - 138
Methyl tert-butyl ether	50.0	46.3		ug/L		93	66 - 130
m-Xylene & p-Xylene	50.0	42.6		ug/L		85	70 - 130
Naphthalene	50.0	47.4		ug/L		95	47 - 149
n-Butylbenzene	50.0	42.8		ug/L		86	67 - 130
N-Propylbenzene	50.0	45.9		ug/L		92	70 - 130
o-Chlorotoluene	50.0	45.9		ug/L		92	70 - 130
o-Xylene	50.0	44.0		ug/L		88	70 - 130
p-Chlorotoluene	50.0	45.1		ug/L		90	70 - 130

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

Lab Sample ID: LCS 400-658371/1002
Matrix: Water
Analysis Batch: 658371

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	46.1		ug/L		92	65 - 130
sec-Butylbenzene	50.0	46.3		ug/L		93	66 - 130
Styrene	50.0	44.3		ug/L		89	70 - 130
tert-Butylbenzene	50.0	44.9		ug/L		90	64 - 139
1,1,1,2-Tetrachloroethane	50.0	45.8		ug/L		92	67 - 131
1,1,2,2-Tetrachloroethane	50.0	45.7		ug/L		91	70 - 131
Tetrachloroethene	50.0	47.0		ug/L		94	65 - 130
Toluene	50.0	45.3		ug/L		91	70 - 130
trans-1,2-Dichloroethene	50.0	46.0		ug/L		92	70 - 130
trans-1,3-Dichloropropene	50.0	48.3		ug/L		97	63 - 130
1,2,3-Trichlorobenzene	50.0	48.5		ug/L		97	60 - 138
1,2,4-Trichlorobenzene	50.0	48.8		ug/L		98	60 - 140
1,1,1-Trichloroethane	50.0	44.0		ug/L		88	68 - 130
1,1,2-Trichloroethane	50.0	47.7		ug/L		95	70 - 130
Trichloroethene	50.0	45.5		ug/L		91	70 - 130
Trichlorofluoromethane	50.0	40.0		ug/L		80	65 - 138
1,2,3-Trichloropropane	50.0	45.3		ug/L		91	70 - 130
1,2,4-Trimethylbenzene	50.0	45.5		ug/L		91	70 - 130
1,3,5-Trimethylbenzene	50.0	46.0		ug/L		92	69 - 130
Vinyl acetate	100	93.3		ug/L		93	26 - 160
Vinyl chloride	50.0	44.7		ug/L		89	59 - 136
Xylenes, Total	100	86.7		ug/L		87	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*72 - 130*
Dibromofluoromethane	*102*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

Lab Sample ID: MB 400-658524/4
Matrix: Water
Analysis Batch: 658524

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.50	ug/L			01/24/24 11:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*01/24/24 11:49*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*01/24/24 11:49*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*01/24/24 11:49*	*1*

Lab Sample ID: LCS 400-658524/1002
Matrix: Water
Analysis Batch: 658524

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	50.0	49.9		ug/L		100	70 - 130

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

Lab Sample ID: LCS 400-658524/1002
Matrix: Water
Analysis Batch: 658524

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	*102*		*72 - 130*
Dibromofluoromethane	*101*		*75 - 126*
Toluene-d8 (Surr)	*107*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-658257/1-A
Matrix: Water
Analysis Batch: 658299

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 658257

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		01/22/24 09:08	01/22/24 14:22	1
Benzenethiol	ND		10	9.9	ug/L		01/22/24 09:08	01/22/24 14:22	1
Benzoic acid	ND		30	24	ug/L		01/22/24 09:08	01/22/24 14:22	1
Benzyl alcohol	ND		10	7.3	ug/L		01/22/24 09:08	01/22/24 14:22	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		01/22/24 09:08	01/22/24 14:22	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		01/22/24 09:08	01/22/24 14:22	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		01/22/24 09:08	01/22/24 14:22	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		01/22/24 09:08	01/22/24 14:22	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		01/22/24 09:08	01/22/24 14:22	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		01/22/24 09:08	01/22/24 14:22	1
4-Chloroaniline	ND		10	4.7	ug/L		01/22/24 09:08	01/22/24 14:22	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		01/22/24 09:08	01/22/24 14:22	1
2-Chloronaphthalene	ND		10	3.8	ug/L		01/22/24 09:08	01/22/24 14:22	1
2-Chlorophenol	ND		10	4.1	ug/L		01/22/24 09:08	01/22/24 14:22	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		01/22/24 09:08	01/22/24 14:22	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		01/22/24 09:08	01/22/24 14:22	1
Dibenzofuran	ND		10	4.0	ug/L		01/22/24 09:08	01/22/24 14:22	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/22/24 09:08	01/22/24 14:22	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		01/22/24 09:08	01/22/24 14:22	1
Diethyl phthalate	ND		10	4.4	ug/L		01/22/24 09:08	01/22/24 14:22	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		01/22/24 09:08	01/22/24 14:22	1
Dimethyl phthalate	ND		10	4.2	ug/L		01/22/24 09:08	01/22/24 14:22	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		01/22/24 09:08	01/22/24 14:22	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/22/24 09:08	01/22/24 14:22	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		01/22/24 09:08	01/22/24 14:22	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		01/22/24 09:08	01/22/24 14:22	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		01/22/24 09:08	01/22/24 14:22	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		01/22/24 09:08	01/22/24 14:22	1
1,4-Dioxane	ND		10	4.3	ug/L		01/22/24 09:08	01/22/24 14:22	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		01/22/24 09:08	01/22/24 14:22	1
Hexachlorobenzene	ND		10	9.7	ug/L		01/22/24 09:08	01/22/24 14:22	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		01/22/24 09:08	01/22/24 14:22	1
Hexachloroethane	ND		10	5.2	ug/L		01/22/24 09:08	01/22/24 14:22	1
Indene	ND		10	3.6	ug/L		01/22/24 09:08	01/22/24 14:22	1
Isophorone	ND		10	5.2	ug/L		01/22/24 09:08	01/22/24 14:22	1
2-Methylphenol	ND		10	3.2	ug/L		01/22/24 09:08	01/22/24 14:22	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		01/22/24 09:08	01/22/24 14:22	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-658257/1-A
Matrix: Water
Analysis Batch: 658299

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 658257

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	5.0	ug/L		01/22/24 09:08	01/22/24 14:22	1
3-Nitroaniline	ND		10	4.7	ug/L		01/22/24 09:08	01/22/24 14:22	1
4-Nitroaniline	ND		10	4.1	ug/L		01/22/24 09:08	01/22/24 14:22	1
Nitrobenzene	ND		10	4.7	ug/L		01/22/24 09:08	01/22/24 14:22	1
2-Nitrophenol	ND		10	4.6	ug/L		01/22/24 09:08	01/22/24 14:22	1
4-Nitrophenol	ND		10	3.3	ug/L		01/22/24 09:08	01/22/24 14:22	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		01/22/24 09:08	01/22/24 14:22	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		01/22/24 09:08	01/22/24 14:22	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		01/22/24 09:08	01/22/24 14:22	1
Pentachlorophenol	ND		20	12	ug/L		01/22/24 09:08	01/22/24 14:22	1
Phenol	ND		10	4.2	ug/L		01/22/24 09:08	01/22/24 14:22	1
Pyridine	ND		10	10	ug/L		01/22/24 09:08	01/22/24 14:22	1
Quinoline	ND		10	2.4	ug/L		01/22/24 09:08	01/22/24 14:22	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		01/22/24 09:08	01/22/24 14:22	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/22/24 09:08	01/22/24 14:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*21 - 114*	*01/22/24 09:08*	*01/22/24 14:22*	*1*
2-Fluorophenol	*58*		*10 - 105*	*01/22/24 09:08*	*01/22/24 14:22*	*1*
Nitrobenzene-d5	*66*		*16 - 127*	*01/22/24 09:08*	*01/22/24 14:22*	*1*
Phenol-d5	*45*		*10 - 129*	*01/22/24 09:08*	*01/22/24 14:22*	*1*
Terphenyl-d14	*86*		*13 - 150*	*01/22/24 09:08*	*01/22/24 14:22*	*1*
2,4,6-Tribromophenol	*58*		*10 - 150*	*01/22/24 09:08*	*01/22/24 14:22*	*1*

Lab Sample ID: LCS 400-658257/15-A
Matrix: Water
Analysis Batch: 658299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 658257

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	119		ug/L		99	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*71*		*21 - 114*
2-Fluorophenol	*63*		*10 - 105*
Nitrobenzene-d5	*67*		*16 - 127*
Phenol-d5	*53*		*10 - 129*
Terphenyl-d14	*92*		*13 - 150*
2,4,6-Tribromophenol	*63*		*10 - 150*

Lab Sample ID: LCS 400-658257/2-A
Matrix: Water
Analysis Batch: 658299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 658257

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	69.8		ug/L		58	10 - 127
Benzoic acid	485	108		ug/L		22	19 - 126
Benzyl alcohol	120	89.6		ug/L		75	17 - 109
Bis(2-chloroethoxy)methane	120	82.0		ug/L		68	24 - 125

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-658257/2-A
Matrix: Water
Analysis Batch: 658299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 658257

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-chloroethyl)ether	120	98.6		ug/L		82	10 - 121
bis (2-chloroisopropyl) ether	120	92.9		ug/L		77	14 - 123
Bis(2-ethylhexyl) phthalate	120	103		ug/L		86	16 - 150
4-Bromophenyl phenyl ether	120	102		ug/L		85	17 - 150
Butyl benzyl phthalate	120	103		ug/L		86	21 - 150
4-Chloroaniline	120	80.0		ug/L		67	10 - 124
4-Chloro-3-methylphenol	120	96.1		ug/L		80	37 - 131
2-Chloronaphthalene	120	96.8		ug/L		81	24 - 132
2-Chlorophenol	120	94.7		ug/L		79	27 - 124
4-Chlorophenyl phenyl ether	120	108		ug/L		90	27 - 147
Dibenz[a,h]acridine	114	85.1		ug/L		75	40 - 140
Dibenzofuran	120	105		ug/L		88	30 - 135
3,3'-Dichlorobenzidine	160	148		ug/L		93	10 - 150
2,4-Dichlorophenol	120	90.1		ug/L		75	33 - 132
Diethyl phthalate	120	110		ug/L		91	37 - 145
2,4-Dimethylphenol	120	112		ug/L		93	38 - 132
Dimethyl phthalate	120	100		ug/L		84	32 - 137
Di-n-butyl phthalate	120	113		ug/L		94	27 - 150
4,6-Dinitro-ortho-cresol	240	170		ug/L		71	14 - 150
2,4-Dinitrophenol	240	152		ug/L		63	15 - 150
2,4-Dinitrotoluene	120	104		ug/L		86	35 - 136
2,6-Dinitrotoluene	120	97.7		ug/L		81	29 - 140
Di-n-octyl phthalate	120	108		ug/L		90	26 - 150
1,4-Dioxane	120	51.2		ug/L		43	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	94.2		ug/L		78	23 - 138
Hexachlorobenzene	120	120		ug/L		100	10 - 150
Hexachlorocyclopentadiene	120	60.8		ug/L		51	10 - 124
Hexachloroethane	120	72.6		ug/L		61	10 - 127
Indene	120	101		ug/L		84	18 - 150
Isophorone	120	85.9		ug/L		72	28 - 127
2-Methylphenol	120	95.0		ug/L		79	34 - 124
3 & 4 Methylphenol	120	93.8		ug/L		78	32 - 122
2-Nitroaniline	120	95.1		ug/L		79	24 - 139
3-Nitroaniline	120	99.0		ug/L		83	10 - 128
4-Nitroaniline	120	100		ug/L		84	28 - 118
Nitrobenzene	120	77.6		ug/L		65	29 - 120
2-Nitrophenol	120	78.4		ug/L		65	25 - 148
4-Nitrophenol	240	152		ug/L		63	12 - 129
N-Nitrosodimethylamine	120	77.5		ug/L		65	10 - 115
N-Nitrosodi-n-propylamine	120	97.6		ug/L		81	24 - 142
N-Nitrosodiphenylamine	119	100		ug/L		84	29 - 138
Pentachlorophenol	240	152		ug/L		63	19 - 150
Phenol	120	79.1		ug/L		66	11 - 95
Pyridine	240	86.7		ug/L		36	10 - 82
Quinoline	114	92.6		ug/L		81	40 - 140
2,4,5-Trichlorophenol	120	103		ug/L		86	30 - 144
2,4,6-Trichlorophenol	120	103		ug/L		86	27 - 147

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-658257/2-A
Matrix: Water
Analysis Batch: 658299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 658257

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	84		21 - 114
2-Fluorophenol	67		10 - 105
Nitrobenzene-d5	72		16 - 127
Phenol-d5	60		10 - 129
Terphenyl-d14	97		13 - 150
2,4,6-Tribromophenol	82		10 - 150

Lab Sample ID: LCSD 400-658257/16-A
Matrix: Water
Analysis Batch: 658299

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 658257

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol	120	126		ug/L		105	40 - 140	6	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	72		21 - 114
2-Fluorophenol	59		10 - 105
Nitrobenzene-d5	67		16 - 127
Phenol-d5	48		10 - 129
Terphenyl-d14	96		13 - 150
2,4,6-Tribromophenol	61		10 - 150

Lab Sample ID: LCSD 400-658257/3-A
Matrix: Water
Analysis Batch: 658299

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 658257

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	120	62.5		ug/L		52	10 - 127	11	40
Benzoic acid	485	110		ug/L		23	19 - 126	2	40
Benzyl alcohol	120	85.0		ug/L		71	17 - 109	5	40
Bis(2-chloroethoxy)methane	120	77.6		ug/L		65	24 - 125	6	40
Bis(2-chloroethyl)ether	120	86.1		ug/L		72	10 - 121	14	40
bis (2-chloroisopropyl) ether	120	85.5		ug/L		71	14 - 123	8	40
Bis(2-ethylhexyl) phthalate	120	99.4		ug/L		83	16 - 150	4	40
4-Bromophenyl phenyl ether	120	95.3		ug/L		79	17 - 150	7	40
Butyl benzyl phthalate	120	97.9		ug/L		82	21 - 150	5	40
4-Chloroaniline	120	74.9		ug/L		62	10 - 124	7	40
4-Chloro-3-methylphenol	120	88.8		ug/L		74	37 - 131	8	40
2-Chloronaphthalene	120	88.7		ug/L		74	24 - 132	9	40
2-Chlorophenol	120	85.3		ug/L		71	27 - 124	10	40
4-Chlorophenyl phenyl ether	120	103		ug/L		86	27 - 147	5	40
Dibenz[a,h]acridine	114	116		ug/L		102	40 - 140	31	40
Dibenzofuran	120	101		ug/L		84	30 - 135	4	40
3,3'-Dichlorobenzidine	160	147		ug/L		92	10 - 150	1	40
2,4-Dichlorophenol	120	86.6		ug/L		72	33 - 132	4	40
Diethyl phthalate	120	107		ug/L		89	37 - 145	2	40
2,4-Dimethylphenol	120	106		ug/L		88	38 - 132	5	40
Dimethyl phthalate	120	97.9		ug/L		82	32 - 137	3	40

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-658257/3-A
Matrix: Water
Analysis Batch: 658299

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 658257

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Di-n-butyl phthalate			120	109		ug/L		91	27 - 150	3	40
4,6-Dinitro-ortho-cresol			240	187		ug/L		78	14 - 150	10	40
2,4-Dinitrophenol			240	175		ug/L		73	15 - 150	14	40
2,4-Dinitrotoluene			120	104		ug/L		87	35 - 136	0	40
2,6-Dinitrotoluene			120	96.4		ug/L		80	29 - 140	1	40
Di-n-octyl phthalate			120	107		ug/L		89	26 - 150	1	40
1,4-Dioxane			120	50.1		ug/L		42	10 - 87	2	40
1,2-Diphenylhydrazine (as Azobenzene)			120	87.9		ug/L		73	23 - 138	7	40
Hexachlorobenzene			120	113		ug/L		94	10 - 150	6	40
Hexachlorocyclopentadiene			120	66.6		ug/L		56	10 - 124	9	40
Hexachloroethane			120	70.0		ug/L		58	10 - 127	4	40
Indene			120	93.1		ug/L		78	18 - 150	8	40
Isophorone			120	80.0		ug/L		67	28 - 127	7	40
2-Methylphenol			120	88.9		ug/L		74	34 - 124	7	40
3 & 4 Methylphenol			120	85.4		ug/L		71	32 - 122	9	40
2-Nitroaniline			120	93.6		ug/L		78	24 - 139	2	40
3-Nitroaniline			120	94.6		ug/L		79	10 - 128	5	40
4-Nitroaniline			120	104		ug/L		87	28 - 118	4	40
Nitrobenzene			120	73.1		ug/L		61	29 - 120	6	40
2-Nitrophenol			120	77.4		ug/L		65	25 - 148	1	40
4-Nitrophenol			240	159		ug/L		66	12 - 129	5	40
N-Nitrosodimethylamine			120	68.1		ug/L		57	10 - 115	13	40
N-Nitrosodi-n-propylamine			120	88.1		ug/L		73	24 - 142	10	40
N-Nitrosodiphenylamine			119	94.7		ug/L		80	29 - 138	6	40
Pentachlorophenol			240	164		ug/L		68	19 - 150	8	40
Phenol			120	72.4		ug/L		60	11 - 95	9	40
Pyridine			240	71.6		ug/L		30	10 - 82	19	40
Quinoline			114	83.4		ug/L		73	40 - 140	10	40
2,4,5-Trichlorophenol			120	103		ug/L		86	30 - 144	0	40
2,4,6-Trichlorophenol			120	98.4		ug/L		82	27 - 147	5	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*21 - 114*
2-Fluorophenol	*59*		*10 - 105*
Nitrobenzene-d5	*69*		*16 - 127*
Phenol-d5	*54*		*10 - 129*
Terphenyl-d14	*93*		*13 - 150*
2,4,6-Tribromophenol	*81*		*10 - 150*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-658257/1-A
Matrix: Water
Analysis Batch: 658308

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 658257

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		01/22/24 09:08	01/22/24 17:12	1
Acenaphthylene	ND		0.20	0.044	ug/L		01/22/24 09:08	01/22/24 17:12	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 400-658257/1-A
Matrix: Water
Analysis Batch: 658308

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 658257

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		0.20	0.047	ug/L		01/22/24 09:08	01/22/24 17:12	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		01/22/24 09:08	01/22/24 17:12	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		01/22/24 09:08	01/22/24 17:12	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		01/22/24 09:08	01/22/24 17:12	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/22/24 09:08	01/22/24 17:12	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		01/22/24 09:08	01/22/24 17:12	1
Chrysene	ND		0.20	0.033	ug/L		01/22/24 09:08	01/22/24 17:12	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		01/22/24 09:08	01/22/24 17:12	1
Fluoranthene	ND		0.20	0.034	ug/L		01/22/24 09:08	01/22/24 17:12	1
Fluorene	ND		0.20	0.089	ug/L		01/22/24 09:08	01/22/24 17:12	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		01/22/24 09:08	01/22/24 17:12	1
Phenanthrene	ND		0.20	0.090	ug/L		01/22/24 09:08	01/22/24 17:12	1
Pyrene	ND		0.20	0.039	ug/L		01/22/24 09:08	01/22/24 17:12	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		01/22/24 09:08	01/22/24 17:12	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		01/22/24 09:08	01/22/24 17:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*162*	*S1+*	*18 - 147*	*01/22/24 09:08*	*01/22/24 17:12*	*1*
2-Fluorobiphenyl	*81*		*15 - 128*	*01/22/24 09:08*	*01/22/24 17:12*	*1*
Nitrobenzene-d5	*88*		*10 - 144*	*01/22/24 09:08*	*01/22/24 17:12*	*1*

Lab Sample ID: LCS 400-658257/2-A
Matrix: Water
Analysis Batch: 658308

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 658257

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	119		ug/L		99	40 - 140
Acenaphthylene	120	120		ug/L		100	40 - 140
Anthracene	120	123		ug/L		102	40 - 140
Benzo[a]anthracene	120	120		ug/L		100	40 - 140
Benzo[a]pyrene	120	119		ug/L		99	40 - 140
Benzo[b]fluoranthene	120	152		ug/L		127	40 - 140
Benzo[g,h,i]perylene	120	104		ug/L		86	40 - 140
Benzo[k]fluoranthene	120	144		ug/L		120	40 - 140
Chrysene	120	126		ug/L		105	40 - 140
Dibenz(a,h)anthracene	120	100		ug/L		83	40 - 140
Fluoranthene	120	112		ug/L		93	40 - 140
Fluorene	120	118		ug/L		98	40 - 140
Indeno[1,2,3-cd]pyrene	120	106		ug/L		88	40 - 140
Phenanthrene	120	124		ug/L		104	40 - 140
Pyrene	120	148		ug/L		123	40 - 140
1-Methylnaphthalene	120	122		ug/L		102	40 - 140
2-Methylnaphthalene	120	123		ug/L		103	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*114*		*18 - 147*
2-Fluorobiphenyl	*98*		*15 - 128*
Nitrobenzene-d5	*107*		*10 - 144*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: LCSD 400-658257/3-A
Matrix: Water
Analysis Batch: 658308

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 658257

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	119		ug/L		99	40 - 140	0	40
Acenaphthylene			120	119		ug/L		99	40 - 140	1	40
Anthracene			120	123		ug/L		103	40 - 140	0	40
Benzo[a]anthracene			120	119		ug/L		99	40 - 140	0	40
Benzo[a]pyrene			120	135		ug/L		113	40 - 140	12	40
Benzo[b]fluoranthene			120	166		ug/L		139	40 - 140	9	40
Benzo[g,h,i]perylene			120	111		ug/L		92	40 - 140	6	40
Benzo[k]fluoranthene			120	161		ug/L		134	40 - 140	11	40
Chrysene			120	128		ug/L		107	40 - 140	1	40
Dibenz(a,h)anthracene			120	105		ug/L		87	40 - 140	5	40
Fluoranthene			120	114		ug/L		95	40 - 140	2	40
Fluorene			120	118		ug/L		98	40 - 140	0	40
Indeno[1,2,3-cd]pyrene			120	112		ug/L		94	40 - 140	6	40
Phenanthrene			120	127		ug/L		106	40 - 140	2	40
Pyrene			120	151		ug/L		126	40 - 140	2	40
1-Methylnaphthalene			120	95.9		ug/L		80	40 - 140	24	40
2-Methylnaphthalene			120	97.0		ug/L		81	40 - 140	24	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*113*		*18 - 147*
2-Fluorobiphenyl	*97*		*15 - 128*
Nitrobenzene-d5	*83*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-658293/1-A
Matrix: Water
Analysis Batch: 658338

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 658293

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		01/22/24 11:12	01/22/24 15:58	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/22/24 11:12	01/22/24 15:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*51 - 149*	*01/22/24 11:12*	*01/22/24 15:58*	*1*

Lab Sample ID: LCS 400-658293/2-A
Matrix: Water
Analysis Batch: 658338

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 658293

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0930		ug/L		92	60 - 140		
1,2-Dibromoethane			0.100	0.0829		ug/L		83	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*71*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-658293/3-A
Matrix: Water
Analysis Batch: 658338

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 658293

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.104		ug/L		103	60 - 140	11	30
1,2-Dibromoethane			0.100	0.101		ug/L		101	60 - 140	20	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*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
Melissa Remiger	25278	DATE: 1/17/2024
PO #	**GSAP Project ID**	PAGE: 1 of 1
60721927 3.1.2	USPC/00114/R/02	

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS: Street and City	State	AECOM Project / Task Number:
AECOM		900 South Central Ave; ROXANA	IL	Roxana Quarterly GW 60721927 3.1.2

ADDRESS:	EDF DELIVERABLE TO (Name, Company, Office Location):	PHONE NO.:	E-MAIL:	AECOM Other ID:
100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA	Melissa Remiger - please see special instructions	314-802-1207	melissa.remiger@aecom.com	

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

SAMPLER NAME(S) (Print): C. McDavid, M. Massa

LAB USE ONLY

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

* Please include "J" values on Reports.
* Please provide sample receipt upon login.
* Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 3.1.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°: 0.0 IR8

Container PID Readings or Laboratory Notes:

400-249894 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 8270 SIMS
	TB-ROX-011724-8260	1/17/2024	0000	Water	2					2	X			
	TB-ROX-011724-8011	1/17/2024	0000	Water	2					2		X		
	MW4-ROX-011724-EB	1/17/2024	0935	Water	6			2		8	X	X	X	X
	MW4-ROX-011724	1/17/2024	1055	Water	6			2		8	X	X	X	X
	MW25-ROX-011724	1/17/2024	1305	Water	6			2		8	X	X	X	X
	MW7-ROX-011724	1/17/2024	1420	Water	6			2		8	X	X	X	X
	MW7-ROX-011724-DUP	1/17/2024	1420	Water	6			2		8	X	X	X	X

1-17-24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 6339 6598 2656	1/17/2024	1600
		1.20.24	11:07

Version: 27Sept23

CUSTODY SEALS: 1599826, 1599827

Page 57 of 62

1/26/2024

Leah Klingensmith

From: Massa, Mary <Mary.Massa@aecom.com>
Sent: Monday, January 22, 2024 8:47 AM
To: Leah Klingensmith; Howell, Brett; Remiger, Melissa
Subject: RE: ***Please Note***400-249894-1 ROXANA QUARTERLY GW Sample Confirmation files from Eurofins Southeast
Attachments: 1Q24 Roxana GW COC_011724.pdf

CAUTION: EXTERNAL EMAIL - Sent from an email domain that is not formally trusted by Eurofins.

Do not click on links or open attachments unless you recognise the sender and are certain that the content is safe.

My apologies Leah, MW-14 is the correct ID for the sample collected 1/17. It originally would've been MW-25 had that well not been encased in ice at the time, hence the mix-up.

I've attached the corrected COC.

Thanks so much,
Mary Massa *(D'Angelo)*, RG *(MO)*

Geologist, US West Environment
M +1 (314) 795-7580
mary.massa@aecom.com

AECOM
100 N. Broadway
20th Floor
St. Louis, MO, 63102, US
T +1 (314) 429-0100
aecom.com

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From: Leah Klingensmith <Leah.Klingensmith@et.eurofinsus.com>
Sent: Monday, January 22, 2024 7:16 AM
To: Howell, Brett <brett.howell@aecom.com>; Massa, Mary <Mary.Massa@aecom.com>; Remiger, Melissa <melissa.remiger@aecom.com>
Subject: ***Please Note***400-249894-1 ROXANA QUARTERLY GW Sample Confirmation files from Eurofins Southeast

Hello,

On the COC , MW25 is listed however the labels list MW14 as the ID. Which is correct?
Attached, please find the Sample Confirmation files for job 400-249894-1; ROXANA QUARTERLY GW

Please feel free to contact me if you have any questions.

Thank you.

Leah Klingensmith
Project Manager

Eurofins Pensacola
Phone: 615-301-5038

E-mail: Leah.Klingensmith@et.eurofinsus.com
www.eurofinsus.com/env



Reference: [400-746075]
Attachments: 4

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- [ ] ACCUTEST (_____)
- [ ] CALSCIENCE (_____)
- [x] 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
- [x] OTHER _ENV. SERVICES_____

Print Bill To Contact Name:	PlaNet Site or Project ID	[ ] CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 1/17/2024
PO #	**GSAP Project ID**	PAGE: 1 of 1
60721927 3.1.2	USPC/00114/R/02	

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS: Street and City	State	AECOM Project / Task Number:
AECOM		900 South Central Ave; ROXANA	IL	Roxana Quarterly GW 60721927 3.1.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO.: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

SAMPLER NAME(S) (Print): C. McDavid, M. Massa

LAB USE ONLY

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS):
- [x] STANDARD (14 DAY)
- [ ] 5 DAYS
- [ ] 3 DAYS
- [ ] 2 DAYS
- [ ] 24 HOURS
- [ ] RESULTS NEEDED ON WEEKEND

- [ ] LA - RWQCB REPORT FORMAT

DELIVERABLES:
- [ ] LEVEL 1
- [x] LEVEL 2
- [ ] LEVEL 3
- [x] LEVEL 4
- [x] OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

* Please include "J" values on Reports.
* Please provide sample receipt upon login.
* Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

- [x] SHELL CONTRACT RATE APPLIES
- [ ] STATE REIMBURSEMENT RATE APPLIES
- [ ] EDD NOT NEEDED
- [x] RECEIPT VERIFICATION REQUESTED
- [ ] PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 3.1.2

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 8270 SIMS
	TB-ROX-011724-8260	1/17/2024	0000	Water	2					2	X			
	TB-ROX-011724-8011	1/17/2024	0000	Water	2					2		X		
	MW4-ROX-011724-EB	1/17/2024	0935	Water	6			2		8	X	X	X	X
	MW4-ROX-011724	1/17/2024	1055	Water	6			2		8	X	X	X	X
	MW14-ROX-011724	1/17/2024	1305	Water	6			2		8	X	X	X	X
	MW7-ROX-011724	1/17/2024	1420	Water	6			2		8	X	X	X	X
	MW7-ROX-011724-DUP	1/17/2024	1420	Water	6			2		8	X	X	X	X

1-17-24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 6339 6598 2656	1/17/2024	1600

CUSTODY SEALS: 1599826, 1599827

Version: 27Sept23

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1/26/2024

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-249894-1

Login Number: 249894
List Number: 1
Creator: Roberts, Alexis J

List Source: Eurofins 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	0.0°C IR8
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: 400-249894-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Roxana Groundwater Quarterly – 1st Quarter 2024 Data Review

Laboratory SDG: 400-249896-1

Data Reviewer: Andrei Niculau

Peer Reviewer: Cheyana Cokley

Date Reviewed: 3/1/2024

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

Sample Identification	Sample Identification
TB-ROX-011824-8260	MW25-ROX-011824
TB-ROX-011824-8011	--

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 PAH surrogate recovery for terphenyl-d_{14} and VOC by 8011 surrogate recovery for 4-bromofluorobenzene in several method blanks were outside criteria. The continuing calibration verification (CCV) for several analytes were outside evaluation criteria, biased low. The initial calibration verification (ICV) for 3,3'-dichlorobenzidine was outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (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 (%)
MB 400-658257/1-A	PAHs	Terphenyl-d_{14}	**162**	18-147
MB 400-658842/1-A	VOCs by 8011	4-Bromofluorobenzene	**156**	51-149

Qualifications due to surrogate recoveries were not required if only one of three base/neutral surrogate recoveries were outside evaluation criteria. Method blanks are quality control samples and do not require qualification.

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 (CCV) for methylene chloride, acrylonitrile, chloroethane, pyridine and 4,6-dinitro-ortho-cresol were outside evaluation criteria, biased low. The initial calibration verification (ICV) for 3,3'-dichlorobenzidine was outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW25-ROX-011824	VOCs	Methylene Chloride	**UJ**
MW25-ROX-011824	VOCs	Acrylonitrile	**UJ**
MW25-ROX-011824	VOCs	Chloroethane	**UJ**
MW25-ROX-011824	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW25-ROX-011824	SVOCs	Pyridine	**UJ**
MW25-ROX-011824	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**

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ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 1/30/2024 7:48:29 AM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-249896-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

my EOL

Job Notes

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Authorization



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Job Narrative
400-249896-1

Receipt
The samples were received on 1/20/2024 11:07 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 0.0º C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-658524 recovered above the upper control limit for Hexachlorobutadiene, 1,2,4-Trichlorobenzene, 4-Isopropyltoluene, sec-Butylbenzene and Bromobenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-658524 recovered outside acceptance criteria, low biased, for Chloroethane, Acrylonitrile and Methylene Chloride. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: 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-011824-8260 (400-249896-1) and MW25-ROX-011824 (400-249896-3). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-658524 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260D: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-658524 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 8270E: The initial calibration verification (ICV) analyzed in batch 400-654856 was outside method criteria for the following analyte(s): 3,3'-Dichlorobenzidine, 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-658299 recovered outside acceptance criteria, low biased, for 4,6-Dinitro-2-methylphenol and Pyridine. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E SIM: The continuing calibration verification (CCV) associated with batch 400-658308 recovered above the upper control limit for Pyrene, Benzo[b]fluoranthene and Benzo[k]fluoranthene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E SIM: 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: (MB 400-658257/1-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 surrogate recovery for the blank associated with preparation batch 400-658842 and analytical batch 400-658857 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.

Organic 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: 400-249896-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-249896-1	TB-ROX-011824-8260	Water	01/18/24 12:00	01/20/24 11:07
400-249896-2	TB-ROX-011824-8011	Water	01/18/24 12:00	01/20/24 11:07
400-249896-3	MW25-ROX-011824	Water	01/18/24 09:55	01/20/24 11:07

Detection Summary

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

Job ID: 400-249896-1

Client Sample ID: TB-ROX-011824-8260 — Lab Sample ID: 400-249896-1

No Detections.

Client Sample ID: TB-ROX-011824-8011 — Lab Sample ID: 400-249896-2

No Detections.

Client Sample ID: MW25-ROX-011824 — Lab Sample ID: 400-249896-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	53		1.0	0.50	ug/L	1		8260D	Total/NA
Carbon disulfide	0.50	J	1.0	0.50	ug/L	1		8260D	Total/NA
tert-Butylbenzene	0.64	J	1.0	0.63	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-249896-1

Client Sample ID: TB-ROX-011824-8260
Date Collected: 01/18/24 12:00
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249896-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/24/24 16:34	1
Acrolein	ND		20	3.3	ug/L			01/24/24 16:34	1
Acrylonitrile	ND		10	2.8	ug/L			01/24/24 16:34	1
Benzene	ND		1.0	0.50	ug/L			01/24/24 16:34	1
Bromobenzene	ND		1.0	0.54	ug/L			01/24/24 16:34	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/24/24 16:34	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/24/24 16:34	1
Bromoform	ND		5.0	0.25	ug/L			01/24/24 16:34	1
Bromomethane	ND		1.0	0.98	ug/L			01/24/24 16:34	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/24/24 16:34	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/24/24 16:34	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/24/24 16:34	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/24/24 16:34	1
Chloroethane	ND		1.0	0.76	ug/L			01/24/24 16:34	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/24/24 16:34	1
Chloroform	ND		1.0	0.90	ug/L			01/24/24 16:34	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/24/24 16:34	1
Chloromethane	ND		1.0	0.90	ug/L			01/24/24 16:34	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/24/24 16:34	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/24/24 16:34	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/24/24 16:34	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/24/24 16:34	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/24/24 16:34	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/24/24 16:34	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/24/24 16:34	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/24/24 16:34	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/24/24 16:34	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/24/24 16:34	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/24/24 16:34	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/24/24 16:34	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/24/24 16:34	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/24/24 16:34	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/24/24 16:34	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/24/24 16:34	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/24/24 16:34	1
2-Hexanone	ND		25	1.4	ug/L			01/24/24 16:34	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/24/24 16:34	1
Methylene bromide	ND		5.0	0.22	ug/L			01/24/24 16:34	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/24/24 16:34	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/24/24 16:34	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/24/24 16:34	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/24/24 16:34	1
Naphthalene	ND		5.0	3.0	ug/L			01/24/24 16:34	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/24/24 16:34	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/24/24 16:34	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/24/24 16:34	1
o-Xylene	ND		5.0	0.60	ug/L			01/24/24 16:34	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/24/24 16:34	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/24/24 16:34	1

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

Job ID: 400-249896-1

Client Sample ID: TB-ROX-011824-8260
Date Collected: 01/18/24 12:00
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249896-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/24/24 16:34	1
Styrene	ND		1.0	1.0	ug/L			01/24/24 16:34	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/24/24 16:34	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/24/24 16:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/24/24 16:34	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/24/24 16:34	1
Toluene	ND		1.0	0.90	ug/L			01/24/24 16:34	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/24/24 16:34	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/24/24 16:34	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/24/24 16:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/24/24 16:34	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/24/24 16:34	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/24/24 16:34	1
Trichloroethene	ND		1.0	0.15	ug/L			01/24/24 16:34	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/24/24 16:34	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/24/24 16:34	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/24/24 16:34	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/24/24 16:34	1
Vinyl acetate	ND		25	0.93	ug/L			01/24/24 16:34	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/24/24 16:34	1
Xylenes, Total	ND		10	1.6	ug/L			01/24/24 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*01/24/24 16:34*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/24/24 16:34*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*01/24/24 16:34*	*1*

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

Job ID: 400-249896-1

Client Sample ID: TB-ROX-011824-8011
Date Collected: 01/18/24 12:00
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249896-2
Matrix: Water

Method: EPA 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		01/26/24 11:22	01/26/24 17:41	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		01/26/24 11:22	01/26/24 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*51 - 149*	*01/26/24 11:22*	*01/26/24 17:41*	*1*

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

Job ID: 400-249896-1

Client Sample ID: MW25-ROX-011824
Date Collected: 01/18/24 09:55
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249896-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/24/24 16:56	1
Acrolein	ND		20	3.3	ug/L			01/24/24 16:56	1
Acrylonitrile	ND		10	2.8	ug/L			01/24/24 16:56	1
Benzene	**53**		1.0	0.50	ug/L			01/24/24 16:56	1
Bromobenzene	ND		1.0	0.54	ug/L			01/24/24 16:56	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/24/24 16:56	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/24/24 16:56	1
Bromoform	ND		5.0	0.25	ug/L			01/24/24 16:56	1
Bromomethane	ND		1.0	0.98	ug/L			01/24/24 16:56	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/24/24 16:56	1
Carbon disulfide	**0.50**	**J**	1.0	0.50	ug/L			01/24/24 16:56	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/24/24 16:56	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/24/24 16:56	1
Chloroethane	ND		1.0	0.76	ug/L			01/24/24 16:56	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/24/24 16:56	1
Chloroform	ND		1.0	0.90	ug/L			01/24/24 16:56	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/24/24 16:56	1
Chloromethane	ND		1.0	0.90	ug/L			01/24/24 16:56	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/24/24 16:56	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/24/24 16:56	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/24/24 16:56	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/24/24 16:56	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/24/24 16:56	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/24/24 16:56	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/24/24 16:56	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/24/24 16:56	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/24/24 16:56	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/24/24 16:56	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/24/24 16:56	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/24/24 16:56	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/24/24 16:56	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/24/24 16:56	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/24/24 16:56	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/24/24 16:56	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/24/24 16:56	1
2-Hexanone	ND		25	1.4	ug/L			01/24/24 16:56	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/24/24 16:56	1
Methylene bromide	ND		5.0	0.22	ug/L			01/24/24 16:56	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/24/24 16:56	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/24/24 16:56	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/24/24 16:56	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/24/24 16:56	1
Naphthalene	ND		5.0	3.0	ug/L			01/24/24 16:56	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/24/24 16:56	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/24/24 16:56	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/24/24 16:56	1
o-Xylene	ND		5.0	0.60	ug/L			01/24/24 16:56	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/24/24 16:56	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/24/24 16:56	1

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

Job ID: 400-249896-1

Client Sample ID: MW25-ROX-011824

Date Collected: 01/18/24 09:55
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249896-3

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/24/24 16:56	1
Styrene	ND		1.0	1.0	ug/L			01/24/24 16:56	1
tert-Butylbenzene	**0.64**	**J**	1.0	0.63	ug/L			01/24/24 16:56	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/24/24 16:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/24/24 16:56	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/24/24 16:56	1
Toluene	ND		1.0	0.90	ug/L			01/24/24 16:56	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/24/24 16:56	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/24/24 16:56	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/24/24 16:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/24/24 16:56	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/24/24 16:56	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/24/24 16:56	1
Trichloroethene	ND		1.0	0.15	ug/L			01/24/24 16:56	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/24/24 16:56	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/24/24 16:56	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/24/24 16:56	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/24/24 16:56	1
Vinyl acetate	ND		25	0.93	ug/L			01/24/24 16:56	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/24/24 16:56	1
Xylenes, Total	ND		10	1.6	ug/L			01/24/24 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*72 - 130*		*01/24/24 16:56*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*01/24/24 16:56*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*01/24/24 16:56*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.23	0.12	ug/L		01/22/24 09:09	01/22/24 19:54	1
Acenaphthylene	ND		0.23	0.051	ug/L		01/22/24 09:09	01/22/24 19:54	1
Anthracene	ND		0.23	0.055	ug/L		01/22/24 09:09	01/22/24 19:54	1
Benzo[a]anthracene	ND		0.23	0.040	ug/L		01/22/24 09:09	01/22/24 19:54	1
Benzo[a]pyrene	ND		0.23	0.075	ug/L		01/22/24 09:09	01/22/24 19:54	1
Benzo[b]fluoranthene	ND		0.23	0.043	ug/L		01/22/24 09:09	01/22/24 19:54	1
Benzo[g,h,i]perylene	ND		0.23	0.031	ug/L		01/22/24 09:09	01/22/24 19:54	1
Benzo[k]fluoranthene	ND		0.23	0.072	ug/L		01/22/24 09:09	01/22/24 19:54	1
Chrysene	ND		0.23	0.038	ug/L		01/22/24 09:09	01/22/24 19:54	1
Dibenz(a,h)anthracene	ND		0.23	0.056	ug/L		01/22/24 09:09	01/22/24 19:54	1
Fluoranthene	ND		0.23	0.040	ug/L		01/22/24 09:09	01/22/24 19:54	1
Fluorene	ND		0.23	0.10	ug/L		01/22/24 09:09	01/22/24 19:54	1
Indeno[1,2,3-cd]pyrene	ND		0.23	0.040	ug/L		01/22/24 09:09	01/22/24 19:54	1
Phenanthrene	ND		0.23	0.10	ug/L		01/22/24 09:09	01/22/24 19:54	1
Pyrene	ND		0.23	0.045	ug/L		01/22/24 09:09	01/22/24 19:54	1
1-Methylnaphthalene	ND		0.23	0.093	ug/L		01/22/24 09:09	01/22/24 19:54	1
2-Methylnaphthalene	ND		0.23	0.077	ug/L		01/22/24 09:09	01/22/24 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*109*		*18 - 147*	*01/22/24 09:09*	*01/22/24 19:54*	*1*
2-Fluorobiphenyl	*75*		*15 - 128*	*01/22/24 09:09*	*01/22/24 19:54*	*1*

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

Job ID: 400-249896-1

Client Sample ID: MW25-ROX-011824
Date Collected: 01/18/24 09:55
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249896-3
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*83*		*10 - 144*	*01/22/24 09:09*	*01/22/24 19:54*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		12	10	ug/L		01/22/24 09:09	01/22/24 18:06	1
Benzenethiol	ND		12	12	ug/L		01/22/24 09:09	01/22/24 18:06	1
Benzoic acid	ND		35	28	ug/L		01/22/24 09:09	01/22/24 18:06	1
Benzyl alcohol	ND		12	8.5	ug/L		01/22/24 09:09	01/22/24 18:06	1
Bis(2-chloroethoxy)methane	ND		12	5.4	ug/L		01/22/24 09:09	01/22/24 18:06	1
Bis(2-chloroethyl)ether	ND		12	4.5	ug/L		01/22/24 09:09	01/22/24 18:06	1
bis (2-chloroisopropyl) ether	ND		12	2.1	ug/L		01/22/24 09:09	01/22/24 18:06	1
Bis(2-ethylhexyl) phthalate	ND		12	10	ug/L		01/22/24 09:09	01/22/24 18:06	1
4-Bromophenyl phenyl ether	ND		12	10	ug/L		01/22/24 09:09	01/22/24 18:06	1
Butyl benzyl phthalate	ND		12	6.8	ug/L		01/22/24 09:09	01/22/24 18:06	1
4-Chloroaniline	ND		12	5.5	ug/L		01/22/24 09:09	01/22/24 18:06	1
4-Chloro-3-methylphenol	ND		12	6.2	ug/L		01/22/24 09:09	01/22/24 18:06	1
2-Chloronaphthalene	ND		12	4.4	ug/L		01/22/24 09:09	01/22/24 18:06	1
2-Chlorophenol	ND		12	4.8	ug/L		01/22/24 09:09	01/22/24 18:06	1
4-Chlorophenyl phenyl ether	ND		12	4.3	ug/L		01/22/24 09:09	01/22/24 18:06	1
Dibenz[a,h]acridine	ND		12	3.3	ug/L		01/22/24 09:09	01/22/24 18:06	1
Dibenzofuran	ND		12	4.7	ug/L		01/22/24 09:09	01/22/24 18:06	1
3,3'-Dichlorobenzidine	ND		13	13	ug/L		01/22/24 09:09	01/22/24 18:06	1
2,4-Dichlorophenol	ND		12	5.0	ug/L		01/22/24 09:09	01/22/24 18:06	1
Diethyl phthalate	ND		12	5.1	ug/L		01/22/24 09:09	01/22/24 18:06	1
2,4-Dimethylphenol	ND		12	6.1	ug/L		01/22/24 09:09	01/22/24 18:06	1
Dimethyl phthalate	ND		12	4.9	ug/L		01/22/24 09:09	01/22/24 18:06	1
Di-n-butyl phthalate	ND		12	5.4	ug/L		01/22/24 09:09	01/22/24 18:06	1
4,6-Dinitro-ortho-cresol	ND		12	12	ug/L		01/22/24 09:09	01/22/24 18:06	1
2,4-Dinitrophenol	ND		35	5.4	ug/L		01/22/24 09:09	01/22/24 18:06	1
2,4-Dinitrotoluene	ND		12	5.9	ug/L		01/22/24 09:09	01/22/24 18:06	1
2,6-Dinitrotoluene	ND		12	4.5	ug/L		01/22/24 09:09	01/22/24 18:06	1
Di-n-octyl phthalate	ND		12	7.0	ug/L		01/22/24 09:09	01/22/24 18:06	1
1,4-Dioxane	ND		12	5.0	ug/L		01/22/24 09:09	01/22/24 18:06	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		12	3.8	ug/L		01/22/24 09:09	01/22/24 18:06	1
Hexachlorobenzene	ND		12	11	ug/L		01/22/24 09:09	01/22/24 18:06	1
Hexachlorocyclopentadiene	ND		23	5.2	ug/L		01/22/24 09:09	01/22/24 18:06	1
Hexachloroethane	ND		12	6.1	ug/L		01/22/24 09:09	01/22/24 18:06	1
Indene	ND		12	4.2	ug/L		01/22/24 09:09	01/22/24 18:06	1
Isophorone	ND		12	6.1	ug/L		01/22/24 09:09	01/22/24 18:06	1
2-Methylphenol	ND		12	3.7	ug/L		01/22/24 09:09	01/22/24 18:06	1
3 & 4 Methylphenol	ND		23	5.4	ug/L		01/22/24 09:09	01/22/24 18:06	1
2-Nitroaniline	ND		12	5.8	ug/L		01/22/24 09:09	01/22/24 18:06	1
3-Nitroaniline	ND		12	5.5	ug/L		01/22/24 09:09	01/22/24 18:06	1
4-Nitroaniline	ND		12	4.8	ug/L		01/22/24 09:09	01/22/24 18:06	1
Nitrobenzene	ND		12	5.5	ug/L		01/22/24 09:09	01/22/24 18:06	1
2-Nitrophenol	ND		12	5.4	ug/L		01/22/24 09:09	01/22/24 18:06	1
4-Nitrophenol	ND		12	3.8	ug/L		01/22/24 09:09	01/22/24 18:06	1
N-Nitrosodimethylamine	ND		12	2.6	ug/L		01/22/24 09:09	01/22/24 18:06	1

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

Job ID: 400-249896-1

Client Sample ID: MW25-ROX-011824

Date Collected: 01/18/24 09:55
Date Received: 01/20/24 11:07

Lab Sample ID: 400-249896-3

Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		12	2.9	ug/L		01/22/24 09:09	01/22/24 18:06	1
N-Nitrosodiphenylamine	ND		12	4.3	ug/L		01/22/24 09:09	01/22/24 18:06	1
Pentachlorophenol	ND		23	14	ug/L		01/22/24 09:09	01/22/24 18:06	1
Phenol	ND		12	4.9	ug/L		01/22/24 09:09	01/22/24 18:06	1
Pyridine	ND		12	12	ug/L		01/22/24 09:09	01/22/24 18:06	1
Quinoline	ND		12	2.8	ug/L		01/22/24 09:09	01/22/24 18:06	1
2,4,5-Trichlorophenol	ND		12	4.7	ug/L		01/22/24 09:09	01/22/24 18:06	1
2,4,6-Trichlorophenol	ND		12	4.1	ug/L		01/22/24 09:09	01/22/24 18:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*21 - 114*	*01/22/24 09:09*	*01/22/24 18:06*	*1*
2-Fluorophenol	*53*		*10 - 105*	*01/22/24 09:09*	*01/22/24 18:06*	*1*
Nitrobenzene-d5	*64*		*16 - 127*	*01/22/24 09:09*	*01/22/24 18:06*	*1*
Phenol-d5	*41*		*10 - 129*	*01/22/24 09:09*	*01/22/24 18:06*	*1*
Terphenyl-d14	*83*		*13 - 150*	*01/22/24 09:09*	*01/22/24 18:06*	*1*
2,4,6-Tribromophenol	*68*		*10 - 150*	*01/22/24 09:09*	*01/22/24 18:06*	*1*

Method: EPA 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		01/26/24 11:22	01/26/24 18:02	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/26/24 11:22	01/26/24 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*141*		*51 - 149*	*01/26/24 11:22*	*01/26/24 18:02*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Job ID: 400-249896-1
Project/Site: ROXANA QUARTERLY GW

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
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
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: 400-249896-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-130)	(75-126)	(64-132)
400-249896-1	TB-ROX-011824-8260	94	105	103
400-249896-3	MW25-ROX-011824	89	101	99
LCS 400-658524/1002	Lab Control Sample	102	101	107
MB 400-658524/4	Method Blank	94	102	103

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - 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	(21-114)	(10-105)	(16-127)	(10-129)	(13-150)	(10-150)
400-249896-3	MW25-ROX-011824	69	53	64	41	83	68
LCS 400-658257/15-A	Lab Control Sample	71	63	67	53	92	63
LCS 400-658257/2-A	Lab Control Sample	84	67	72	60	97	82
LCSD 400-658257/16-A	Lab Control Sample Dup	72	59	67	48	96	61
LCSD 400-658257/3-A	Lab Control Sample Dup	78	59	69	54	93	81
MB 400-658257/1-A	Method Blank	68	58	66	45	86	58

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-249896-3	MW25-ROX-011824	109	75	83
LCS 400-658257/2-A	Lab Control Sample	114	98	107
LCSD 400-658257/3-A	Lab Control Sample Dup	113	97	83
MB 400-658257/1-A	Method Blank	162 S1+	81	88

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Surrogate Summary

Client: AECOM Technical Services Inc.
Job ID: 400-249896-1
Project/Site: ROXANA QUARTERLY GW

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
		BFB1								
Lab Sample ID	Client Sample ID	(51-149)								
400-249896-2	TB-ROX-011824-8011	90								
400-249896-3	MW25-ROX-011824	141								
LCS 400-658842/2-A	Lab Control Sample	123								
LCSD 400-658842/3-A	Lab Control Sample Dup	110								
MB 400-658842/1-A	Method Blank	156 S1+								

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-249896-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins 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: 400-249896-1

Client Sample ID: TB-ROX-011824-8260

Lab Sample ID: 400-249896-1
Date Collected: 01/18/24 12:00
Matrix: Water
Date Received: 01/20/24 11:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	658524	01/24/24 16:34	KR	EET PEN

Client Sample ID: TB-ROX-011824-8011

Lab Sample ID: 400-249896-2
Date Collected: 01/18/24 12:00
Matrix: Water
Date Received: 01/20/24 11:07

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	658842	01/26/24 11:22	JAW	EET PEN
Total/NA	Analysis	8011		1			658857	01/26/24 17:41	DS	EET PEN

Client Sample ID: MW25-ROX-011824

Lab Sample ID: 400-249896-3
Date Collected: 01/18/24 09:55
Matrix: Water
Date Received: 01/20/24 11:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	658524	01/24/24 16:56	KR	EET PEN
Total/NA	Prep	3510C			214.4 mL	1 mL	658257	01/22/24 09:09	SNG	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	658299	01/22/24 18:06	S1B	EET PEN
Total/NA	Prep	3510C			214.4 mL	1 mL	658257	01/22/24 09:09	SNG	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	658308	01/22/24 19:54	S1B	EET PEN
Total/NA	Prep	8011			34.9 mL	35 mL	658842	01/26/24 11:22	JAW	EET PEN
Total/NA	Analysis	8011		1			658857	01/26/24 18:02	DS	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-658257/1-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	3510C			250 mL	1 mL	658257	01/22/24 09:08	SNG	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	658299	01/22/24 14:22	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	658257	01/22/24 09:08	SNG	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	658308	01/22/24 17:12	S1B	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-658524/4
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	8260D		1	5 mL	5 mL	658524	01/24/24 11:49	KR	EET PEN

Lab Chronicle

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

Job ID: 400-249896-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-658842/1-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	658842	01/26/24 11:22	JAW	EET PEN
Total/NA	Analysis	8011		1			658857	01/26/24 14:57	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-658257/15-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	3510C			250 mL	1 mL	658257	01/22/24 09:12	SNG	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	658299	01/22/24 15:30	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-658257/2-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	3510C			250 mL	1 mL	658257	01/22/24 09:08	SNG	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	658299	01/22/24 14:45	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	658257	01/22/24 09:08	SNG	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	658308	01/22/24 17:33	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-658524/1002
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	8260D		1	5 mL	5 mL	658524	01/24/24 10:19	KR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-658842/2-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	658842	01/26/24 11:22	JAW	EET PEN
Total/NA	Analysis	8011		1			658857	01/26/24 15:18	DS	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-658257/16-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	3510C			250 mL	1 mL	658257	01/22/24 09:12	SNG	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	658299	01/22/24 15:52	S1B	EET PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Job ID: 400-249896-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-658257/3-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	3510C			250 mL	1 mL	658257	01/22/24 09:08	SNG	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	658299	01/22/24 15:07	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	658257	01/22/24 09:08	SNG	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	658308	01/22/24 17:53	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-658842/3-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	658842	01/26/24 11:22	JAW	EET PEN
Total/NA	Analysis	8011		1			658857	01/26/24 15:39	DS	EET PEN

Laboratory References:

EET PEN = Eurofins 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: 400-249896-1

GC/MS VOA

Analysis Batch: 658524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249896-1	TB-ROX-011824-8260	Total/NA	Water	8260D	
400-249896-3	MW25-ROX-011824	Total/NA	Water	8260D	
MB 400-658524/4	Method Blank	Total/NA	Water	8260D	
LCS 400-658524/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 658257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249896-3	MW25-ROX-011824	Total/NA	Water	3510C	
MB 400-658257/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-658257/15-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-658257/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-658257/16-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-658257/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 658299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249896-3	MW25-ROX-011824	Total/NA	Water	8270E	658257
MB 400-658257/1-A	Method Blank	Total/NA	Water	8270E	658257
LCS 400-658257/15-A	Lab Control Sample	Total/NA	Water	8270E	658257
LCS 400-658257/2-A	Lab Control Sample	Total/NA	Water	8270E	658257
LCSD 400-658257/16-A	Lab Control Sample Dup	Total/NA	Water	8270E	658257
LCSD 400-658257/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	658257

Analysis Batch: 658308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249896-3	MW25-ROX-011824	Total/NA	Water	8270E SIM	658257
MB 400-658257/1-A	Method Blank	Total/NA	Water	8270E SIM	658257
LCS 400-658257/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	658257
LCSD 400-658257/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	658257

GC Semi VOA

Prep Batch: 658842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249896-2	TB-ROX-011824-8011	Total/NA	Water	8011	
400-249896-3	MW25-ROX-011824	Total/NA	Water	8011	
MB 400-658842/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-658842/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-658842/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 658857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-249896-2	TB-ROX-011824-8011	Total/NA	Water	8011	658842
400-249896-3	MW25-ROX-011824	Total/NA	Water	8011	658842
MB 400-658842/1-A	Method Blank	Total/NA	Water	8011	658842
LCS 400-658842/2-A	Lab Control Sample	Total/NA	Water	8011	658842
LCSD 400-658842/3-A	Lab Control Sample Dup	Total/NA	Water	8011	658842

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-658524/4
Matrix: Water
Analysis Batch: 658524

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			01/24/24 11:49	1
Acrolein	ND		20	3.3	ug/L			01/24/24 11:49	1
Acrylonitrile	ND		10	2.8	ug/L			01/24/24 11:49	1
Benzene	ND		1.0	0.50	ug/L			01/24/24 11:49	1
Bromobenzene	ND		1.0	0.54	ug/L			01/24/24 11:49	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/24/24 11:49	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/24/24 11:49	1
Bromoform	ND		5.0	0.25	ug/L			01/24/24 11:49	1
Bromomethane	ND		1.0	0.98	ug/L			01/24/24 11:49	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/24/24 11:49	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/24/24 11:49	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/24/24 11:49	1
Chlorobenzene	ND		1.0	0.90	ug/L			01/24/24 11:49	1
Chloroethane	ND		1.0	0.76	ug/L			01/24/24 11:49	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/24/24 11:49	1
Chloroform	ND		1.0	0.90	ug/L			01/24/24 11:49	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/24/24 11:49	1
Chloromethane	ND		1.0	0.90	ug/L			01/24/24 11:49	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/24/24 11:49	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/24/24 11:49	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/24/24 11:49	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/24/24 11:49	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/24/24 11:49	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/24/24 11:49	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/24/24 11:49	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/24/24 11:49	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/24/24 11:49	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/24/24 11:49	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/24/24 11:49	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/24/24 11:49	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/24/24 11:49	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/24/24 11:49	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/24/24 11:49	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/24/24 11:49	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/24/24 11:49	1
2-Hexanone	ND		25	1.4	ug/L			01/24/24 11:49	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/24/24 11:49	1
Methylene bromide	ND		5.0	0.22	ug/L			01/24/24 11:49	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/24/24 11:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/24/24 11:49	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/24/24 11:49	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/24/24 11:49	1
Naphthalene	ND		5.0	3.0	ug/L			01/24/24 11:49	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/24/24 11:49	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/24/24 11:49	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/24/24 11:49	1
o-Xylene	ND		5.0	0.60	ug/L			01/24/24 11:49	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/24/24 11:49	1

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

Lab Sample ID: MB 400-658524/4
Matrix: Water
Analysis Batch: 658524

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			01/24/24 11:49	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/24/24 11:49	1
Styrene	ND		1.0	1.0	ug/L			01/24/24 11:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/24/24 11:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/24/24 11:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/24/24 11:49	1
Tetrachloroethene	ND		1.0	0.90	ug/L			01/24/24 11:49	1
Toluene	ND		1.0	0.90	ug/L			01/24/24 11:49	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/24/24 11:49	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/24/24 11:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			01/24/24 11:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/24/24 11:49	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/24/24 11:49	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/24/24 11:49	1
Trichloroethene	ND		1.0	0.15	ug/L			01/24/24 11:49	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/24/24 11:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/24/24 11:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/24/24 11:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/24/24 11:49	1
Vinyl acetate	ND		25	0.93	ug/L			01/24/24 11:49	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/24/24 11:49	1
Xylenes, Total	ND		10	1.6	ug/L			01/24/24 11:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*01/24/24 11:49*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*01/24/24 11:49*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*01/24/24 11:49*	*1*

Lab Sample ID: LCS 400-658524/1002
Matrix: Water
Analysis Batch: 658524

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	124		ug/L		62	43 - 160
Acrolein	500	493		ug/L		99	38 - 160
Acrylonitrile	500	377		ug/L		75	64 - 142
Benzene	50.0	49.9		ug/L		100	70 - 130
Bromobenzene	50.0	60.0		ug/L		120	70 - 132
Bromochloromethane	50.0	46.9		ug/L		94	70 - 130
Bromodichloromethane	50.0	49.9		ug/L		100	67 - 133
Bromoform	50.0	56.3		ug/L		113	57 - 140
Bromomethane	50.0	47.4		ug/L		95	10 - 160
2-Butanone (MEK)	200	149		ug/L		74	61 - 145
Carbon disulfide	50.0	41.2		ug/L		82	61 - 137
Carbon tetrachloride	50.0	50.9		ug/L		102	61 - 137
Chlorobenzene	50.0	53.1		ug/L		106	70 - 130
Chloroethane	50.0	31.2		ug/L		62	55 - 141
2-Chloroethyl vinyl ether	50.0	58.0		ug/L		116	10 - 160

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

Lab Sample ID: LCS 400-658524/1002
Matrix: Water
Analysis Batch: 658524

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	51.6		ug/L		103	69 - 130
1-Chlorohexane	50.0	54.0		ug/L		108	69 - 130
Chloromethane	50.0	46.8		ug/L		94	58 - 137
cis-1,2-Dichloroethene	50.0	49.4		ug/L		99	68 - 130
cis-1,3-Dichloropropene	50.0	50.4		ug/L		101	69 - 132
Dibromochloromethane	50.0	57.9		ug/L		116	67 - 135
1,2-Dichlorobenzene	50.0	56.4		ug/L		113	67 - 130
1,3-Dichlorobenzene	50.0	59.0		ug/L		118	70 - 130
1,4-Dichlorobenzene	50.0	58.2		ug/L		116	70 - 130
Dichlorodifluoromethane	50.0	51.3		ug/L		103	41 - 146
1,1-Dichloroethane	50.0	53.0		ug/L		106	70 - 130
1,2-Dichloroethane	50.0	45.5		ug/L		91	69 - 130
1,1-Dichloroethene	50.0	45.7		ug/L		91	63 - 134
1,2-Dichloropropane	50.0	49.2		ug/L		98	70 - 130
1,3-Dichloropropane	50.0	56.5		ug/L		113	70 - 130
2,2-Dichloropropane	50.0	50.9		ug/L		102	52 - 135
1,1-Dichloropropene	50.0	51.9		ug/L		104	70 - 130
Ethylbenzene	50.0	52.1		ug/L		104	70 - 130
Ethyl methacrylate	50.0	50.6		ug/L		101	68 - 130
Hexachlorobutadiene	50.0	63.1		ug/L		126	53 - 140
2-Hexanone	200	184		ug/L		92	65 - 137
Isopropylbenzene	50.0	52.3		ug/L		105	70 - 130
Methylene bromide	50.0	47.2		ug/L		94	70 - 130
Methylene Chloride	50.0	39.1		ug/L		78	66 - 135
4-Methyl-2-pentanone (MIBK)	200	159		ug/L		79	69 - 138
Methyl tert-butyl ether	50.0	49.4		ug/L		99	66 - 130
m-Xylene & p-Xylene	50.0	49.6		ug/L		99	70 - 130
Naphthalene	50.0	56.1		ug/L		112	47 - 149
n-Butylbenzene	50.0	56.2		ug/L		112	67 - 130
N-Propylbenzene	50.0	59.6		ug/L		119	70 - 130
o-Chlorotoluene	50.0	57.1		ug/L		114	70 - 130
o-Xylene	50.0	50.7		ug/L		101	70 - 130
p-Chlorotoluene	50.0	57.0		ug/L		114	70 - 130
p-Isopropyltoluene	50.0	60.8		ug/L		122	65 - 130
sec-Butylbenzene	50.0	60.8		ug/L		122	66 - 130
Styrene	50.0	50.9		ug/L		102	70 - 130
tert-Butylbenzene	50.0	57.2		ug/L		114	64 - 139
1,1,1,2-Tetrachloroethane	50.0	56.8		ug/L		114	67 - 131
1,1,2,2-Tetrachloroethane	50.0	58.3		ug/L		117	70 - 131
Tetrachloroethene	50.0	59.9		ug/L		120	65 - 130
Toluene	50.0	54.3		ug/L		109	70 - 130
trans-1,2-Dichloroethene	50.0	54.9		ug/L		110	70 - 130
trans-1,3-Dichloropropene	50.0	58.5		ug/L		117	63 - 130
1,2,3-Trichlorobenzene	50.0	59.4		ug/L		119	60 - 138
1,2,4-Trichlorobenzene	50.0	61.1		ug/L		122	60 - 140
1,1,1-Trichloroethane	50.0	51.7		ug/L		103	68 - 130
1,1,2-Trichloroethane	50.0	57.8		ug/L		116	70 - 130
Trichloroethene	50.0	54.7		ug/L		109	70 - 130
Trichlorofluoromethane	50.0	50.6		ug/L		101	65 - 138

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

Lab Sample ID: LCS 400-658524/1002
Matrix: Water
Analysis Batch: 658524

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	56.3		ug/L		113	70 - 130
1,2,4-Trimethylbenzene	50.0	57.1		ug/L		114	70 - 130
1,3,5-Trimethylbenzene	50.0	58.4		ug/L		117	69 - 130
Vinyl acetate	100	110		ug/L		110	26 - 160
Vinyl chloride	50.0	50.3		ug/L		101	59 - 136
Xylenes, Total	100	100		ug/L		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*72 - 130*
Dibromofluoromethane	*101*		*75 - 126*
Toluene-d8 (Surr)	*107*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-658257/1-A
Matrix: Water
Analysis Batch: 658299

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 658257

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		01/22/24 09:08	01/22/24 14:22	1
Benzenethiol	ND		10	9.9	ug/L		01/22/24 09:08	01/22/24 14:22	1
Benzoic acid	ND		30	24	ug/L		01/22/24 09:08	01/22/24 14:22	1
Benzyl alcohol	ND		10	7.3	ug/L		01/22/24 09:08	01/22/24 14:22	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		01/22/24 09:08	01/22/24 14:22	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		01/22/24 09:08	01/22/24 14:22	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		01/22/24 09:08	01/22/24 14:22	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		01/22/24 09:08	01/22/24 14:22	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		01/22/24 09:08	01/22/24 14:22	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		01/22/24 09:08	01/22/24 14:22	1
4-Chloroaniline	ND		10	4.7	ug/L		01/22/24 09:08	01/22/24 14:22	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		01/22/24 09:08	01/22/24 14:22	1
2-Chloronaphthalene	ND		10	3.8	ug/L		01/22/24 09:08	01/22/24 14:22	1
2-Chlorophenol	ND		10	4.1	ug/L		01/22/24 09:08	01/22/24 14:22	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		01/22/24 09:08	01/22/24 14:22	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		01/22/24 09:08	01/22/24 14:22	1
Dibenzofuran	ND		10	4.0	ug/L		01/22/24 09:08	01/22/24 14:22	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		01/22/24 09:08	01/22/24 14:22	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		01/22/24 09:08	01/22/24 14:22	1
Diethyl phthalate	ND		10	4.4	ug/L		01/22/24 09:08	01/22/24 14:22	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		01/22/24 09:08	01/22/24 14:22	1
Dimethyl phthalate	ND		10	4.2	ug/L		01/22/24 09:08	01/22/24 14:22	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		01/22/24 09:08	01/22/24 14:22	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		01/22/24 09:08	01/22/24 14:22	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		01/22/24 09:08	01/22/24 14:22	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		01/22/24 09:08	01/22/24 14:22	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		01/22/24 09:08	01/22/24 14:22	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		01/22/24 09:08	01/22/24 14:22	1
1,4-Dioxane	ND		10	4.3	ug/L		01/22/24 09:08	01/22/24 14:22	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-658257/1-A
Matrix: Water
Analysis Batch: 658299

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 658257

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		01/22/24 09:08	01/22/24 14:22	1
Hexachlorobenzene	ND		10	9.7	ug/L		01/22/24 09:08	01/22/24 14:22	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		01/22/24 09:08	01/22/24 14:22	1
Hexachloroethane	ND		10	5.2	ug/L		01/22/24 09:08	01/22/24 14:22	1
Indene	ND		10	3.6	ug/L		01/22/24 09:08	01/22/24 14:22	1
Isophorone	ND		10	5.2	ug/L		01/22/24 09:08	01/22/24 14:22	1
2-Methylphenol	ND		10	3.2	ug/L		01/22/24 09:08	01/22/24 14:22	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		01/22/24 09:08	01/22/24 14:22	1
2-Nitroaniline	ND		10	5.0	ug/L		01/22/24 09:08	01/22/24 14:22	1
3-Nitroaniline	ND		10	4.7	ug/L		01/22/24 09:08	01/22/24 14:22	1
4-Nitroaniline	ND		10	4.1	ug/L		01/22/24 09:08	01/22/24 14:22	1
Nitrobenzene	ND		10	4.7	ug/L		01/22/24 09:08	01/22/24 14:22	1
2-Nitrophenol	ND		10	4.6	ug/L		01/22/24 09:08	01/22/24 14:22	1
4-Nitrophenol	ND		10	3.3	ug/L		01/22/24 09:08	01/22/24 14:22	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		01/22/24 09:08	01/22/24 14:22	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		01/22/24 09:08	01/22/24 14:22	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		01/22/24 09:08	01/22/24 14:22	1
Pentachlorophenol	ND		20	12	ug/L		01/22/24 09:08	01/22/24 14:22	1
Phenol	ND		10	4.2	ug/L		01/22/24 09:08	01/22/24 14:22	1
Pyridine	ND		10	10	ug/L		01/22/24 09:08	01/22/24 14:22	1
Quinoline	ND		10	2.4	ug/L		01/22/24 09:08	01/22/24 14:22	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		01/22/24 09:08	01/22/24 14:22	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/22/24 09:08	01/22/24 14:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*21 - 114*	*01/22/24 09:08*	*01/22/24 14:22*	*1*
2-Fluorophenol	*58*		*10 - 105*	*01/22/24 09:08*	*01/22/24 14:22*	*1*
Nitrobenzene-d5	*66*		*16 - 127*	*01/22/24 09:08*	*01/22/24 14:22*	*1*
Phenol-d5	*45*		*10 - 129*	*01/22/24 09:08*	*01/22/24 14:22*	*1*
Terphenyl-d14	*86*		*13 - 150*	*01/22/24 09:08*	*01/22/24 14:22*	*1*
2,4,6-Tribromophenol	*58*		*10 - 150*	*01/22/24 09:08*	*01/22/24 14:22*	*1*

Lab Sample ID: LCS 400-658257/15-A
Matrix: Water
Analysis Batch: 658299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 658257

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	119		ug/L		99	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*71*		*21 - 114*
2-Fluorophenol	*63*		*10 - 105*
Nitrobenzene-d5	*67*		*16 - 127*
Phenol-d5	*53*		*10 - 129*
Terphenyl-d14	*92*		*13 - 150*
2,4,6-Tribromophenol	*63*		*10 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-658257/2-A
Matrix: Water
Analysis Batch: 658299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 658257

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	69.8		ug/L		58	10 - 127
Benzoic acid	485	108		ug/L		22	19 - 126
Benzyl alcohol	120	89.6		ug/L		75	17 - 109
Bis(2-chloroethoxy)methane	120	82.0		ug/L		68	24 - 125
Bis(2-chloroethyl)ether	120	98.6		ug/L		82	10 - 121
bis (2-chloroisopropyl) ether	120	92.9		ug/L		77	14 - 123
Bis(2-ethylhexyl) phthalate	120	103		ug/L		86	16 - 150
4-Bromophenyl phenyl ether	120	102		ug/L		85	17 - 150
Butyl benzyl phthalate	120	103		ug/L		86	21 - 150
4-Chloroaniline	120	80.0		ug/L		67	10 - 124
4-Chloro-3-methylphenol	120	96.1		ug/L		80	37 - 131
2-Chloronaphthalene	120	96.8		ug/L		81	24 - 132
2-Chlorophenol	120	94.7		ug/L		79	27 - 124
4-Chlorophenyl phenyl ether	120	108		ug/L		90	27 - 147
Dibenz[a,h]acridine	114	85.1		ug/L		75	40 - 140
Dibenzofuran	120	105		ug/L		88	30 - 135
3,3'-Dichlorobenzidine	160	148		ug/L		93	10 - 150
2,4-Dichlorophenol	120	90.1		ug/L		75	33 - 132
Diethyl phthalate	120	110		ug/L		91	37 - 145
2,4-Dimethylphenol	120	112		ug/L		93	38 - 132
Dimethyl phthalate	120	100		ug/L		84	32 - 137
Di-n-butyl phthalate	120	113		ug/L		94	27 - 150
4,6-Dinitro-ortho-cresol	240	170		ug/L		71	14 - 150
2,4-Dinitrophenol	240	152		ug/L		63	15 - 150
2,4-Dinitrotoluene	120	104		ug/L		86	35 - 136
2,6-Dinitrotoluene	120	97.7		ug/L		81	29 - 140
Di-n-octyl phthalate	120	108		ug/L		90	26 - 150
1,4-Dioxane	120	51.2		ug/L		43	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	94.2		ug/L		78	23 - 138
Hexachlorobenzene	120	120		ug/L		100	10 - 150
Hexachlorocyclopentadiene	120	60.8		ug/L		51	10 - 124
Hexachloroethane	120	72.6		ug/L		61	10 - 127
Indene	120	101		ug/L		84	18 - 150
Isophorone	120	85.9		ug/L		72	28 - 127
2-Methylphenol	120	95.0		ug/L		79	34 - 124
3 & 4 Methylphenol	120	93.8		ug/L		78	32 - 122
2-Nitroaniline	120	95.1		ug/L		79	24 - 139
3-Nitroaniline	120	99.0		ug/L		83	10 - 128
4-Nitroaniline	120	100		ug/L		84	28 - 118
Nitrobenzene	120	77.6		ug/L		65	29 - 120
2-Nitrophenol	120	78.4		ug/L		65	25 - 148
4-Nitrophenol	240	152		ug/L		63	12 - 129
N-Nitrosodimethylamine	120	77.5		ug/L		65	10 - 115
N-Nitrosodi-n-propylamine	120	97.6		ug/L		81	24 - 142
N-Nitrosodiphenylamine	119	100		ug/L		84	29 - 138
Pentachlorophenol	240	152		ug/L		63	19 - 150
Phenol	120	79.1		ug/L		66	11 - 95
Pyridine	240	86.7		ug/L		36	10 - 82

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-658257/2-A
Matrix: Water
Analysis Batch: 658299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 658257

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Quinoline			114	92.6		ug/L		81	40 - 140		
2,4,5-Trichlorophenol			120	103		ug/L		86	30 - 144		
2,4,6-Trichlorophenol			120	103		ug/L		86	27 - 147		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*21 - 114*
2-Fluorophenol	*67*		*10 - 105*
Nitrobenzene-d5	*72*		*16 - 127*
Phenol-d5	*60*		*10 - 129*
Terphenyl-d14	*97*		*13 - 150*
2,4,6-Tribromophenol	*82*		*10 - 150*

Lab Sample ID: LCSD 400-658257/16-A
Matrix: Water
Analysis Batch: 658299

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 658257

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	126		ug/L		105	40 - 140	6	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*72*		*21 - 114*
2-Fluorophenol	*59*		*10 - 105*
Nitrobenzene-d5	*67*		*16 - 127*
Phenol-d5	*48*		*10 - 129*
Terphenyl-d14	*96*		*13 - 150*
2,4,6-Tribromophenol	*61*		*10 - 150*

Lab Sample ID: LCSD 400-658257/3-A
Matrix: Water
Analysis Batch: 658299

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 658257

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	62.5		ug/L		52	10 - 127	11	40
Benzoic acid			485	110		ug/L		23	19 - 126	2	40
Benzyl alcohol			120	85.0		ug/L		71	17 - 109	5	40
Bis(2-chloroethoxy)methane			120	77.6		ug/L		65	24 - 125	6	40
Bis(2-chloroethyl)ether			120	86.1		ug/L		72	10 - 121	14	40
bis (2-chloroisopropyl) ether			120	85.5		ug/L		71	14 - 123	8	40
Bis(2-ethylhexyl) phthalate			120	99.4		ug/L		83	16 - 150	4	40
4-Bromophenyl phenyl ether			120	95.3		ug/L		79	17 - 150	7	40
Butyl benzyl phthalate			120	97.9		ug/L		82	21 - 150	5	40
4-Chloroaniline			120	74.9		ug/L		62	10 - 124	7	40
4-Chloro-3-methylphenol			120	88.8		ug/L		74	37 - 131	8	40
2-Chloronaphthalene			120	88.7		ug/L		74	24 - 132	9	40
2-Chlorophenol			120	85.3		ug/L		71	27 - 124	10	40
4-Chlorophenyl phenyl ether			120	103		ug/L		86	27 - 147	5	40
Dibenz[a,h]acridine			114	116		ug/L		102	40 - 140	31	40
Dibenzofuran			120	101		ug/L		84	30 - 135	4	40

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-658257/3-A
Matrix: Water
Analysis Batch: 658299

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 658257

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine			160	147		ug/L		92	10 - 150	1	40
2,4-Dichlorophenol			120	86.6		ug/L		72	33 - 132	4	40
Diethyl phthalate			120	107		ug/L		89	37 - 145	2	40
2,4-Dimethylphenol			120	106		ug/L		88	38 - 132	5	40
Dimethyl phthalate			120	97.9		ug/L		82	32 - 137	3	40
Di-n-butyl phthalate			120	109		ug/L		91	27 - 150	3	40
4,6-Dinitro-ortho-cresol			240	187		ug/L		78	14 - 150	10	40
2,4-Dinitrophenol			240	175		ug/L		73	15 - 150	14	40
2,4-Dinitrotoluene			120	104		ug/L		87	35 - 136	0	40
2,6-Dinitrotoluene			120	96.4		ug/L		80	29 - 140	1	40
Di-n-octyl phthalate			120	107		ug/L		89	26 - 150	1	40
1,4-Dioxane			120	50.1		ug/L		42	10 - 87	2	40
1,2-Diphenylhydrazine (as Azobenzene)			120	87.9		ug/L		73	23 - 138	7	40
Hexachlorobenzene			120	113		ug/L		94	10 - 150	6	40
Hexachlorocyclopentadiene			120	66.6		ug/L		56	10 - 124	9	40
Hexachloroethane			120	70.0		ug/L		58	10 - 127	4	40
Indene			120	93.1		ug/L		78	18 - 150	8	40
Isophorone			120	80.0		ug/L		67	28 - 127	7	40
2-Methylphenol			120	88.9		ug/L		74	34 - 124	7	40
3 & 4 Methylphenol			120	85.4		ug/L		71	32 - 122	9	40
2-Nitroaniline			120	93.6		ug/L		78	24 - 139	2	40
3-Nitroaniline			120	94.6		ug/L		79	10 - 128	5	40
4-Nitroaniline			120	104		ug/L		87	28 - 118	4	40
Nitrobenzene			120	73.1		ug/L		61	29 - 120	6	40
2-Nitrophenol			120	77.4		ug/L		65	25 - 148	1	40
4-Nitrophenol			240	159		ug/L		66	12 - 129	5	40
N-Nitrosodimethylamine			120	68.1		ug/L		57	10 - 115	13	40
N-Nitrosodi-n-propylamine			120	88.1		ug/L		73	24 - 142	10	40
N-Nitrosodiphenylamine			119	94.7		ug/L		80	29 - 138	6	40
Pentachlorophenol			240	164		ug/L		68	19 - 150	8	40
Phenol			120	72.4		ug/L		60	11 - 95	9	40
Pyridine			240	71.6		ug/L		30	10 - 82	19	40
Quinoline			114	83.4		ug/L		73	40 - 140	10	40
2,4,5-Trichlorophenol			120	103		ug/L		86	30 - 144	0	40
2,4,6-Trichlorophenol			120	98.4		ug/L		82	27 - 147	5	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*21 - 114*
2-Fluorophenol	*59*		*10 - 105*
Nitrobenzene-d5	*69*		*16 - 127*
Phenol-d5	*54*		*10 - 129*
Terphenyl-d14	*93*		*13 - 150*
2,4,6-Tribromophenol	*81*		*10 - 150*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-658257/1-A
Matrix: Water
Analysis Batch: 658308

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 658257

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		01/22/24 09:08	01/22/24 17:12	1
Acenaphthylene	ND		0.20	0.044	ug/L		01/22/24 09:08	01/22/24 17:12	1
Anthracene	ND		0.20	0.047	ug/L		01/22/24 09:08	01/22/24 17:12	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		01/22/24 09:08	01/22/24 17:12	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		01/22/24 09:08	01/22/24 17:12	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		01/22/24 09:08	01/22/24 17:12	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		01/22/24 09:08	01/22/24 17:12	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		01/22/24 09:08	01/22/24 17:12	1
Chrysene	ND		0.20	0.033	ug/L		01/22/24 09:08	01/22/24 17:12	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		01/22/24 09:08	01/22/24 17:12	1
Fluoranthene	ND		0.20	0.034	ug/L		01/22/24 09:08	01/22/24 17:12	1
Fluorene	ND		0.20	0.089	ug/L		01/22/24 09:08	01/22/24 17:12	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		01/22/24 09:08	01/22/24 17:12	1
Phenanthrene	ND		0.20	0.090	ug/L		01/22/24 09:08	01/22/24 17:12	1
Pyrene	ND		0.20	0.039	ug/L		01/22/24 09:08	01/22/24 17:12	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		01/22/24 09:08	01/22/24 17:12	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		01/22/24 09:08	01/22/24 17:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*162*	*S1+*	*18 - 147*	*01/22/24 09:08*	*01/22/24 17:12*	*1*
2-Fluorobiphenyl	*81*		*15 - 128*	*01/22/24 09:08*	*01/22/24 17:12*	*1*
Nitrobenzene-d5	*88*		*10 - 144*	*01/22/24 09:08*	*01/22/24 17:12*	*1*

Lab Sample ID: LCS 400-658257/2-A
Matrix: Water
Analysis Batch: 658308

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 658257

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	119		ug/L		99	40 - 140
Acenaphthylene	120	120		ug/L		100	40 - 140
Anthracene	120	123		ug/L		102	40 - 140
Benzo[a]anthracene	120	120		ug/L		100	40 - 140
Benzo[a]pyrene	120	119		ug/L		99	40 - 140
Benzo[b]fluoranthene	120	152		ug/L		127	40 - 140
Benzo[g,h,i]perylene	120	104		ug/L		86	40 - 140
Benzo[k]fluoranthene	120	144		ug/L		120	40 - 140
Chrysene	120	126		ug/L		105	40 - 140
Dibenz(a,h)anthracene	120	100		ug/L		83	40 - 140
Fluoranthene	120	112		ug/L		93	40 - 140
Fluorene	120	118		ug/L		98	40 - 140
Indeno[1,2,3-cd]pyrene	120	106		ug/L		88	40 - 140
Phenanthrene	120	124		ug/L		104	40 - 140
Pyrene	120	148		ug/L		123	40 - 140
1-Methylnaphthalene	120	122		ug/L		102	40 - 140
2-Methylnaphthalene	120	123		ug/L		103	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*114*		*18 - 147*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 400-658257/2-A
Matrix: Water
Analysis Batch: 658308

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 658257

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	98		15 - 128
Nitrobenzene-d5	107		10 - 144

Lab Sample ID: LCSD 400-658257/3-A
Matrix: Water
Analysis Batch: 658308

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 658257

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	119		ug/L		99	40 - 140	0	40
Acenaphthylene			120	119		ug/L		99	40 - 140	1	40
Anthracene			120	123		ug/L		103	40 - 140	0	40
Benzo[a]anthracene			120	119		ug/L		99	40 - 140	0	40
Benzo[a]pyrene			120	135		ug/L		113	40 - 140	12	40
Benzo[b]fluoranthene			120	166		ug/L		139	40 - 140	9	40
Benzo[g,h,i]perylene			120	111		ug/L		92	40 - 140	6	40
Benzo[k]fluoranthene			120	161		ug/L		134	40 - 140	11	40
Chrysene			120	128		ug/L		107	40 - 140	1	40
Dibenz(a,h)anthracene			120	105		ug/L		87	40 - 140	5	40
Fluoranthene			120	114		ug/L		95	40 - 140	2	40
Fluorene			120	118		ug/L		98	40 - 140	0	40
Indeno[1,2,3-cd]pyrene			120	112		ug/L		94	40 - 140	6	40
Phenanthrene			120	127		ug/L		106	40 - 140	2	40
Pyrene			120	151		ug/L		126	40 - 140	2	40
1-Methylnaphthalene			120	95.9		ug/L		80	40 - 140	24	40
2-Methylnaphthalene			120	97.0		ug/L		81	40 - 140	24	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	113		18 - 147
2-Fluorobiphenyl	97		15 - 128
Nitrobenzene-d5	83		10 - 144

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-658842/1-A
Matrix: Water
Analysis Batch: 658857

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 658842

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		01/26/24 11:22	01/26/24 14:57	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/26/24 11:22	01/26/24 14:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	156	S1+	51 - 149	01/26/24 11:22	01/26/24 14:57	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCS 400-658842/2-A
Matrix: Water
Analysis Batch: 658857

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 658842

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			0.100	0.109		ug/L		109	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*123*		*51 - 149*

Lab Sample ID: LCSD 400-658842/3-A
Matrix: Water
Analysis Batch: 658857

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 658842

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.107		ug/L		106	60 - 140	1	30
1,2-Dibromoethane			0.100	0.102		ug/L		102	60 - 140	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*110*		*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
Melissa Remiger	25278	DATE: 1/18/2024
PO #	**GSAP Project ID**	PAGE: 1 of 1
60721927 3.1.2	USPC/00114/R/02	

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS: Street and City	State	AECOM Project / Task Number:
AECOM		900 South Central Ave; ROXANA	IL	Roxana Quarterly GW 60721927 3.1.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@aecom.com

EDF DELIVERABLE TO (Name, Company, Office Location):	PHONE NO.:	E-MAIL:	AECOM Other ID:
Melissa Remiger - please see special instructions	314-802-1207	melissa.remiger@aecom.com	

SAMPLER NAME(S) (Print): C. McDavid, M. Massa

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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

*** Please include "J" values on Reports.**
*** Please provide sample receipt upon login.**
*** Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com**

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 3.1.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

400-249896 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 8270 SIMS
	TB-ROX-011824-8260	1/18/2024	0000	Water	2					2	X			
	TB-ROX-011824-8011	1/18/2024	0000	Water	2					2		X		
	MW25-ROX-011824	1/18/2024	0955	Water	6			2		8	X	X	X	X

COOLER TEMP 0.0°C 01-18-24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 6339 6595 3281	1/18/2024	1600
Relinquished by: (Signature)	Received by: (Signature) SR	Date: 1/20/24	Time: 1107
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: 2312500, 2312501

0.0°C SR

Page 33 of 36

eurofins | Environment Testing TestAmerica

2312501

231

eurofins

Environment Testing
TestAmerica

0.0°C IL 8 BP

Part # 159469-434 MTW EXP 04/24

ORIGIN ID:PNSA (314) 305-6614
MARY MASSA - 2H
REFINERY
411 BROADWAY AVE

SOUTH ROXANA, IL 62087
UNITED STATES US

SHIP DATE: 12SEP23
ACTWGT: 10.00 LB MAN
CAD: 0823943/CAFE3753

TO **SHIPPING MANAGER**
TEST AMERICA PENSACOLA
3355 MCLEMORE DR
RETURNS
PENSACOLA FL 32514
(850) 474-1001
REF: S400-122996

RMA:

FedEx
Express

E

eurofins | Environment Testing TestAmerica

2312500

FedEx
TRK# 0221 6339 6595 3281

XH PNSA

FRI - 19 JAN 10:30A
PRIORITY OVERNIGHT

32514
FL-US BFM

DATE

SIGNATURE

eurofins | Environment Testing TestAmerica

2312500

Job# 5
Roll
231

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-249896-1

Login Number: 249896
List Number: 1
Creator: Roberts, Alexis J

List Source: Eurofins 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	0.0°C IR8
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: 400-249896-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Appendix D

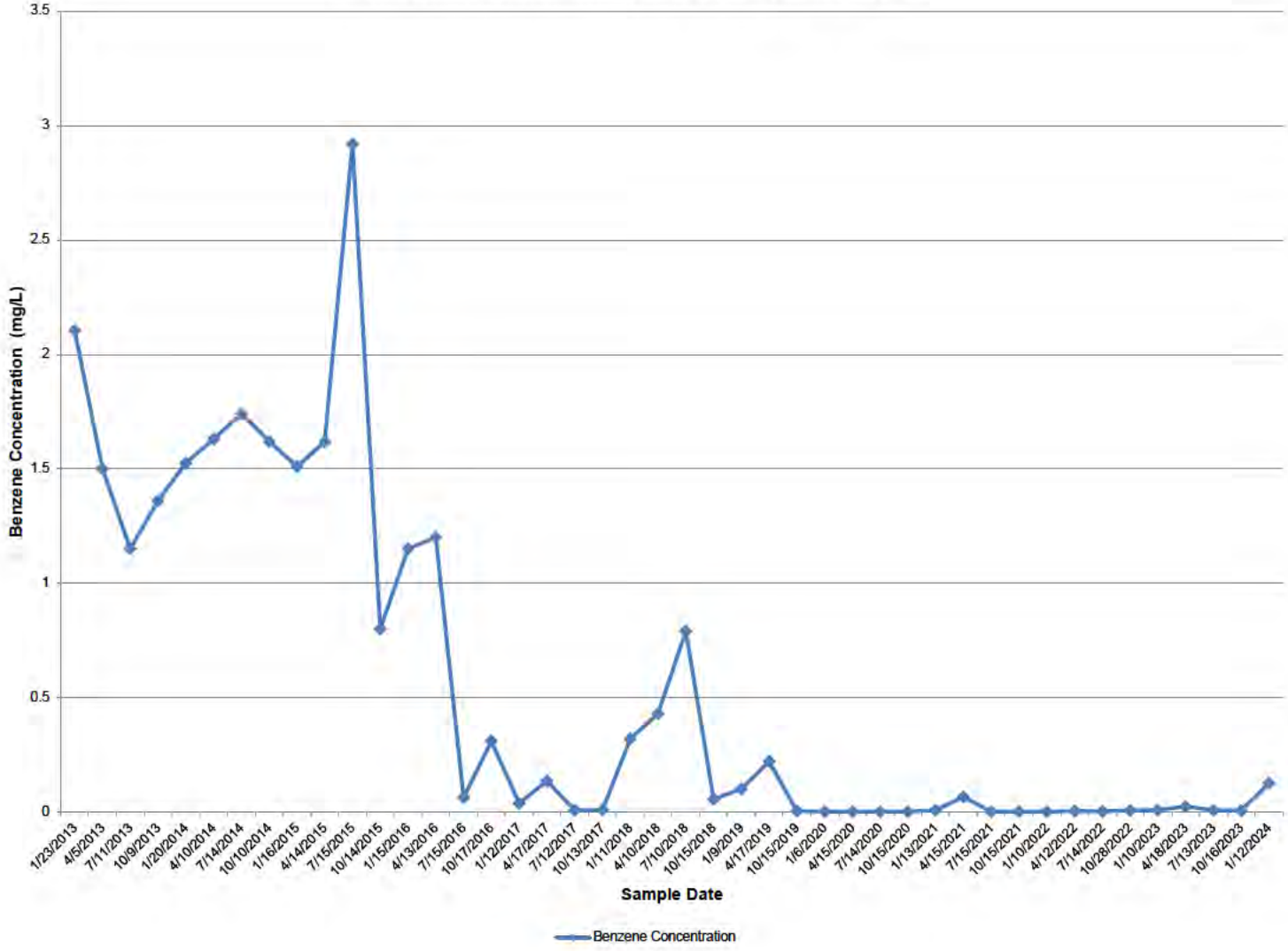
Appendix D – 1 Charts – Benzene Concentrations Over Time

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

Benzene Concentrations Over Time - MW-22



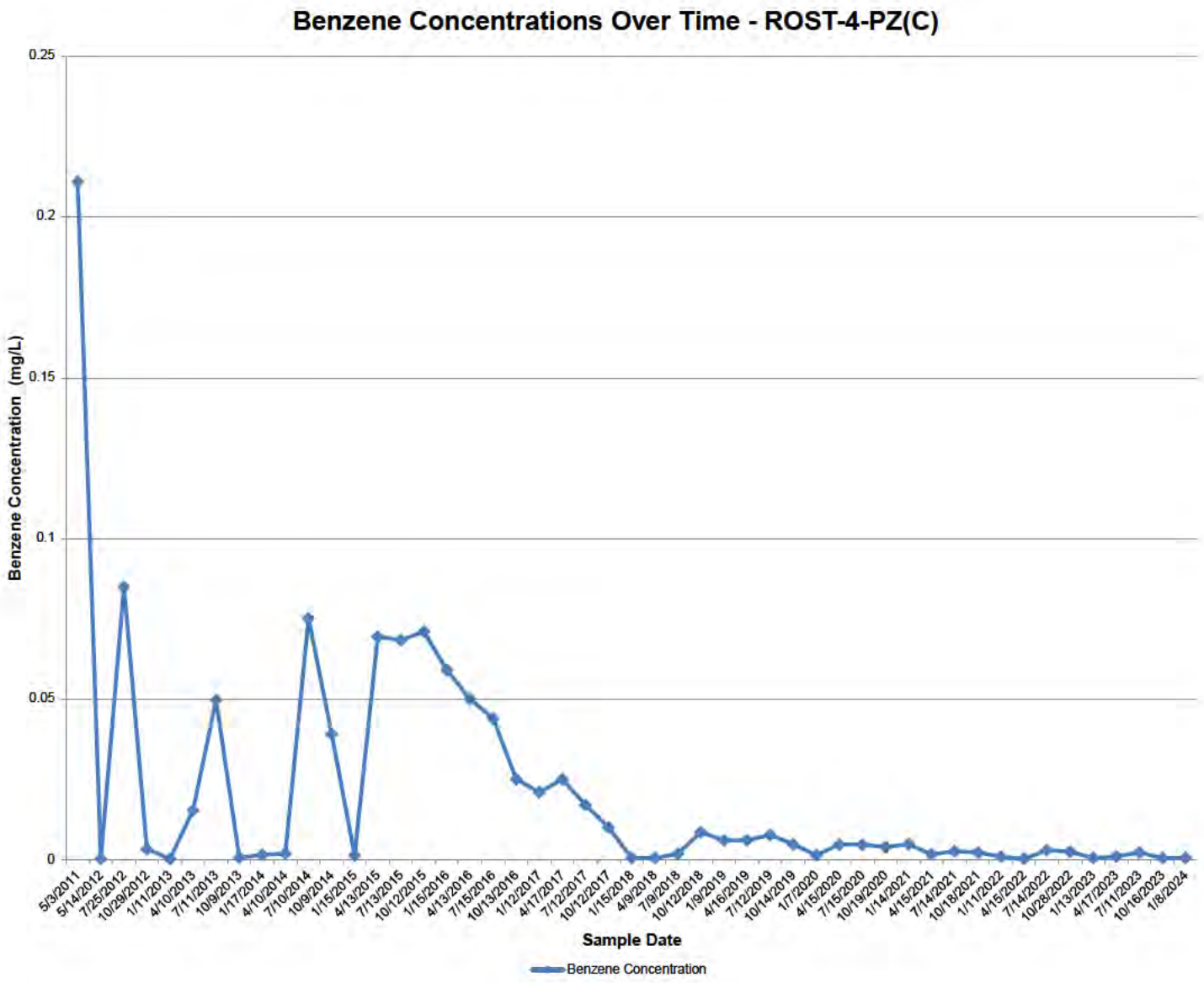
Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Non-detect values are shown at half the reporting limit.



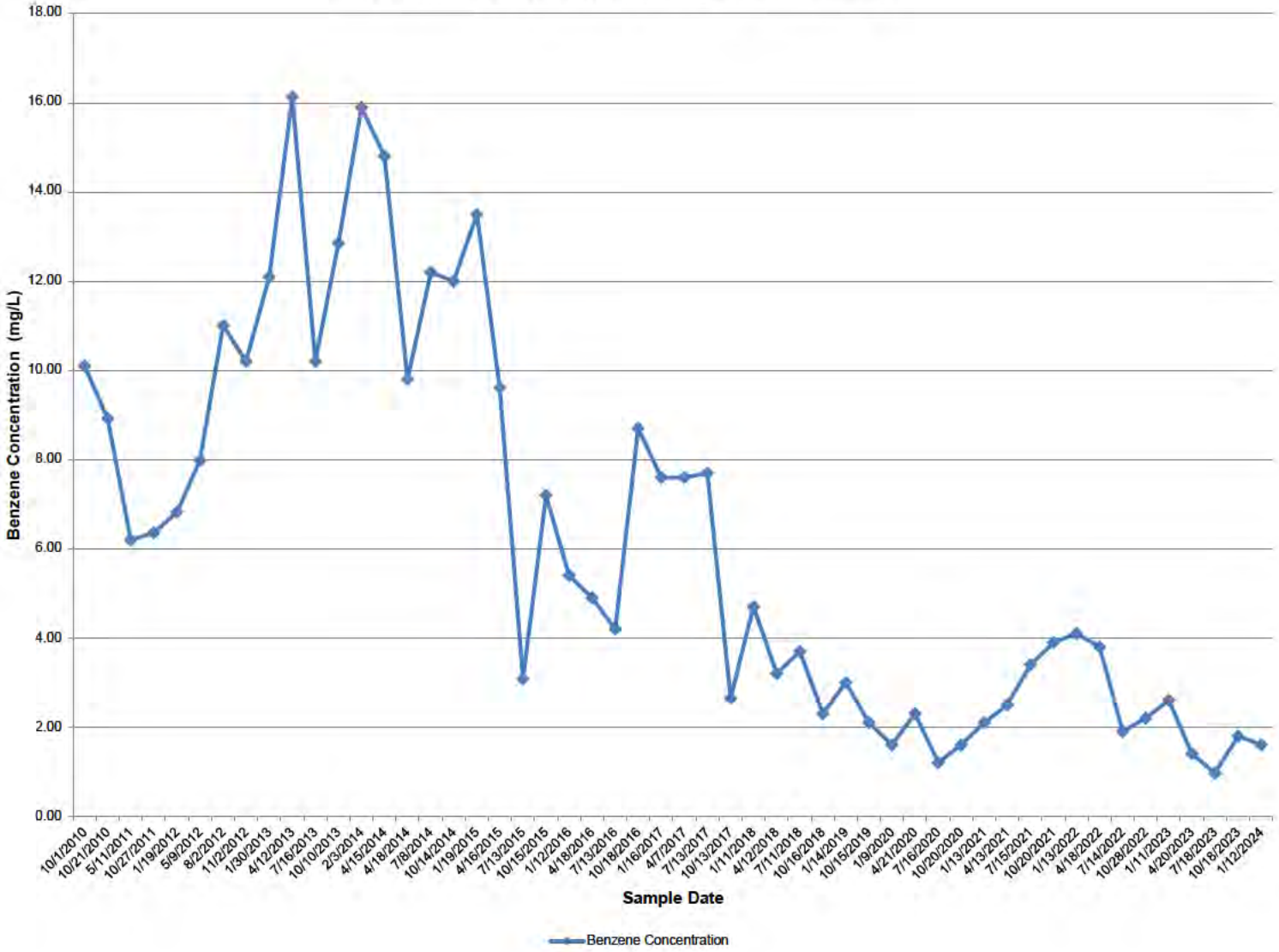
Notes:

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

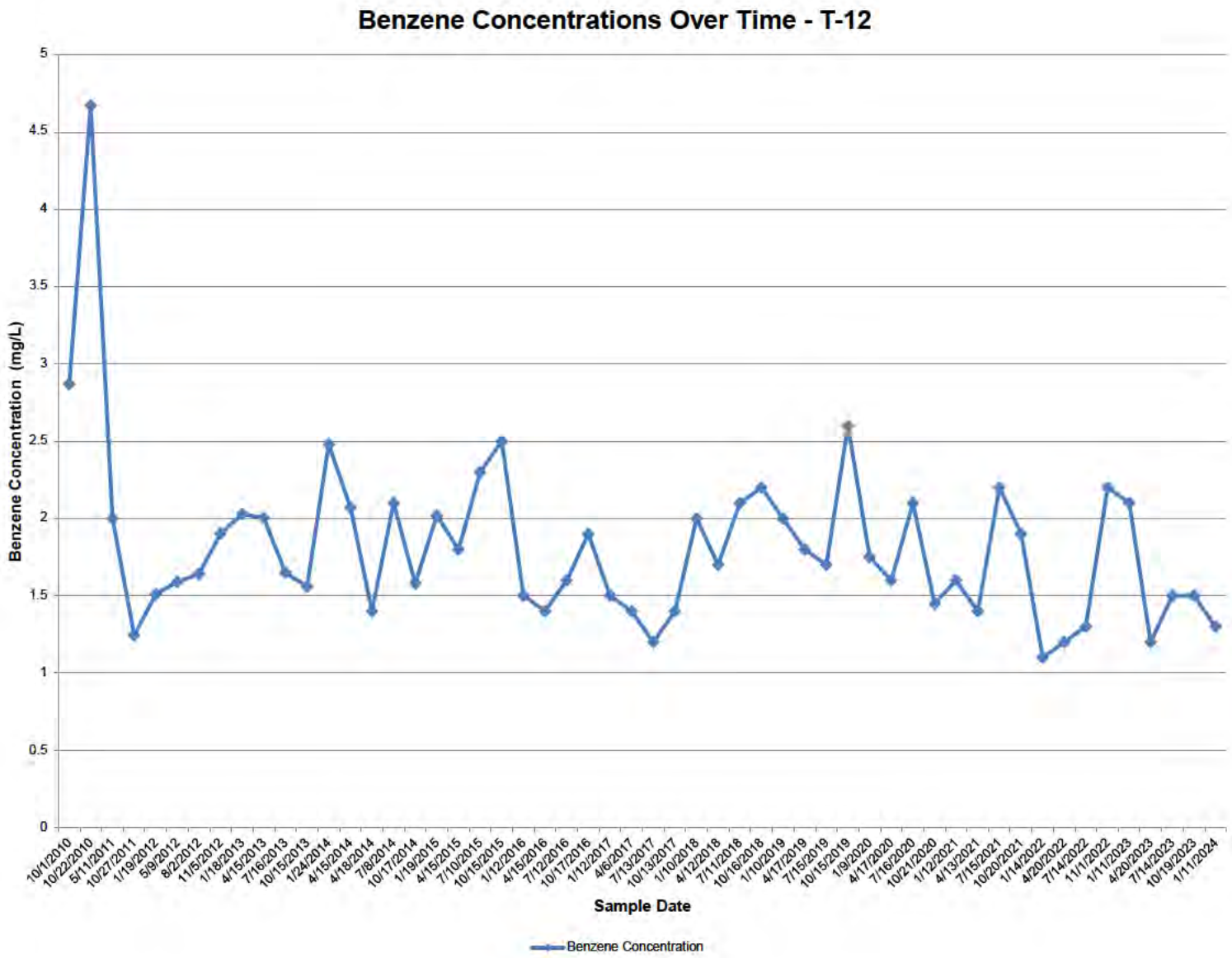


Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.



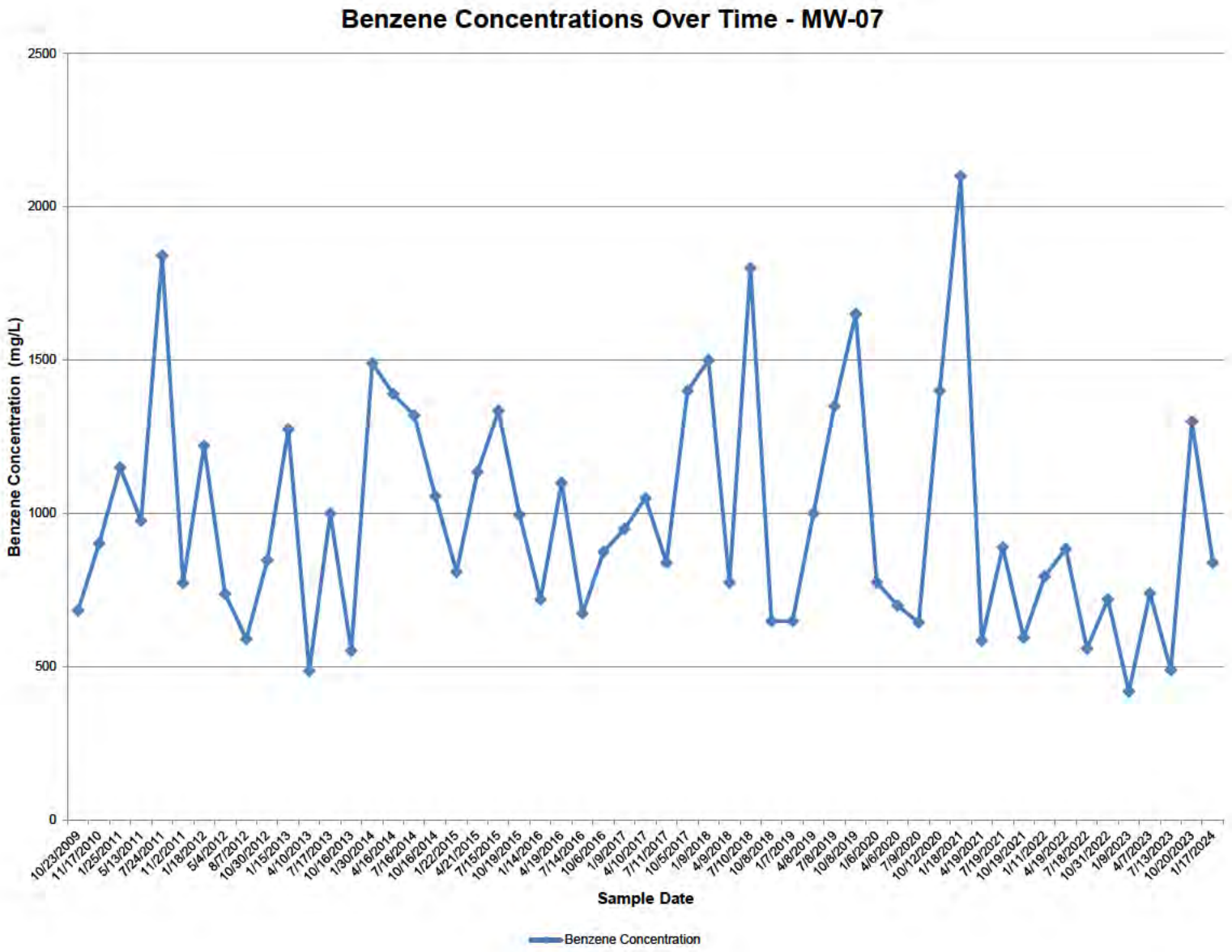
Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Public Works Yard Area

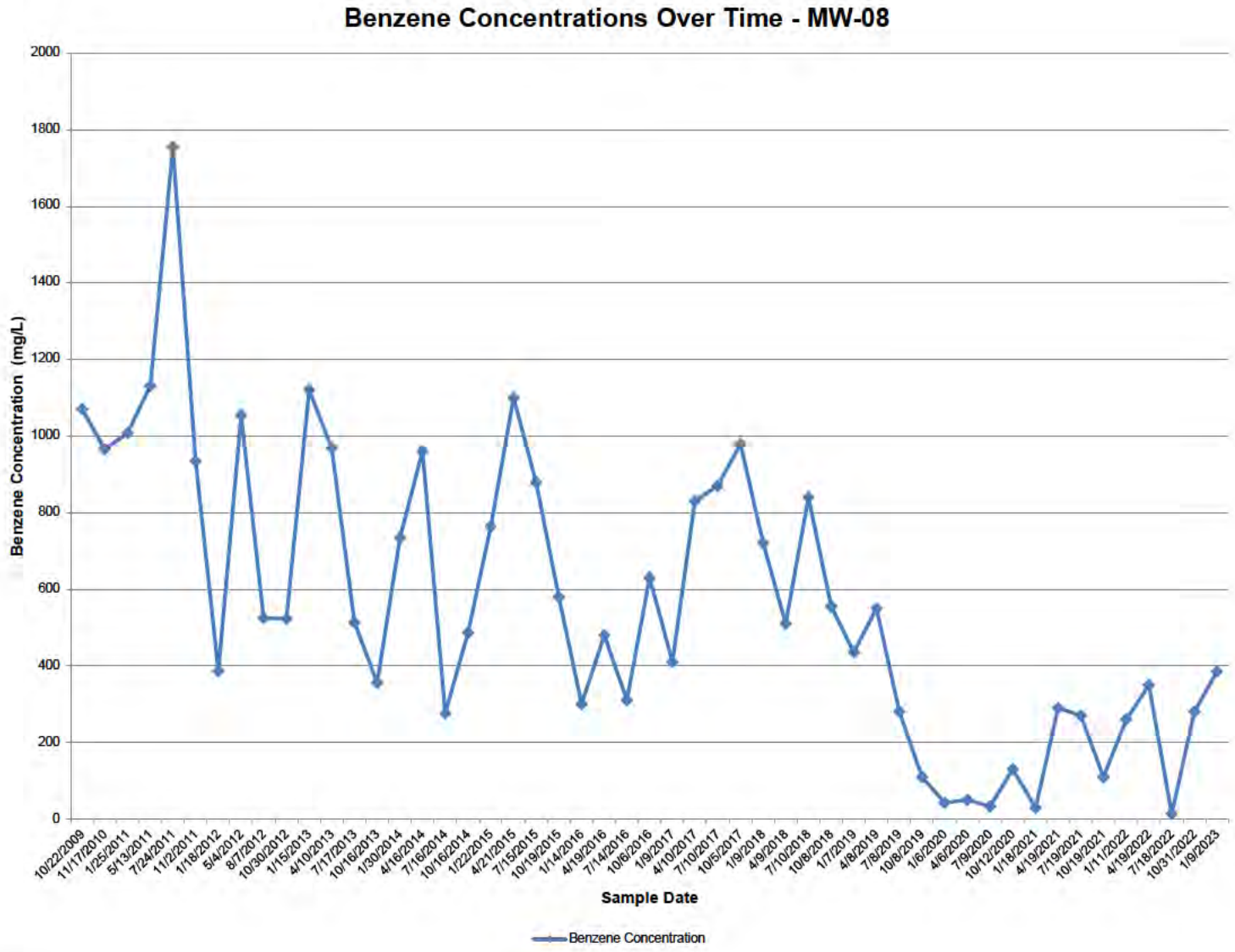


Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.



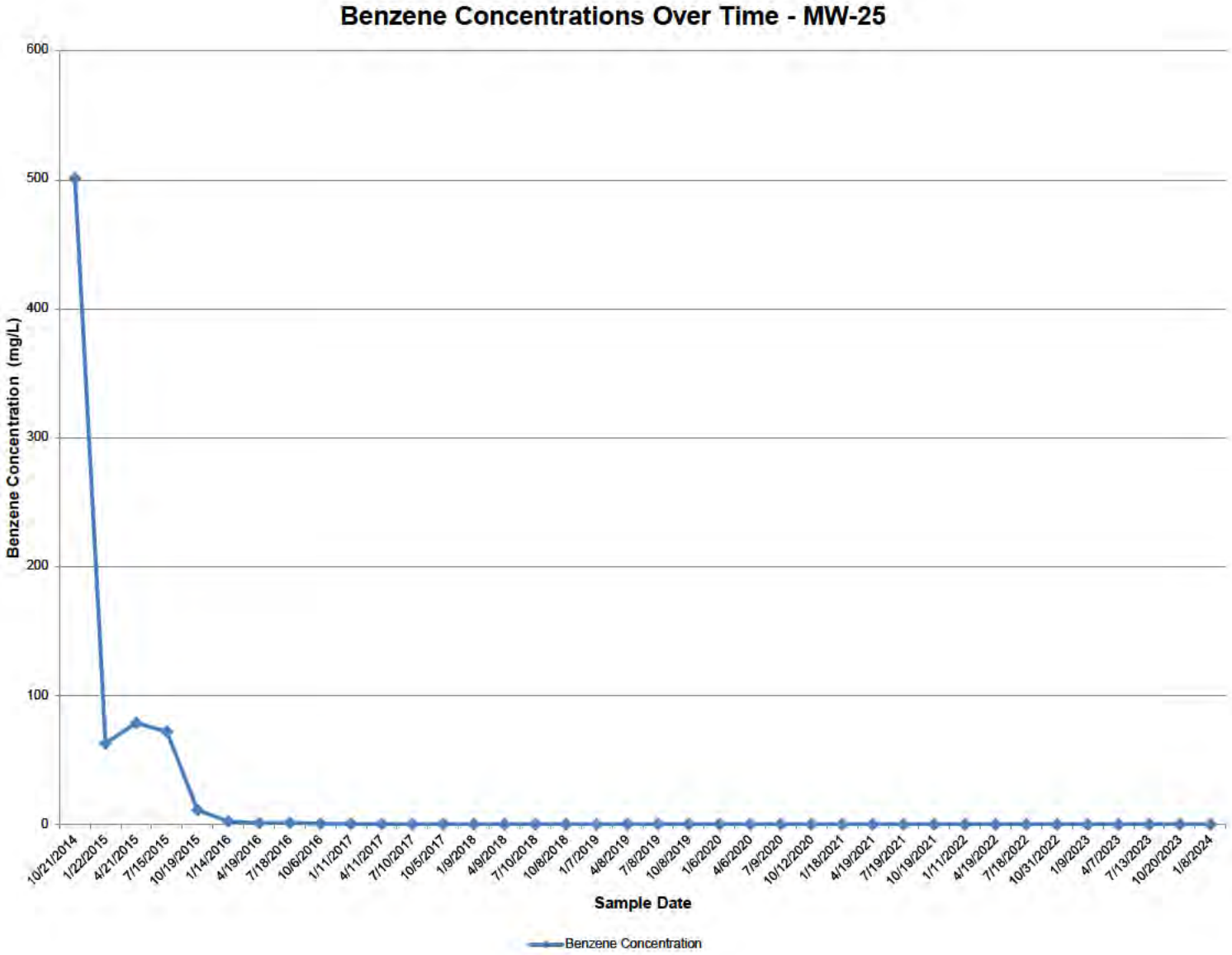
Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Well MW-8 was abandoned on January 10, 2023 after 1Q23 quarterly sampling. Abandonment of MW-8 was approved with conditions in the August 22, 2022 IEPA letter (IEPA 2022) in response to the PWY SEE Work Plan (AECOM 2022a); installation of MW-8A and MW-8B is planned as part of the post-SEE system activities.



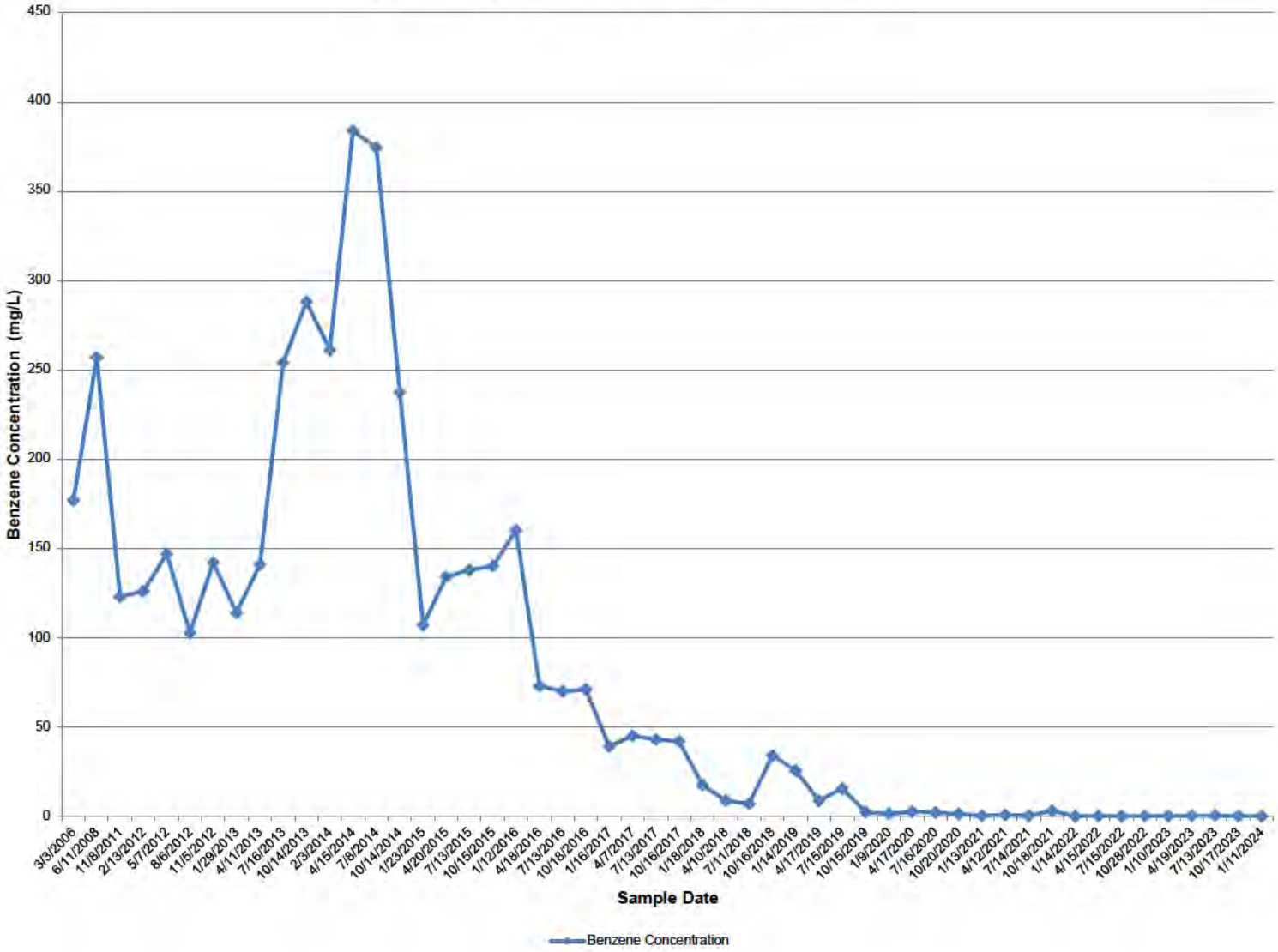
Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Benzene Concentrations Over Time - P-57



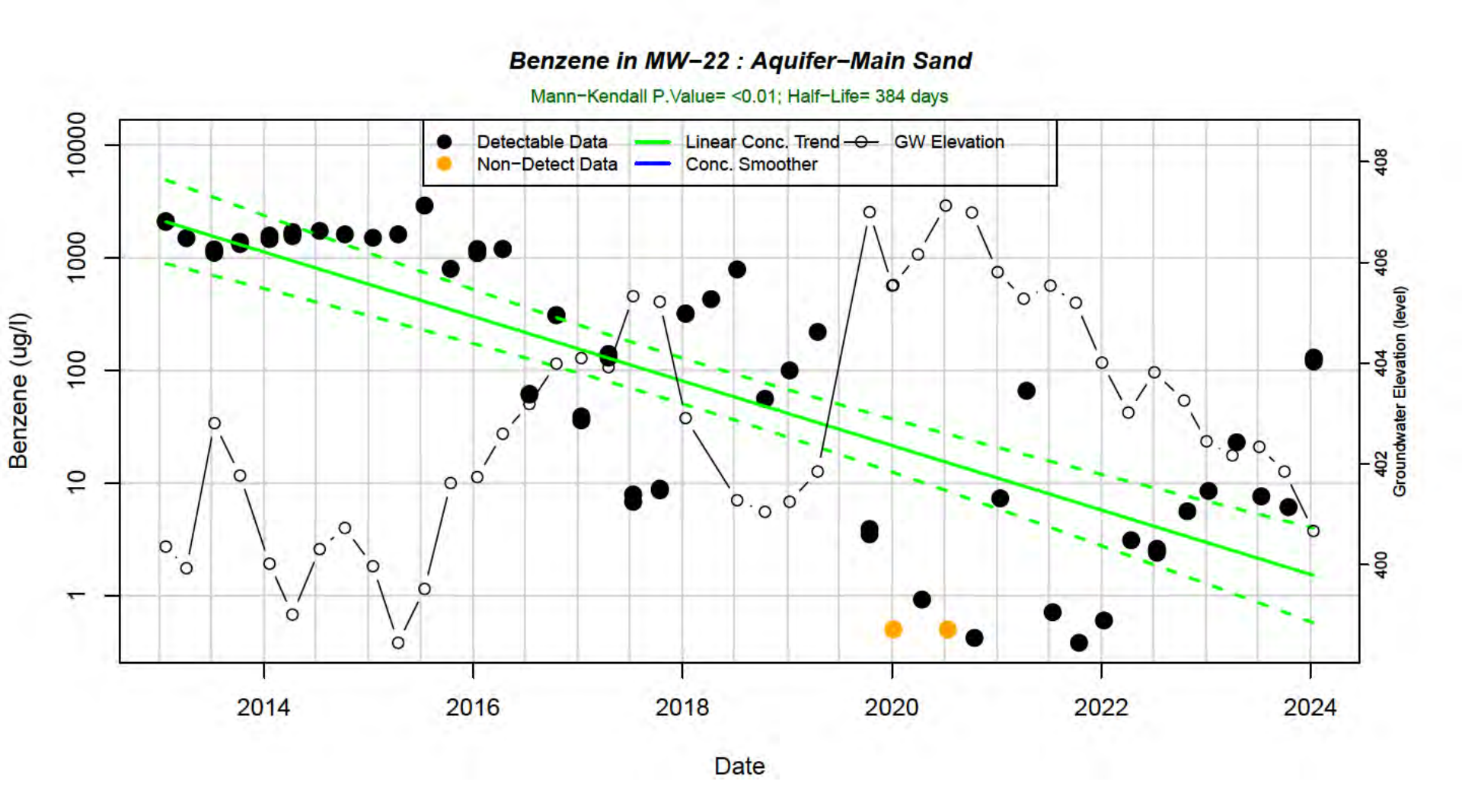
Notes:

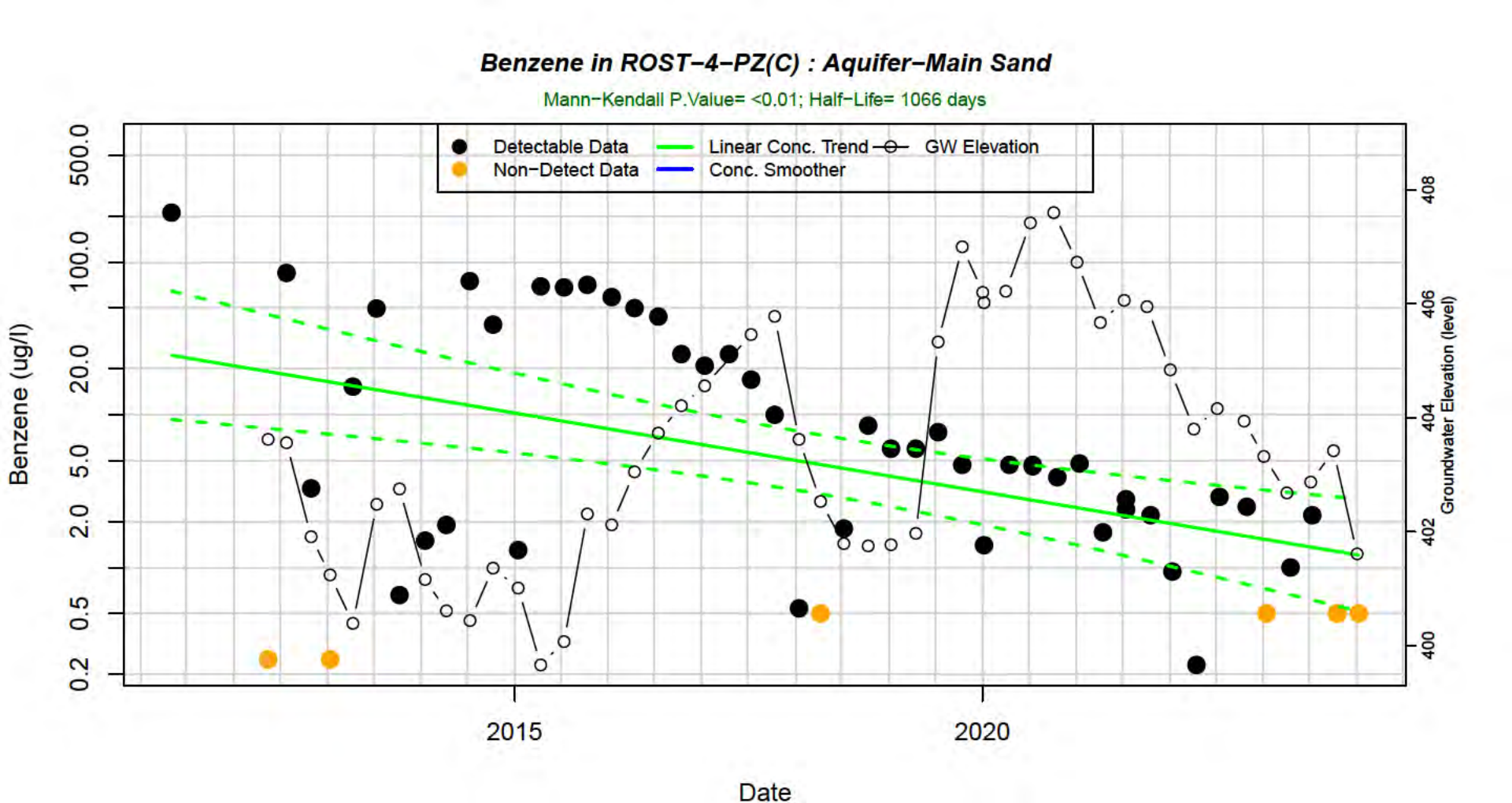
mg/L = milligrams per liter

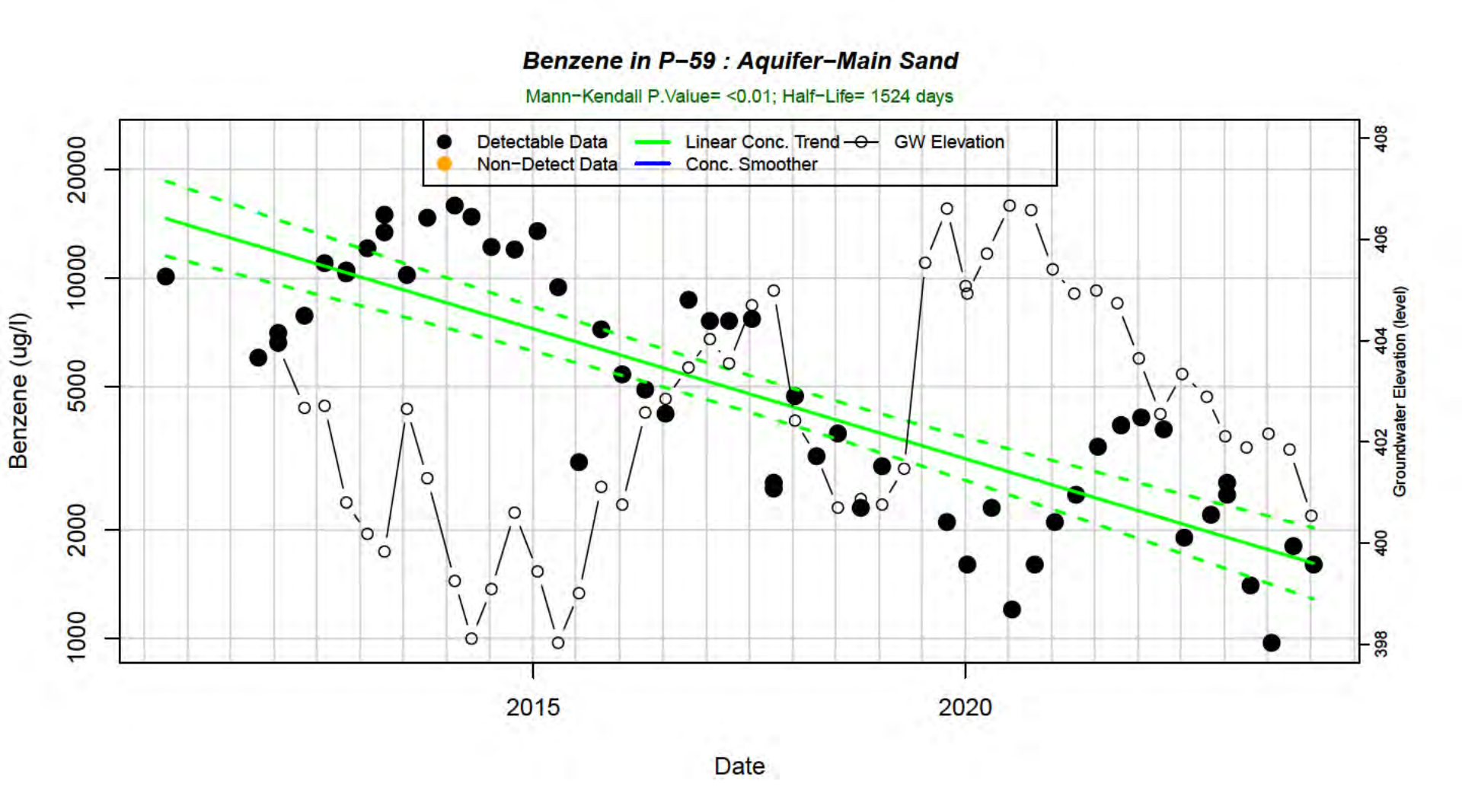
Duplicate values were averaged.

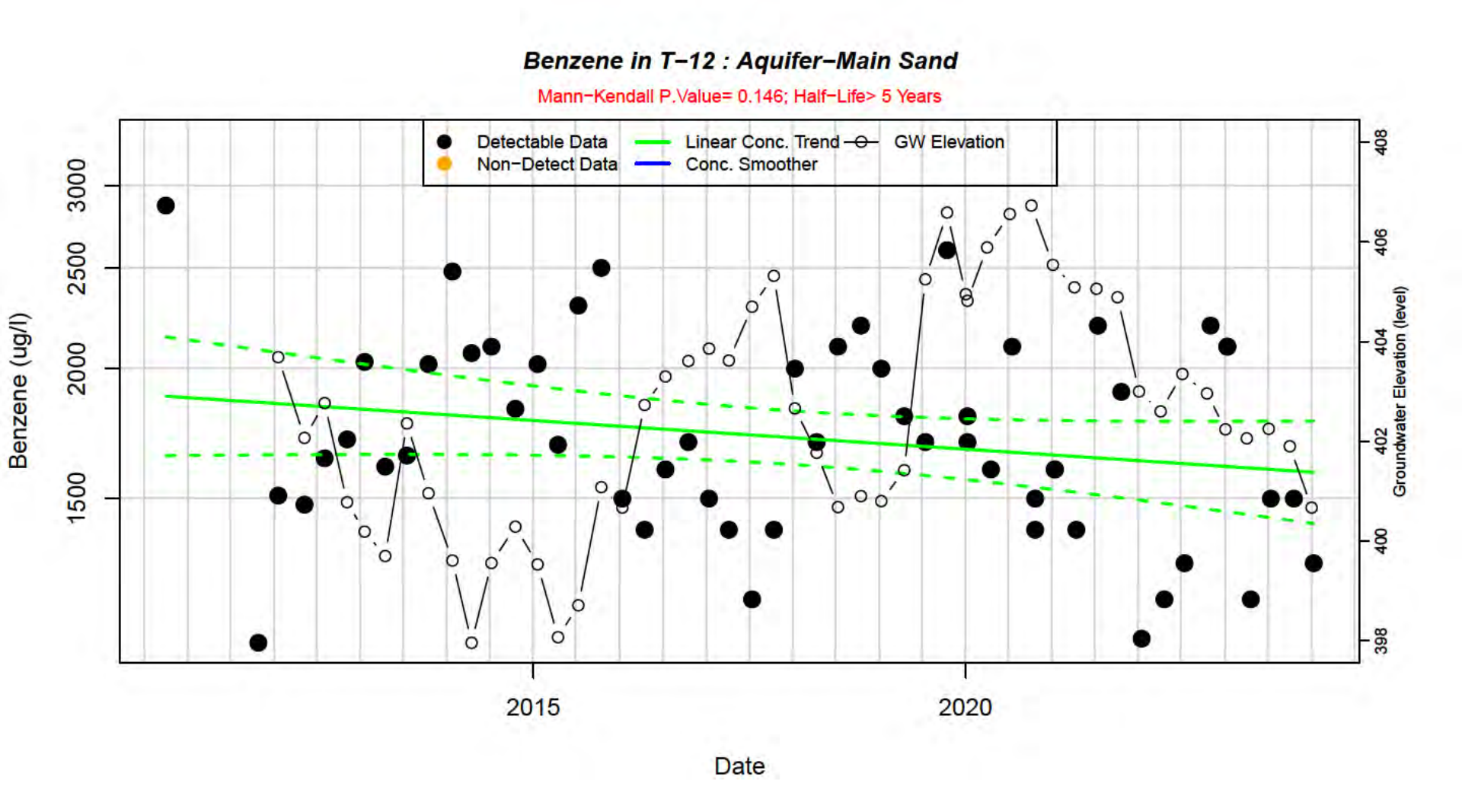
Timeframe specific to available data.

4th Street Area

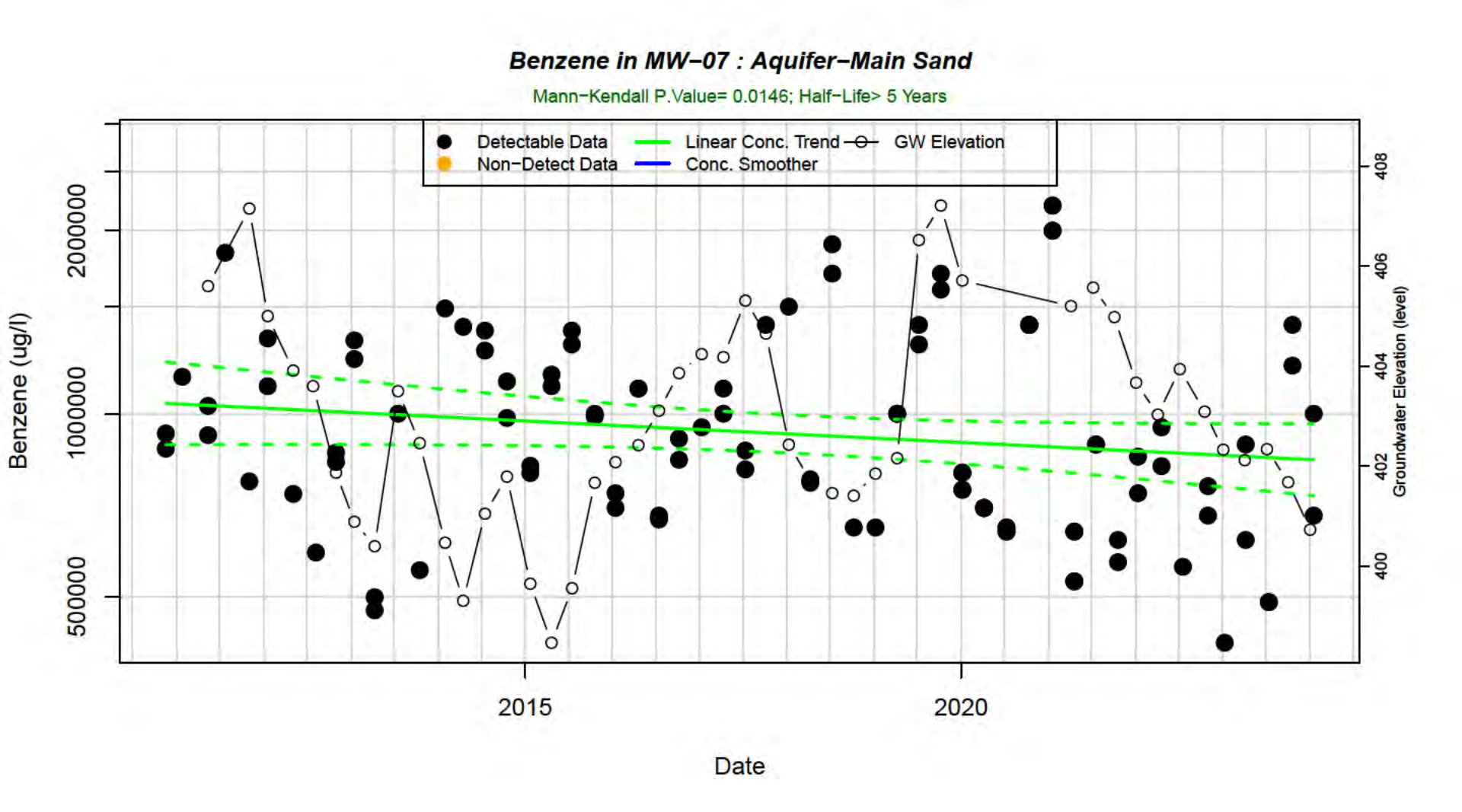

Benzene in MW-22 : Aquifer-Main Sand
Mann-Kendall P.Value= <0.01; Half-Life= 384 days
Detectable Data
Non-Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
10000
1000
100
10
1
Groundwater Elevation (level)
408
406
404
402
400
2014
2016
2018
2020
2022
2024
Date

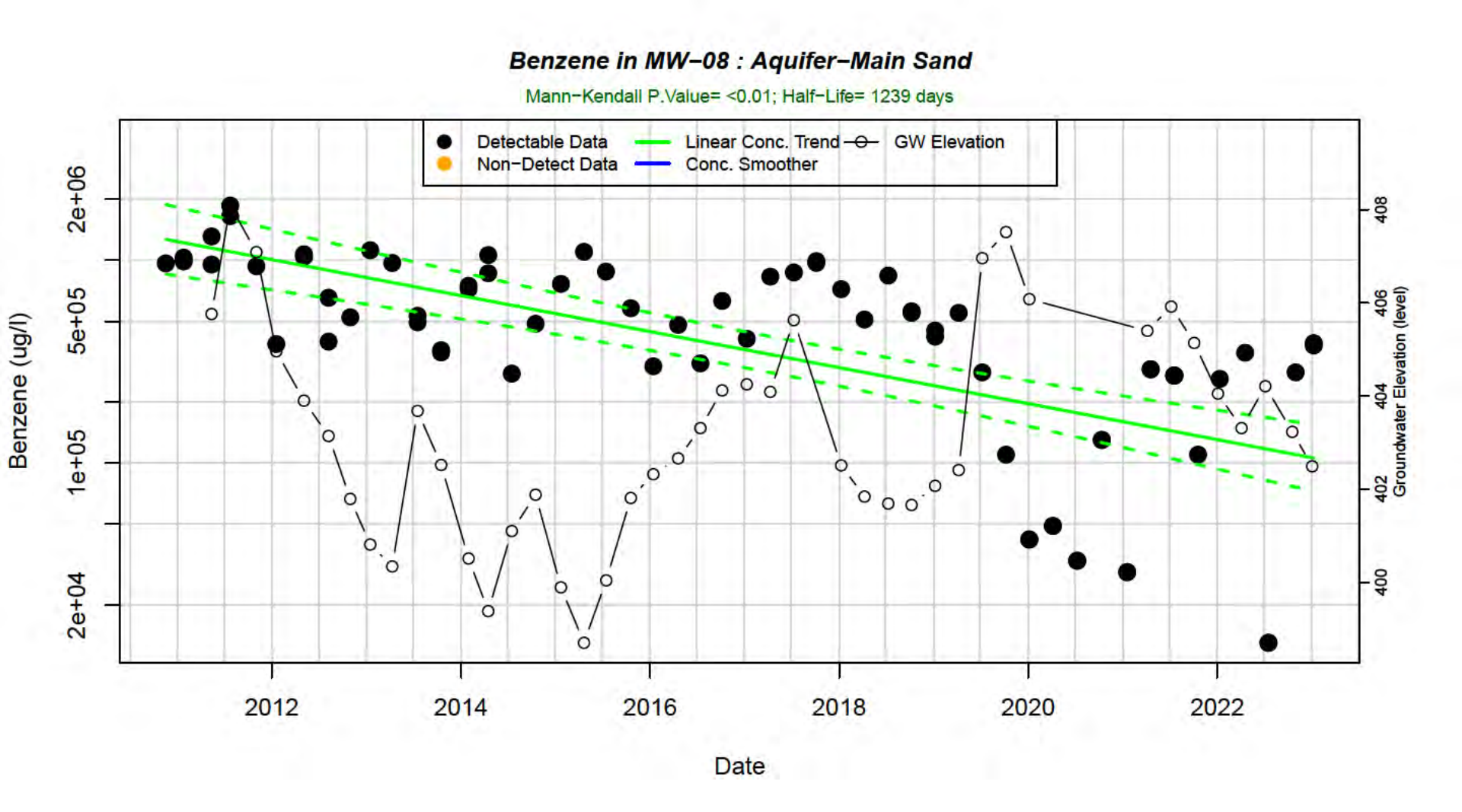

Benzene in ROST−4−PZ(C) : Aquifer−Main Sand
Mann−Kendall P.Value= <0.01; Half−Life= 1066 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
500.0
100.0
20.0
5.0
2.0
0.5
0.2
2015
2020
Date
Groundwater Elevation (level)
408
406
404
402
400

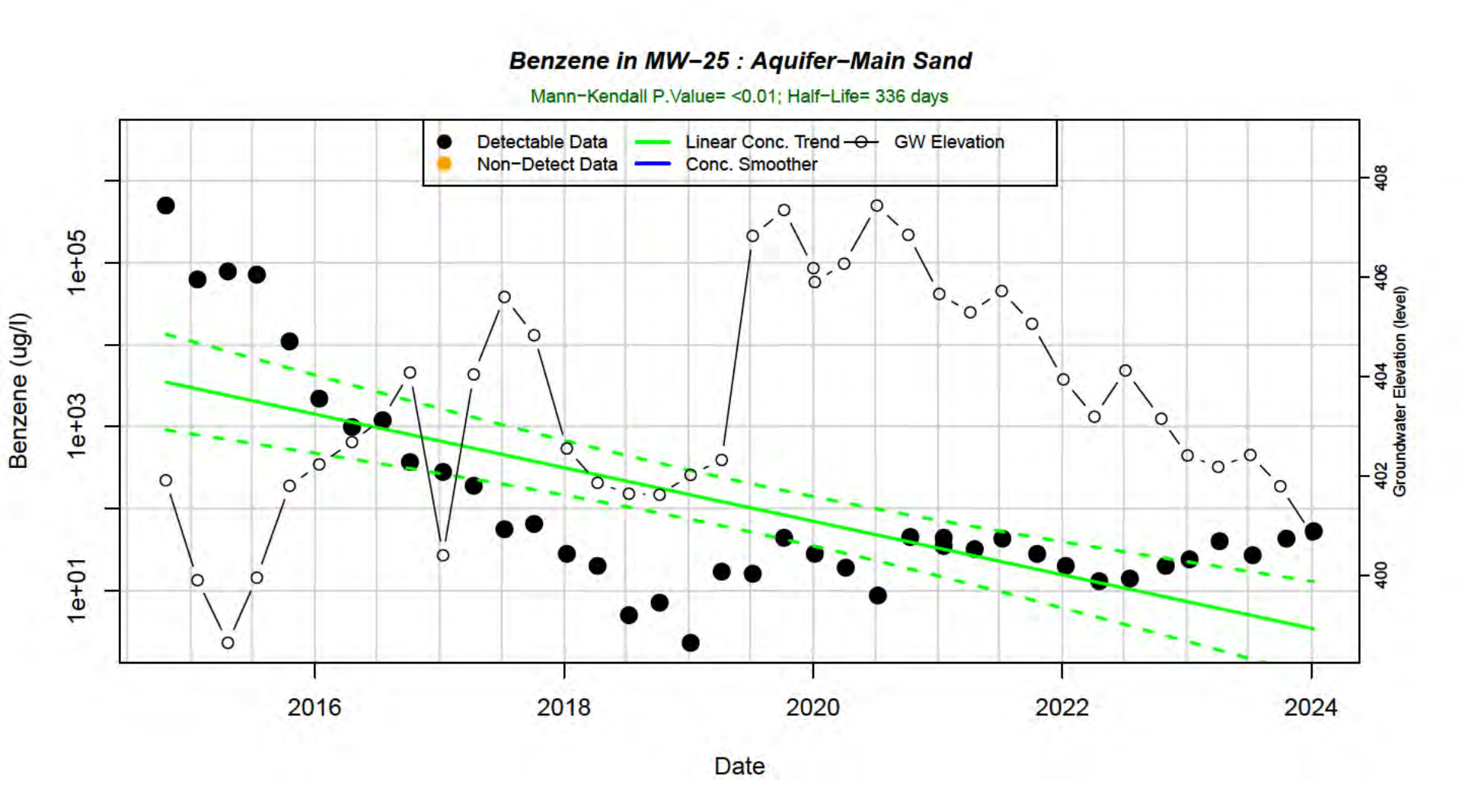

Benzene in P−59 : Aquifer−Main Sand
Mann−Kendall P.Value= <0.01; Half−Life= 1524 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
1000
2000
5000
10000
20000
Groundwater Elevation (level)
398
400
402
404
406
408
2015
2020
Date

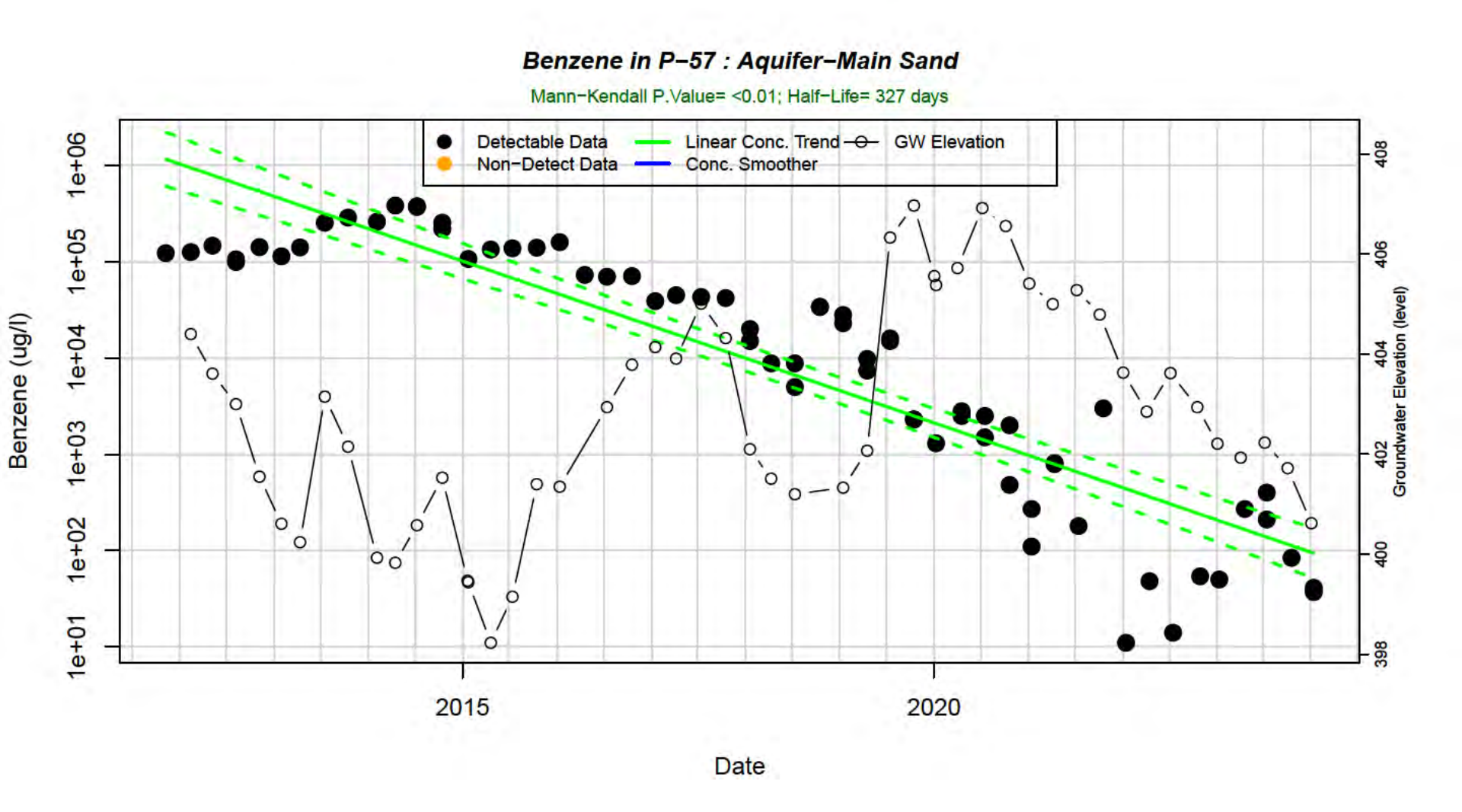

Benzene in T−12 : Aquifer−Main Sand
Mann−Kendall P.Value= 0.146; Half−Life> 5 Years
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
1500
2000
2500
3000
Groundwater Elevation (level)
398
400
402
404
406
408
2015
2020
Date

Public Works Yard Area


Benzene in MW-07 : Aquifer-Main Sand
Mann-Kendall P.Value= 0.0146; Half-Life> 5 Years
Detectable Data
Non-Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
500000
1000000
2000000
2015
2020
Date
Groundwater Elevation (level)
400
402
404
406
408


Benzene in MW−08 : Aquifer−Main Sand
Mann−Kendall P.Value= <0.01; Half−Life= 1239 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
2e+04
1e+05
5e+05
2e+06
Groundwater Elevation (level)
400
402
404
406
408
2012
2014
2016
2018
2020
2022
Date


Benzene in MW−25 : Aquifer−Main Sand
Mann−Kendall P.Value= <0.01; Half−Life= 336 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
1e+01
1e+03
1e+05
Groundwater Elevation (level)
400
402
404
406
408
2016
2018
2020
2022
2024
Date


Benzene in P−57 : Aquifer−Main Sand
Mann−Kendall P.Value= <0.01; Half−Life= 327 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
1e+01
1e+02
1e+03
1e+04
1e+05
1e+06
Groundwater Elevation (level)
398
400
402
404
406
408
2015
2020
Date

Appendix E

Monthly Groundwater Report Attachments

- **Summary of Groundwater Monitoring Well Analytical Detections and Exceedances**

  Nov/Dec 23

- **Data Review Forms and Laboratory Analytical Reports**

  Nov/Dec 23

- **Figure 1 – Groundwater Contours – West Fenceline**

  November 2023

  December 2023

  February 2024

  March 2024

- **Figure 6 – Dissolved Phase Benzene Concentrations in GW**

  Nov/Dec 23

- **Figure 7 – Cross-Section of Benzene GW Results – Chaffer**

  Nov/Dec 23

SEE LAST PAGE OF TABLE FOR NOTES

SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs																		
			Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Cymene (p-Isopropyltoluene)	Ethylbenzene	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	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]	0.7 [1]	0.56	0.7 [1]	0.07 [1]	0.14 [1]	0.7 [3]	0.07 [3]	0.07 [3]	10 [1]		10 [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-01	MW1-ROX-112723	11/27/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
MW-02	MW2-ROX-113023	11/30/2023	< 0.025	**0.0013**	**0.013 J**	**0.0065**	**0.0077**	**0.00092 J**	**0.0065**	**0.091**	**0.055**	< 0.025	< 0.0010	**0.016**	**0.093**	**0.0039**	**0.012**	**0.018**	**0.041**	**0.0044 J**	**0.045**
MW-03	MW3-ROX-112823	11/28/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	**0.00058 J**	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
MW-04	MW4-ROX-120423	12/4/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
MW-05	MW5-ROX-112823	11/28/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	**0.0018**	< 0.0010	< 0.0010	< 0.0010	< 0.025	**0.0029**	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
	MW5-ROX-112823-DUP	11/28/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	**0.0020**	< 0.0010	< 0.0010	< 0.0010	< 0.025	**0.0029**	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
MW-06A	MW6A-ROX-113023	11/30/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	**0.00026 J**	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
MW-06B	MW6B-ROX-113023	11/30/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	**0.00032 J**	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
MW-06C	MW6C-ROX-113023	11/30/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
MW-06D	MW6D-ROX-113023	11/30/2023	< 0.025 UJ	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
MW-07	MW7-ROX-120423	12/4/2023	< 50 UJ	**750**	< 50 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 50 UJ	< 2 UJ	< 10 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 10 UJ	< 10 UJ	< 20 UJ
	MW7-ROX-120423-DUP	12/4/2023	< 50 UJ	**860**	< 50 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 50 UJ	< 2 UJ	< 10 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 10 UJ	< 10 UJ	< 20 UJ
MW-09	MW9-ROX-112723	11/27/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
MW-10	MW10-ROX-112723	11/27/2023	< 0.025 UJ	< 0.0010	< 0.025 UJ	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
MW-11	MW11-ROX-112723	11/27/2023	< 0.025 UJ	< 0.0010	< 0.025 UJ	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010 UJ	< 0.025	< 0.0010	< 0.0050	< 0.0010 UJ	< 0.0010 UJ	< 0.0010 UJ	< 0.0010 UJ	< 0.0050 UJ	< 0.0050 UJ	< 0.01 UJ
MW-12	MW12-ROX-112923	11/29/2023	< 0.025 UJ	< 0.0010	< 0.025 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
MW-13	MW13-ROX-112923	11/29/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	**0.00059 J**	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
MW-14	MW14-ROX-120123	12/1/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.0010**	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	**0.0018**	**0.0025 J**	**0.00081 J**	**0.0056**	**0.0025 J**	**0.0081 J**
	MW14-ROX-120123-DUP	12/1/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.0015**	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	**0.0024**	**0.0046 J**	**0.0014**	**0.0082**	**0.0036 J**	**0.012**
MW-16	MW16-ROX-112823	11/28/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
MW-22	MW22-ROX-113023	11/30/2023	< 0.025	**0.02**	**0.0036 J**	**0.011**	**0.0056**	**0.01**	**0.0055**	**0.072**	**0.05**	< 0.025	< 0.0010	**0.095**	**0.1**	**0.024**	**0.11**	**0.14**	**0.44**	**0.02**	**0.46**
MW-23	MW23-ROX-112923	11/29/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	**0.00090 J**	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
MW-24	MW24-ROX-112823	11/28/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
MW-25	MW25-ROX-120423	12/4/2023	< 0.025	**0.047**	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	**0.00034 J**	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
MW-26	MW26-ROX-112723	11/27/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
MW-27	MW27-ROX-112723	11/27/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
MW-28	MW28-ROX-112723	11/27/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	**0.00039 J**	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01

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SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs																		
			Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Cymene (p-Isopropyltoluene)	Ethylbenzene	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	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]	0.7 [1]	0.56	0.7 [1]	0.07 [1]	0.14 [1]	0.7 [3]	0.07 [3]	0.07 [3]	10 [1]		10 [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
P-54	P54-ROX-112823	11/28/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
P-56	P56-ROX-120123	12/1/2023	0.02 J	< 0.0010	< 0.025	< 0.0010	0.0018	< 0.0010	< 0.0010	0.00051 J	0.011	< 0.025	< 0.0010	< 0.0050	0.012	< 0.0010	0.0017	0.0010	0.0066	< 0.0050	0.0069 J
P-57	P57-ROX-120423	12/4/2023	< 0.025	0.0070	< 0.025	0.0017	0.0040	0.0044	< 0.0010	0.00062 J	0.018	< 0.025	< 0.0010	< 0.0050	0.019	0.0027	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
P-58	P58-ROX-120523	12/5/2023	< 50	530	< 50	< 2	< 2	< 2	< 2	< 2	< 2	< 50	< 2	< 10	< 2	< 2	< 2	< 2	< 10	< 10	< 20
P-59	P59-ROX-120423	12/4/2023	< 0.13	1.2	< 0.13	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.063	0.031	< 0.13	< 0.0050	0.016 J	0.048	0.049	0.01	0.019	0.072	< 0.025	0.075
P-74	P74-ROX-120423	12/4/2023	< 0.13	1	< 0.13	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.01	< 0.0050	0.01 J	0.0092	< 0.025	< 0.0050	0.014	0.0061	< 0.0050	0.033	< 0.025	0.035 J
P-93A	P93A-ROX-120123	12/1/2023	< 0.025	0.0021	< 0.025	< 0.0010	< 0.0010	0.00094 J	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
P-93B	P93B-ROX-120523	12/5/2023	< 130 UJ	2100	< 130 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 130 UJ	< 5 UJ	< 25 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 25 UJ	< 25 UJ	< 50 UJ
P-93C	P93C-ROX-120123	12/1/2023	< 13	49 J	< 13	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 13	< 0.5	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 2.5	< 5
	P93C-ROX-120123-DUP	12/1/2023	< 13 UJ	67 J	< 13 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 13 UJ	< 0.5 UJ	< 2.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 2.5 UJ	< 2.5 UJ	< 5 UJ
P-93D	P93D-ROX-120423	12/4/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00085 J	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
P-114R	P114R-ROX-112923	11/29/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0013	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
ROST-3-MW	ROST3MW-ROX-112823	11/28/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
ROST-4-PZ(C)	ROST4PZ(C)-ROX-112823	11/28/2023	< 0.025	< 0.0010	0.0046 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	0.00069 J	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
ROST-4-PZ(E)	ROST4PZ(E)-ROX-113023	11/30/2023	< 0.025	< 0.0010	0.0058 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0011	0.00064 J	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010	0.0086	< 0.0010	0.0016 J	< 0.0050	0.0018 J
ROST-4-PZ(G)	ROST4PZ(G)-ROX-112823	11/28/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01
T-12	T12-ROX-120423	12/4/2023	< 0.25	1.3	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	0.0057 J	0.011	< 0.25	< 0.01	< 0.05	0.01	0.023	< 0.01	< 0.01	0.032 J	< 0.05	0.035 J
	T12-ROX-120423-DUP	12/4/2023	< 0.25	1.3	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.0092 J	< 0.25	< 0.01	< 0.05	0.0076 J	0.021	< 0.01	< 0.01	0.028 J	< 0.05	0.03 J

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			SVOCs												
			Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzoic Acid	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	2-Chloronaphthalene	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)acridine	Dibenzo(a,h)anthracene
Screening Values (mg/L)			0.42 [1]	0.42 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	28 [1]	0.006 [1]	1.4 [2]	0.56 [3]	0.012 [1]		0.0003 [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**													
MW-01	MW1-ROX-112723	11/27/2023	< 0.00020	< 0.00020 U	< 0.00020	**0.000050 J**	< 0.00020	< 0.00020 U	< 0.00020	< 0.031	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.01	< 0.00020
MW-02	MW2-ROX-113023	11/30/2023	< 0.00021	< 0.00021	< 0.00021 H UJ	< 0.00021 H UJ	< 0.00021	< 0.00021 H UJ	< 0.00021	< 0.032	< 0.011	< 0.011	< 0.011	< 0.00021	< 0.011	< 0.00021
MW-03	MW3-ROX-112823	11/28/2023	< 0.00019	< 0.00019	< 0.00019	< 0.00019 H UJ	< 0.00019	< 0.00019	< 0.00019 H UJ	< 0.028	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.0095	< 0.00019 H UJ
MW-04	MW4-ROX-120423	12/4/2023	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.031	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.01	< 0.00020
MW-05	MW5-ROX-112823	11/28/2023	< 0.00020	< 0.00022 H UJ	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.01	< 0.00020
	MW5-ROX-112823-DUP	11/28/2023	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.01	< 0.00020
MW-06A	MW6A-ROX-113023	11/30/2023	< 0.00019	< 0.00019	< 0.00019	**0.000062 J**	**0.00011 J**	**0.000064 J**	**0.000030 J J**	< 0.028	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.0095	< 0.00019
MW-06B	MW6B-ROX-113023	11/30/2023	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	< 0.0094	< 0.0094	< 0.0094	< 0.00019	< 0.0094	< 0.00019
MW-06C	MW6C-ROX-113023	11/30/2023	< 0.00019	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019	< 0.028	< 0.0094	< 0.0094	< 0.0094	< 0.00019	< 0.0094	< 0.00019
MW-06D	MW6D-ROX-113023	11/30/2023	< 0.00019	< 0.00019	< 0.00019	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	< 0.028	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.0095	< 0.00019 H UJ
MW-07	MW7-ROX-120423	12/4/2023	< 0.00020	**0.00014 J**	**0.000083 J**	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.031	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.01	< 0.00020
	MW7-ROX-120423-DUP	12/4/2023	**0.00013 J**	**0.00014 J**	**0.000095 J**	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.032	< 0.011 H UJ	< 0.011	< 0.011	< 0.00021	< 0.011	< 0.00021
MW-09	MW9-ROX-112723	11/27/2023	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.0095	< 0.00019
MW-10	MW10-ROX-112723	11/27/2023	< 0.00019	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019	< 0.00019 H UJ	**0.000068 H J**	< 0.00019	< 0.029	< 0.0095	**0.0029 J**	< 0.0095	< 0.00019	< 0.0095	< 0.00019
MW-11	MW11-ROX-112723	11/27/2023	< 0.00020	< 0.00021 H UJ	< 0.00021 H UJ	< 0.00021 H UJ	< 0.00021 H UJ	< 0.00021 H UJ	< 0.00021 H UJ	< 0.00020	< 0.031	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.01	< 0.00021 H UJ
MW-12	MW12-ROX-112923	11/29/2023	< 0.00020	< 0.00020	< 0.00020	< 0.00020 H UJ	< 0.00020 H UJ	< 0.00020 H UJ	< 0.00020 H UJ	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.01	< 0.00020 H UJ
MW-13	MW13-ROX-112923	11/29/2023	< 0.00021	< 0.00021	< 0.00021	< 0.00021 H UJ	< 0.00021	< 0.00021 H UJ	< 0.00021	< 0.031	< 0.01 H UJ	< 0.01 H UJ	**0.00019 J H J**	< 0.00021	< 0.01 H UJ	< 0.00021
MW-14	MW14-ROX-120123	12/1/2023	< 0.00020	< 0.00020	**0.000091 J**	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.01	< 0.00020
	MW14-ROX-120123-DUP	12/1/2023	< 0.00020	< 0.00020	**0.00011 J**	**0.000059 J**	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.01	< 0.00020
MW-16	MW16-ROX-112823	11/28/2023	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	< 0.0094	< 0.0094	< 0.0094	< 0.00019	< 0.0094	< 0.00019
MW-22	MW22-ROX-113023	11/30/2023	< 0.00021	< 0.00021	< 0.00021	**0.000069 J**	< 0.00021	**0.000073 J**	< 0.00021	< 0.031	< 0.011 H UJ	< 0.01	< 0.01	< 0.00021	< 0.01	**0.000061 J**
MW-23	MW23-ROX-112923	11/29/2023	< 0.00020	< 0.00020	< 0.00020 H UJ	< 0.00020 H UJ	< 0.00020 H UJ	< 0.00020 H UJ	< 0.00020 H UJ	< 0.03	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.01	< 0.00020 H UJ
MW-24	MW24-ROX-112823	11/28/2023	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.032	< 0.011	< 0.011	< 0.011	< 0.00021	< 0.011	< 0.00020 H UJ
MW-25	MW25-ROX-120423	12/4/2023	< 0.00020	< 0.00020	< 0.00020	< 0.00020 H UJ	< 0.00020 H UJ	< 0.00020 H UJ	< 0.00020 H UJ	< 0.031 UJ	< 0.01	< 0.01	< 0.01	< 0.00020 H UJ	< 0.01	< 0.00020 H UJ
MW-26	MW26-ROX-112723	11/27/2023	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.031	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.01	< 0.00021
MW-27	MW27-ROX-112723	11/27/2023	< 0.00020	< 0.00020	< 0.00021 H UJ	< 0.00021 H UJ	< 0.00020	< 0.00021 H UJ	< 0.00020	< 0.031	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.01	< 0.00020
MW-28	MW28-ROX-112723	11/27/2023	< 0.00019	< 0.00019	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	< 0.028	**0.0051 J**	< 0.0094	< 0.0094	< 0.00019	< 0.0094	< 0.00019 H UJ

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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	Benzoic Acid	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	2-Chloronaphthalene	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)acridine	Dibenzo(a,h)anthracene
Screening Values (mg/L)			0.42 [1]	0.42 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	28 [1]	0.006 [1]	1.4 [2]	0.56 [3]	0.012 [1]		0.0003 [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**													
P-54	P54-ROX-112823	11/28/2023	< 0.00020	< 0.00020	< 0.00020	< 0.00020 H UJ	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01	< 0.01	< 0.01	< 0.00020	0.0019 J	< 0.00020 H UJ
P-56	P56-ROX-120123	12/1/2023	0.00039	< 0.00019	0.00010 J	0.000057 J	< 0.00019	0.000052 J	< 0.00019	< 0.028	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.0095	0.000061 J J
P-57	P57-ROX-120423	12/4/2023	0.00016 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.0098	< 0.00020
P-58	P58-ROX-120523	12/5/2023	0.00035	< 0.00020	0.00011 J	0.000045 J J	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.0099	0.000053 J	< 0.0099	< 0.00020
P-59	P59-ROX-120423	12/4/2023	0.00038	< 0.00019	0.00023	0.000052 J J	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0096	< 0.0096	< 0.0096	0.000055 J	< 0.0096	< 0.00019
P-74	P74-ROX-120423	12/4/2023	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.0098	< 0.00020
P-93A	P93A-ROX-120123	12/1/2023	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0096	< 0.0096	< 0.0096	< 0.00019	< 0.0096	< 0.00019
P-93B	P93B-ROX-120523	12/5/2023	< 0.00020	0.00014 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.012 J	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.0098	< 0.00020
P-93C	P93C-ROX-120123	12/1/2023	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	0.015 J*1	< 0.0096	< 0.0096	< 0.0096	< 0.00019	< 0.0096	< 0.00019
	P93C-ROX-120123-DUP	12/1/2023	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	0.015 J*1	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.0095	< 0.00019
P-93D	P93D-ROX-120423	12/4/2023	< 0.00021	0.000056 J	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.031	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.01	< 0.00021
P-114R	P114R-ROX-112923	11/29/2023	0.00057	< 0.00020	0.000086 J	0.000053 J	< 0.00020	0.000048 J	< 0.00020	< 0.031	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.01	< 0.00020
ROST-3-MW	ROST3MW-ROX-112823	11/28/2023	< 0.00021 H UJ	< 0.00020	< 0.00020	< 0.00021 H UJ	< 0.00020	< 0.00020	< 0.00021 H UJ	< 0.031	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.01	< 0.00021 H UJ
ROST-4-PZ(C)	ROST4PZ(C)-ROX-112823	11/28/2023	0.00024	0.000082 J	0.00018 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.0095	< 0.00019
ROST-4-PZ(E)	ROST4PZ(E)-ROX-113023	11/30/2023	< 0.00020 H UJ	< 0.00021	< 0.00020 H UJ	< 0.00020 H UJ	< 0.00020 H UJ	< 0.00020 H UJ	< 0.00021	< 0.032 UJ	< 0.011 UJ	< 0.011 UJ	< 0.011 UJ	< 0.00020 H UJ	< 0.011 UJ	< 0.00021
ROST-4-PZ(G)	ROST4PZ(G)-ROX-112823	11/28/2023	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.0095	< 0.00019
T-12	T12-ROX-120423	12/4/2023	0.00025	< 0.00020	0.000069 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099 H UJ	< 0.0098	< 0.0098	< 0.00020	< 0.0098	< 0.00020
	T12-ROX-120423-DUP	12/4/2023	0.00028	< 0.00020	0.000068 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.0099	< 0.00020

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SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs														
			Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Dimethyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	3&4-Methylphenol (m & p-Cresol)	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)			0.007 [3]	5.6 [1]	0.14 [2]		0.14 [2]	0.28 [1]	0.28 [1]		0.00043 [1]	0.49 [3]	0.028 [1]	0.14 [3]	0.21 [3]	0.1 [1]	0.21 [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**														
MW-01	MW1-ROX-112723	11/27/2023	< 0.01	< 0.01 U	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020 U	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0.00020
MW-02	MW2-ROX-113023	11/30/2023	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.00021 H UJ	**0.0061 H J**	**0.0089 H J**	< 0.021	< 0.00021	< 0.011	< 0.00021
MW-03	MW3-ROX-112823	11/28/2023	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.00019	< 0.0095	< 0.00019 H UJ	< 0.00019	< 0.00019	< 0.019	< 0.00019	< 0.0095	< 0.00019
MW-04	MW4-ROX-120423	12/4/2023	< 0.01	**0.00030 J**	< 0.01	< 0.01 U	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0.00020
MW-05	MW5-ROX-112823	11/28/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00022 H UJ	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0.00020
	MW5-ROX-112823-DUP	11/28/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0.00020
MW-06A	MW6A-ROX-113023	11/30/2023	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.00019	< 0.0095	**0.000073 J**	< 0.00019	< 0.00019	< 0.019	< 0.00019	< 0.0095	**0.000046 J**
MW-06B	MW6B-ROX-113023	11/30/2023	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.00019	< 0.00019	< 0.0094	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.00019	< 0.0094	< 0.00019
MW-06C	MW6C-ROX-113023	11/30/2023	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.00019	< 0.00019	< 0.0094	< 0.00019 H UJ	< 0.00019	< 0.00019 H UJ	< 0.019	< 0.00019	< 0.0094	< 0.00019
MW-06D	MW6D-ROX-113023	11/30/2023	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.00019	< 0.0095	< 0.00019 H UJ	< 0.00019	< 0.00019	< 0.019	< 0.00019	< 0.0095	< 0.00019
MW-07	MW7-ROX-120423	12/4/2023	< 0.01	**0.00043 J**	< 0.01	**0.0017 J**	< 0.01	**0.000043 J**	**0.000096 J**	< 0.01	< 0.00020	**0.0010**	**0.0015**	< 0.02	**0.00014 J**	**0.097 *1 J**	< 0.00020
	MW7-ROX-120423-DUP	12/4/2023	< 0.011	**0.00055 J**	< 0.011	< 0.011	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.00021	**0.0011**	**0.0015**	< 0.021	**0.00012 J**	**0.067 *1 J**	< 0.00021
MW-09	MW9-ROX-112723	11/27/2023	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.00019	< 0.0095	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.00019	< 0.0095	< 0.00019
MW-10	MW10-ROX-112723	11/27/2023	< 0.0095	< 0.0095	< 0.0095	< 0.0095	**0.0043 J**	< 0.00019	< 0.00019	< 0.0095	< 0.00019 H UJ	< 0.00019	< 0.00019	< 0.019	< 0.00019	< 0.0095	< 0.00019
MW-11	MW11-ROX-112723	11/27/2023	< 0.01	**0.00025 J**	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00021 H UJ	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0.00020
MW-12	MW12-ROX-112923	11/29/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020 H UJ	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0.00020
MW-13	MW13-ROX-112923	11/29/2023	< 0.01 J UJ	**0.00026 J H J**	< 0.01	**0.0012 J H J**	< 0.01 H UJ	< 0.00021	< 0.00021	< 0.01 H UJ	< 0.00021 H UJ	< 0.00021	< 0.00021	< 0.021	< 0.00021	< 0.01	< 0.00021
MW-14	MW14-ROX-120123	12/1/2023	< 0.01	**0.00044 J**	< 0.01	**0.0014 J**	< 0.01	**0.000037 J**	< 0.00020	< 0.01	< 0.00020	**0.00038**	**0.00050**	< 0.02	**0.00014 J**	< 0.01	**0.00010 J**
	MW14-ROX-120123-DUP	12/1/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	**0.00044**	**0.00056**	< 0.02	**0.00013 J**	< 0.01	**0.000098 J**
MW-16	MW16-ROX-112823	11/28/2023	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.00019	< 0.00019	< 0.0094	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.00019	< 0.0094	< 0.00019
MW-22	MW22-ROX-113023	11/30/2023	< 0.01	< 0.01	**0.0045 J**	< 0.01	< 0.01	**0.000039 J**	**0.000099 J**	< 0.01	**0.000082 J**	**0.0083**	**0.01**	< 0.021	< 0.00021	< 0.01	< 0.00021
MW-23	MW23-ROX-112923	11/29/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020 H UJ	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0.00020
MW-24	MW24-ROX-112823	11/28/2023	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.00020 H UJ	< 0.00021	< 0.00021	< 0.021	< 0.00021	< 0.011	< 0.00021
MW-25	MW25-ROX-120423	12/4/2023	< 0.01	< 0.01	< 0.01 UJ	< 0.01	< 0.01	< 0.00020 H UJ	< 0.00020	< 0.01	< 0.00020 H UJ	< 0.00020	< 0.00020	< 0.02 UJ	< 0.00020	< 0.01 UJ	< 0.00020 H UJ
MW-26	MW26-ROX-112723	11/27/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.021	< 0.00021	< 0.01	< 0.00021
MW-27	MW27-ROX-112723	11/27/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0.00020
MW-28	MW28-ROX-112723	11/27/2023	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.00019	< 0.00019	< 0.0094	< 0.00019 H UJ	< 0.00019	< 0.00019	< 0.019	< 0.00019	< 0.0094	< 0.00019

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			SVOCs														
			Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Dimethyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	3&4-Methylphenol (m & p-Cresol)	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)			0.007 [3]	5.6 [1]	0.14 [2]		0.14 [2]	0.28 [1]	0.28 [1]		0.00043 [1]	0.49 [3]	0.028 [1]	0.14 [3]	0.21 [3]	0.1 [1]	0.21 [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**														
P-54	P54-ROX-112823	11/28/2023	< 0.01	0.00032 J	< 0.01	< 0.01	0.00085 J	0.000040 H J	< 0.00020	< 0.01	< 0.00020 H UJ	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0.00020
P-56	P56-ROX-120123	12/1/2023	< 0.0095	0.00041 J	< 0.0095	< 0.0095	< 0.0095	< 0.00019	0.00021	< 0.0095	0.000074 J	0.0030	0.0023	< 0.019	0.00032	< 0.0095	< 0.00019
P-57	P57-ROX-120423	12/4/2023	0.00038 J	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	0.00028	< 0.0098	< 0.00020	0.0079	0.0012	< 0.02	< 0.00020	< 0.0098	< 0.00020
P-58	P58-ROX-120523	12/5/2023	0.0016 J	< 0.0099	< 0.0099	< 0.0099	< 0.0099	0.000050 J	0.00072	0.0012 J	< 0.00020	0.037	0.018	0.0019 J	0.00061	0.77	0.000088 J
P-59	P59-ROX-120423	12/4/2023	< 0.0096	0.00049 J	< 0.0096	< 0.0096	< 0.0096	0.00018 J	0.00031	< 0.0096	< 0.00019	0.0066	0.0079	< 0.019	0.00049	0.024	0.00024
P-74	P74-ROX-120423	12/4/2023	< 0.0098	0.00026 J	0.0047 J	< 0.0098 U	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	0.00032	0.00024	< 0.02	< 0.00020	0.0039 J	< 0.00020
P-93A	P93A-ROX-120123	12/1/2023	< 0.0096	< 0.0096	< 0.0096	0.0011 J	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.00019	< 0.0096	< 0.00019
P-93B	P93B-ROX-120523	12/5/2023	< 0.0098	< 0.0098	0.0034 J	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	0.00015 J	0.00012 J	0.00067 J	< 0.00020	0.24	< 0.00020
P-93C	P93C-ROX-120123	12/1/2023	< 0.0096	0.00038 J	< 0.0096	0.0014 J	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.00019	0.054 *1	< 0.00019
	P93C-ROX-120123-DUP	12/1/2023	< 0.0095	0.00036 J	< 0.0095	0.0013 J	< 0.0095	< 0.00019	< 0.00019	< 0.0095	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.00019	0.043 *1	< 0.00019
P-93D	P93D-ROX-120423	12/4/2023	< 0.01	< 0.01	< 0.01	< 0.01 U	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.021	< 0.00021	< 0.01	< 0.00021
P-114R	P114R-ROX-112923	11/29/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00041	< 0.00041	< 0.02	< 0.00020	< 0.01	< 0.00020
ROST-3-MW	ROST3MW-ROX-112823	11/28/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021 H UJ	< 0.00021 H UJ	< 0.01	< 0.00021 H UJ	0.00031 H J	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0.00021 H UJ
ROST-4-PZ(C)	ROST4PZ(C)-ROX-112823	11/28/2023	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	0.000049 J	0.00026	< 0.0095	0.000033 J	0.00013 J	< 0.00019	< 0.019	0.000089 J	< 0.0095	0.000057 J
ROST-4-PZ(E)	ROST4PZ(E)-ROX-113023	11/30/2023	< 0.011 UJ	< 0.011 UJ	< 0.011 UJ	< 0.011 UJ	< 0.011 UJ	< 0.00020 H UJ	< 0.00020 H UJ	< 0.011 UJ	< 0.00021	0.0061 H J	0.0088 H J	< 0.021 UJ	< 0.00020 H UJ	< 0.011 UJ	< 0.00020 H UJ
ROST-4-PZ(G)	ROST4PZ(G)-ROX-112823	11/28/2023	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019 H UJ	< 0.00019	< 0.0095	< 0.00019 H UJ	< 0.00019	< 0.00019	< 0.019	< 0.00019	< 0.0095	< 0.00019
T-12	T12-ROX-120423	12/4/2023	0.00021 J	< 0.0098	< 0.0098	< 0.0098 U	< 0.0098	0.000043 J	0.00026	< 0.0098	< 0.00020	0.014	0.019	0.00045 J	0.00043	0.035	< 0.00020
	T12-ROX-120423-DUP	12/4/2023	0.00027 J	< 0.0099	< 0.0099	< 0.0099	< 0.0099	0.000035 J	0.00021	< 0.0099	< 0.00020	0.014	0.019	0.00047 J	0.00046	0.039	< 0.00020

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-66, and P-68, contained LNAPL; therefore, these wells were not sampled.

LABORATORY QUALIFIERS

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

*1 = LCS/LCSD RPD is outside contol limit

H = Analyzed or extracted out of holding time criteria

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

AECOM QUALIl Indicates a current exceedance of screening criteria.

J = The result is estimated.

UJ = Estimated non-detect.

U = Result is non-detect.

Analytes that were non-detect across all sampling locations during the November/December sampling event are not presented on the Analytical table.

Roxana Groundwater Monthly – November/December 2023 Data Review

Laboratory SDG: 400-247369-1-Rev.1

Data Reviewer: Andrei Niculau

Peer Reviewer: Cheyana Cokley

Date Reviewed: 12/28/2023

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

Sample Identification	Sample Identification
TB-ROX-112723-8260-A	TB-ROX-112723-8260-B
TB-ROX-112723-8011-A	TB-ROX-112723-8011-B
MW1-ROX-112723-EB	MW9-ROX-112723-EB
MW1-ROX-112723	MW9-ROX-112723
MW26-ROX-112723	MW10-ROX-112723
MW11-ROX-112723	MW28-ROX-112723
MW27-ROX-112723	--

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 that PAHs were re-extracted outside extraction time criteria in samples MW1-ROX-112723, MW11-ROX-112723, MW27-ROX-112723, MW10-ROX-112723 and MW28-ROX-112723, and in equipment blanks MW1-ROX-112723-EB and MW9-ROX-112723-EB. Multiple analytes were detected in equipment blanks MW1-ROX-112723-EB and MW9-ROX-112723-EB. SVOC LCS/LCSD recoveries, and/or SVOC LCS/LCSD RPDs, were outside evaluation criteria. Several VOC MS/MSD recoveries were outside evaluation criteria in samples MW11-ROX-112723 and MW10-ROX-112723. The continuing calibration verifications (CCV) for several analytes were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review. The laboratory report was revised on December 31, 2023, to include missing QC that had inadvertently been omitted by the laboratory.

Three of 70 (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, PAHs in samples MW1-ROX-112723, MW11-ROX-112723, MW27-ROX-112723, MW10-ROX-112723, and MW28-ROX-112723, and in equipment blanks MW1-ROX-

112723-EB and MW9-ROX-112723-EB, were re-extracted 2 days outside extraction holding time criteria (7 days) and then re-analyzed for confirmation. Holding time exceedances were not greater than two times (2X) criteria; both sets of data are reported. Results for the re-extracted and re-analyzed sample MW1-ROX-112723 were comparable to the initial results. Based on professional judgement, the results from the initial analysis were used for the purposes of this report. Equipment blanks are quality control samples and do not require qualification.

With regard to initial MW10-ROX-112723, MW11-ROX-112723, MW27-ROX-112723, and MW28-ROX-112723 PAH data, the laboratory previously issued a Corrective Action Report (CAR) stating that through confirmation analyses, many previous detections were not confirmed and were therefore deemed laboratory contamination. Based on professional judgement, the results from the re-analysis were used for the purposes of this report. Data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW10-ROX-112723 RERA	PAHs	All non-detects	**UJ**
MW10-ROX-112723 RERA	PAHs	Benzo[b]fluoranthene	**J**
MW28-ROX-112723 RERA	PAHs	All non-detects	**UJ**
MW11-ROX-112723 RERA	PAHs	All non-detects	**UJ**
MW27-ROX-112723 RERA	PAHs	All non-detects	**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
MW1-ROX-112723-EB	PAHs	Acenaphthylene	0.077 µg/L
MW1-ROX-112723-EB	PAHs	Benzo[b]fluoranthene	0.046 µg/L
MW1-ROX-112723-EB	PAHs	Dibenz(a,h)anthracene	0.054 µg/L
MW1-ROX-112723-EB	PAHs	Indeno[1,2,3-cd]pyrene	0.065 µg/L
MW1-ROX-112723-EB RERA	PAHs	Benzo[b]fluoranthene	0.11 µg/L
MW1-ROX-112723-EB RERA	PAHs	Indeno[1,2,3-cd]pyrene	0.072 µg/L
MW1-ROX-112723-EB	SVOCs	Diethyl phthalate	0.70 µg/L
MW9-ROX-112723-EB	PAHs	Indeno[1,2,3-cd]pyrene	0.062 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.

Sample ID	Parameter	Analyte	New Reporting Limit (RL)	Qualification
MW1-ROX-112723	PAHs	Acenaphthylene	-	**U**
MW1-ROX-112723	PAHs	Benzo[b]fluoranthene	-	**U**
MW1-ROX-112723	PAHs	Indeno[1,2,3-cd]pyrene	-	**U**
MW1-ROX-112723	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 400-652297/2-A	SVOCs	Hexachlorocyclopentadiene	**7**	NA	10-134
LCS/LCSD 400-652297/3-A/4-A	SVOCs	Benzenethiol	**5/5**	1	10-120/30
LCS/LCSD 400-652100/2-A/3-A	VOCs by 8011	1,2-Dibromo-3-Chloropropane	126/131	**42**	60-140/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol and hexachlorocyclopentadiene below evaluation criteria; benzenethiol and hexachlorocyclopentadiene have been identified as a poor performing analyte under Method 8270. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW1-ROX-112723	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW26-ROX-112723	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW11-ROX-112723	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW27-ROX-112723	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW9-ROX-112723	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW10-ROX-112723	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW28-ROX-112723	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW1-ROX-112723	SVOCs	Benzenethiol	**UJ**
MW26-ROX-112723	SVOCs	Benzenethiol	**UJ**
MW11-ROX-112723	SVOCs	Benzenethiol	**UJ**
MW27-ROX-112723	SVOCs	Benzenethiol	**UJ**
MW9-ROX-112723	SVOCs	Benzenethiol	**UJ**
MW10-ROX-112723	SVOCs	Benzenethiol	**UJ**
MW28-ROX-112723	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW26-ROX-112723	SVOCs	2-Fluorophenol	**10**	13-113
MW11-ROX-112723	SVOCs	2-Fluorophenol	**12**	13-113
MW11-ROX-112723 (MS)	SVOCs	2-Fluorophenol	**12**	13-113

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW27-ROX-112723	SVOCs	2-Fluorophenol	**7**	13-113
MW9-ROX-112723	SVOCs	2-Fluorophenol	**7**	13-113
MW10-ROX-112723	SVOCs	2-Fluorophenol	**6**	13-113
MW1-ROX-112723-EB (RERA)	PAHs	Terphenyl-d_{14}	**164**	18-147
MW11-ROX-112723 (RERA)	PAHs	Terphenyl-d_{14}	**155**	18-147
MW27-ROX-112723 (RERA)	PAHs	Terphenyl-d_{14}	**158**	18-147
MW10-ROX-112723 (RERA)	PAHs	Terphenyl-d_{14}	**157**	18-147
MW28-ROX-112723 (RERA)	PAHs	Terphenyl-d_{14}	**157**	18-147
MB 400-652972/1-A	PAHs	Terphenyl-d_{14}	**158**	18-147

Qualifications due to surrogate recoveries were not required if only one of three base/neutral and/or acid surrogate recoveries were outside evaluation criteria. Method blanks and matrix spikes 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, samples MW11-ROX-112723 and MW10-ROX-112723 were 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
MW11-ROX-112723 MS/MSD	VOCs	Acetone	**31/28**	9	43-150/30
MW11-ROX-112723 MS/MSD	VOCs	Bromobenzene	74/**55**	**31**	59-136/30
MW11-ROX-112723 MS/MSD	VOCs	Bromochloromethane	72/**61**	17	64-140/30
MW11-ROX-112723 MS/MSD	VOCs	2-Butanone (MEK)	**51/45**	13	55-150/30
MW11-ROX-112723 MS/MSD	VOCs	Chlorobenzene	74/**55**	30	64-130/30
MW11-ROX-112723 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW11-ROX-112723 MS/MSD	VOCs	1-Chlorohexane	80/**55**	**36**	56-136/30
MW11-ROX-112723 MS/MSD	VOCs	1,2-Dichlorobenzene	70/**50**	**33**	52-137/30
MW11-ROX-112723 MS/MSD	VOCs	1,3-Dichlorobenzene	72/**51**	**34**	54-135/30
MW11-ROX-112723 MS/MSD	VOCs	1,4-Dichlorobenzene	72/**50**	**36**	53-135/30
MW11-ROX-112723 MS/MSD	VOCs	1,2-Dichloroethane	70/**58**	18	60-141/30
MW11-ROX-112723 MS/MSD	VOCs	1,3-Dichloropropane	77/**65**	17	66-133/30

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW11-ROX-112723 MS/MSD	VOCs	1,1-Dichloropropene	76/**61**	22	65-136/30
MW11-ROX-112723 MS/MSD	VOCs	Ethylbenzene	74/**54**	**32**	58-131/30
MW11-ROX-112723 MS/MSD	VOCs	Hexachlorobutadiene	85/54	**44**	31-149/30
MW11-ROX-112723 MS/MSD	VOCs	2-Hexanone	59/**53**	11	65-140/30
MW11-ROX-112723 MS/MSD	VOCs	Isopropylbenzene	73/**50**	**37**	56-133/30
MW11-ROX-112723 MS/MSD	VOCs	Methylene bromide	72/**61**	17	63-138/30
MW11-ROX-112723 MS/MSD	VOCs	Methylene Chloride	67/**59**	13	60-146/32
MW11-ROX-112723 MS/MSD	VOCs	m-Xylene & p-Xylene	74/**53**	**34**	57-130/30
MW11-ROX-112723 MS/MSD	VOCs	n-Butylbenzene	69/44	**44**	41-142/31
MW11-ROX-112723 MS/MSD	VOCs	N-Propylbenzene	72/**49**	**38**	51-138/30
MW11-ROX-112723 MS/MSD	VOCs	o-Chlorotoluene	72/**51**	**34**	53-134/30
MW11-ROX-112723 MS/MSD	VOCs	o-Xylene	74/**53**	**32**	61-130/30
MW11-ROX-112723 MS/MSD	VOCs	p-Chlorotoluene	71/**49**	**37**	54-133/30
MW11-ROX-112723 MS/MSD	VOCs	p-Isopropyltoluene	71/**46**	**42**	48-139/30
MW11-ROX-112723 MS/MSD	VOCs	sec-Butylbenzene	72/**48**	**40**	50-138/30
MW11-ROX-112723 MS/MSD	VOCs	Styrene	69/**50**	**32**	58-131/30
MW11-ROX-112723 MS/MSD	VOCs	tert-Butylbenzene	82/56	**37**	54-146/30
MW11-ROX-112723 MS/MSD	VOCs	1,1,2,2-Tetrachloroethane	75/**65**	13	66-135/30
MW11-ROX-112723 MS/MSD	VOCs	Toluene	77/**60**	24	65-130/30
MW11-ROX-112723 MS/MSD	VOCs	1,2,4-Trichlorobenzene	75/52	**36**	39-148/30
MW11-ROX-112723 MS/MSD	VOCs	Trichloroethene	74/**58**	24	64-136/30
MW11-ROX-112723 MS/MSD	VOCs	1,2,3-Trichloropropane	75/**64**	15	65-133/30
MW11-ROX-112723 MS/MSD	VOCs	1,2,4-Trimethylbenzene	71/**48**	**38**	50-139/30
MW11-ROX-112723 MS/MSD	VOCs	1,3,5-Trimethylbenzene	71/**49**	**38**	52-135/30
MW11-ROX-112723 MS/MSD	VOCs	Xylenes, Total	74/**53**	**33**	59-130/30

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW10-ROX-112723 MS/MSD	VOCs	Acetone	**32/34**	6	43-150/30
MW10-ROX-112723 MS/MSD	VOCs	2-Butanone (MEK)	**54**/56	3	55-150/30
MW10-ROX-112723 MS/MSD	VOCs	Chlorobenzene	**63**/64	1	64-130/30
MW10-ROX-112723 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW10-ROX-112723 MS/MSD	VOCs	1,3-Dichlorobenzene	55/**52**	5	54-135/30
MW10-ROX-112723 MS/MSD	VOCs	1,4-Dichlorobenzene	55/**51**	8	53-135/30
MW10-ROX-112723 MS/MSD	VOCs	2-Hexanone	**60/61**	3	65-140/30
MW10-ROX-112723 MS/MSD	VOCs	p-Chlorotoluene	54/**52**	5	54-133/30
MW10-ROX-112723 MS/MSD	VOCs	Styrene	**57/57**	1	58-131/30
MW10-ROX-112723 MS/MSD	VOCs	tert-Butylbenzene	62/**52**	19	54-146/30
MW11-ROX-112723 MS/MSD	SVOCs	2-Chlorophenol	37/62	**48**	25-120/42
MW11-ROX-112723 MS/MSD	VOCs by 8011	1,2-Dibromo-3-Chloropropane	131/136	**47**	10-150/20

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 2-chloroethyl vinyl ether due to acceptable LCS recoveries 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. Analytical data associated with MS/MSD RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW11-ROX-112723	VOCs	Acetone	**UJ**
MW11-ROX-112723	VOCs	Bromobenzene	**UJ**
MW11-ROX-112723	VOCs	Bromochloromethane	**UJ**
MW11-ROX-112723	VOCs	2-Butanone (MEK)	**UJ**
MW11-ROX-112723	VOCs	Chlorobenzene	**UJ**
MW11-ROX-112723	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW11-ROX-112723	VOCs	1-Chlorohexane	**UJ**
MW11-ROX-112723	VOCs	1,2-Dichlorobenzene	**UJ**
MW11-ROX-112723	VOCs	1,3-Dichlorobenzene	**UJ**
MW11-ROX-112723	VOCs	1,4-Dichlorobenzene	**UJ**
MW11-ROX-112723	VOCs	1,2-Dichloroethane	**UJ**
MW11-ROX-112723	VOCs	1,3-Dichloropropane	**UJ**
MW11-ROX-112723	VOCs	1,1-Dichloropropene	**UJ**
MW11-ROX-112723	VOCs	Ethylbenzene	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW11-ROX-112723	VOCs	2-Hexanone	UJ
MW11-ROX-112723	VOCs	Isopropylbenzene	UJ
MW11-ROX-112723	VOCs	Methylene bromide	UJ
MW11-ROX-112723	VOCs	Methylene Chloride	UJ
MW11-ROX-112723	VOCs	m-Xylene & p-Xylene	UJ
MW11-ROX-112723	VOCs	N-Propylbenzene	UJ
MW11-ROX-112723	VOCs	o-Chlorotoluene	UJ
MW11-ROX-112723	VOCs	o-Xylene	UJ
MW11-ROX-112723	VOCs	p-Chlorotoluene	UJ
MW11-ROX-112723	VOCs	p-Isopropyltoluene	UJ
MW11-ROX-112723	VOCs	sec-Butylbenzene	UJ
MW11-ROX-112723	VOCs	Styrene	UJ
MW11-ROX-112723	VOCs	1,1,2,2-Tetrachloroethane	UJ
MW11-ROX-112723	VOCs	Toluene	UJ
MW11-ROX-112723	VOCs	Trichloroethene	UJ
MW11-ROX-112723	VOCs	1,2,3-Trichloropropane	UJ
MW11-ROX-112723	VOCs	1,2,4-Trimethylbenzene	UJ
MW11-ROX-112723	VOCs	1,3,5-Trimethylbenzene	UJ
MW11-ROX-112723	VOCs	Xylenes, Total	UJ
MW10-ROX-112723	VOCs	Acetone	UJ
MW10-ROX-112723	VOCs	2-Butanone (MEK)	UJ
MW10-ROX-112723	VOCs	Chlorobenzene	UJ
MW10-ROX-112723	VOCs	2-Chloroethyl vinyl ether	UJ
MW10-ROX-112723	VOCs	1,3-Dichlorobenzene	UJ
MW10-ROX-112723	VOCs	1,4-Dichlorobenzene	UJ
MW10-ROX-112723	VOCs	2-Hexanone	UJ
MW10-ROX-112723	VOCs	p-Chlorotoluene	UJ
MW10-ROX-112723	VOCs	Styrene	UJ
MW10-ROX-112723	VOCs	tert-Butylbenzene	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 verifications (CCV) for multiple analytes were outside evaluation criteria, biased low. Hexachlorocyclopentadiene in samples MW11-ROX-112723, MW10-ROX-112723, MW1-ROX-112723, MW26-ROX-112723, MW27-ROX-112723, MW9-ROX-112723 and MW28-ROX-112723 were previously qualified in Section 5.0 of this data review due to LCS recoveries outside evaluation criteria; no further qualification is required. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW11-ROX-112723	VOCs	Chloroethane	**UJ**
MW10-ROX-112723	VOCs	Chloroethane	**UJ**
MW1-ROX-112723	VOCs	Chloroethane	**UJ**
MW26-ROX-112723	VOCs	Chloroethane	**UJ**
MW27-ROX-112723	VOCs	Chloroethane	**UJ**
MW9-ROX-112723	VOCs	Chloroethane	**UJ**
MW28-ROX-112723	VOCs	Chloroethane	**UJ**
MW11-ROX-112723	VOCs	Trichlorofluoromethane	**UJ**
MW10-ROX-112723	VOCs	Trichlorofluoromethane	**UJ**
MW1-ROX-112723	VOCs	Trichlorofluoromethane	**UJ**
MW26-ROX-112723	VOCs	Trichlorofluoromethane	**UJ**
MW27-ROX-112723	VOCs	Trichlorofluoromethane	**UJ**
MW9-ROX-112723	VOCs	Trichlorofluoromethane	**UJ**
MW28-ROX-112723	VOCs	Trichlorofluoromethane	**UJ**
MW11-ROX-112723	VOCs	Acrolein	**UJ**
MW10-ROX-112723	VOCs	Acrolein	**UJ**
MW1-ROX-112723	VOCs	Acrolein	**UJ**
MW26-ROX-112723	VOCs	Acrolein	**UJ**
MW27-ROX-112723	VOCs	Acrolein	**UJ**
MW9-ROX-112723	VOCs	Acrolein	**UJ**
MW28-ROX-112723	VOCs	Acrolein	**UJ**
MW11-ROX-112723	VOCs	Vinyl acetate	**UJ**
MW10-ROX-112723	VOCs	Vinyl acetate	**UJ**
MW1-ROX-112723	VOCs	Vinyl acetate	**UJ**
MW26-ROX-112723	VOCs	Vinyl acetate	**UJ**
MW27-ROX-112723	VOCs	Vinyl acetate	**UJ**
MW9-ROX-112723	VOCs	Vinyl acetate	**UJ**
MW28-ROX-112723	VOCs	Vinyl acetate	**UJ**

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ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

ROXANA MONTHLY GW

JOB NUMBER

400-247369-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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Revision 1

Authorized for release by
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Job Narrative
400-247369-1

REVISION
The report being provided is a revision of the original report sent on 12/14/2023. The report (revision 1) is being revised to include missing QC.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 11/28/2023 9:15 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 0.0°C

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-652440 recovered outside acceptance criteria, low biased, for Acrolein, Chloroethane, Trichlorofluoromethane and Vinyl acetate. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: 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-112723-8260-A (400-247369-1), MW1-ROX-112723-EB (400-247369-3), MW1-ROX-112723 (400-247369-4), MW26-ROX-112723 (400-247369-5), MW11-ROX-112723 (400-247369-6), MW27-ROX-112723 (400-247369-7), TB-ROX-112723-8260-B (400-247369-8), MW9-ROX-112723-EB (400-247369-10), MW9-ROX-112723 (400-247369-11), MW10-ROX-112723 (400-247369-12) and MW28-ROX-112723 (400-247369-13). 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 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-652440 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 400-652440 was outside control limits. Sample matrix interference is suspected.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-652440 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260D: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-652440 because the recoveries were below the reporting limit due to the acidic nature of the parent sample..

Method 8260D: The initial calibration verification (ICV) analyzed in batch 400-633903 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

GC/MS Semi VOA
Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-650079 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-652297 and analytical batch 400-652457 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 8270E: The laboratory control sample (LCS) for preparation batch 400-652297 and analytical batch 400-652457 recovered outside control limits for the following analyte(s): Hexachlorocyclopentadiene. Hexachlorocyclopentadiene 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 8270E: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 400-652297 and analytical batch 400-652457 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 8270E: The continuing calibration verification (CCV) associated with batch 400-652457 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 8270E: The continuing calibration verification (CCV) associated with batch 400-652457 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E: 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: MW26-ROX-112723 (400-247369-5), MW11-ROX-112723 (400-247369-6), MW11-ROX-112723 (400-247369-6[MS]), MW27-ROX-112723 (400-247369-7), MW9-ROX-112723 (400-247369-11) and MW10-ROX-112723 (400-247369-12). These results have been reported and qualified.

Method 8270E_SIM: 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: MW1-ROX-112723-EB (400-247369-3), MW11-ROX-112723 (400-247369-6), MW27-ROX-112723 (400-247369-7), MW10-ROX-112723 (400-247369-12) and MW28-ROX-112723 (400-247369-13). These results have been reported and qualified.

Method 8270E_SIM: The following samples were re-prepared outside of preparation holding time due to verification of sample results needed: MW1-ROX-112723-EB (400-247369-3), MW1-ROX-112723 (400-247369-4), MW11-ROX-112723 (400-247369-6), MW27-ROX-112723 (400-247369-7), MW9-ROX-112723-EB (400-247369-10), MW10-ROX-112723 (400-247369-12) and MW28-ROX-112723 (400-247369-13). Both sets of data are 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 400-652129 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: (CCV 400-652100/24-A) and (CCV 400-652100/25-A).

Method 8011: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 400-652100 and analytical batch 400-652129 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 8011: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-652100 and analytical batch 400-652129 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane.

Method 8011: The continuing calibration verification (CCV) associated with batch 400-652266 recovered above the upper control limit for 1,2-Dibromoethane. 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.

Sample Summary

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

Job ID: 400-247369-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-247369-1	TB-ROX-112723-8260-A	Water	11/27/23 00:00	11/28/23 09:15
400-247369-2	TB-ROX-112723-8011-A	Water	11/27/23 00:00	11/28/23 09:15
400-247369-3	MW1-ROX-112723-EB	Water	11/27/23 08:45	11/28/23 09:15
400-247369-4	MW1-ROX-112723	Water	11/27/23 10:10	11/28/23 09:15
400-247369-5	MW26-ROX-112723	Water	11/27/23 11:20	11/28/23 09:15
400-247369-6	MW11-ROX-112723	Water	11/27/23 12:45	11/28/23 09:15
400-247369-7	MW27-ROX-112723	Water	11/27/23 13:45	11/28/23 09:15
400-247369-8	TB-ROX-112723-8260-B	Water	11/27/23 00:00	11/28/23 09:15
400-247369-9	TB-ROX-112723-8011-B	Water	11/27/23 00:00	11/28/23 09:15
400-247369-10	MW9-ROX-112723-EB	Water	11/27/23 09:30	11/28/23 09:15
400-247369-11	MW9-ROX-112723	Water	11/27/23 10:25	11/28/23 09:15
400-247369-12	MW10-ROX-112723	Water	11/27/23 11:45	11/28/23 09:15
400-247369-13	MW28-ROX-112723	Water	11/27/23 13:30	11/28/23 09:15

Detection Summary

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

Job ID: 400-247369-1

Client Sample ID: TB-ROX-112723-8260-A — Lab Sample ID: 400-247369-1

No Detections.

Client Sample ID: TB-ROX-112723-8011-A — Lab Sample ID: 400-247369-2

No Detections.

Client Sample ID: MW1-ROX-112723-EB — Lab Sample ID: 400-247369-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.077	J	0.20	0.045	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.046	J	0.20	0.037	ug/L	1		8270E SIM	Total/NA
Dibenz(a,h)anthracene	0.054	J	0.20	0.049	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.065	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene - RERA	0.11	J H	0.20	0.037	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene - RERA	0.072	J H	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Diethyl phthalate	0.70	J	10	0.24	ug/L	1		8270E	Total/NA

Client Sample ID: MW1-ROX-112723 — Lab Sample ID: 400-247369-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.076	J	0.20	0.045	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.050	J	0.20	0.035	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.049	J	0.20	0.038	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.069	J	0.20	0.035	ug/L	1		8270E SIM	Total/NA
Anthracene - RERA	0.072	J H	0.21	0.049	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene - RERA	0.11	J H	0.21	0.038	ug/L	1		8270E SIM	Total/NA
Diethyl phthalate	0.40	J	10	0.25	ug/L	1		8270E	Total/NA

Client Sample ID: MW26-ROX-112723 — Lab Sample ID: 400-247369-5

No Detections.

Client Sample ID: MW11-ROX-112723 — Lab Sample ID: 400-247369-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.076	J	0.20	0.045	ug/L	1		8270E SIM	Total/NA
Anthracene	0.072	J	0.20	0.048	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.057	J	0.20	0.035	ug/L	1		8270E SIM	Total/NA
Benzo[a]pyrene	0.12	J	0.20	0.065	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.060	J	0.20	0.038	ug/L	1		8270E SIM	Total/NA
Dibenz(a,h)anthracene	0.068	J	0.20	0.049	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.078	J	0.20	0.035	ug/L	1		8270E SIM	Total/NA
Diethyl phthalate	0.25	J	10	0.24	ug/L	1		8270E	Total/NA

Client Sample ID: MW27-ROX-112723 — Lab Sample ID: 400-247369-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	0.070	J	0.20	0.048	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.049	J	0.20	0.035	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.046	J	0.20	0.038	ug/L	1		8270E SIM	Total/NA

Client Sample ID: TB-ROX-112723-8260-B — Lab Sample ID: 400-247369-8

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 400-247369-1

Client Sample ID: TB-ROX-112723-8011-B — Lab Sample ID: 400-247369-9

No Detections.

Client Sample ID: MW9-ROX-112723-EB — Lab Sample ID: 400-247369-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Indeno[1,2,3-cd]pyrene	0.062	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW9-ROX-112723 — Lab Sample ID: 400-247369-11

No Detections.

Client Sample ID: MW10-ROX-112723 — Lab Sample ID: 400-247369-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.070	J	0.19	0.042	ug/L	1		8270E SIM	Total/NA
Anthracene	0.066	J	0.19	0.045	ug/L	1		8270E SIM	Total/NA
Benzo[a]pyrene	0.11	J	0.19	0.061	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.049	J	0.19	0.035	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.065	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene - RERA	0.068	J H	0.19	0.035	ug/L	1		8270E SIM	Total/NA
Butyl benzyl phthalate	2.9	J	9.5	0.18	ug/L	1		8270E	Total/NA
Di-n-octyl phthalate	4.3	J	9.5	0.16	ug/L	1		8270E	Total/NA

Client Sample ID: MW28-ROX-112723 — Lab Sample ID: 400-247369-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.39	J	1.0	0.22	ug/L	1		8260D	Total/NA
Anthracene	0.065	J	0.19	0.044	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.064	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Benzo[a]pyrene	0.11	J	0.19	0.060	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.062	J	0.19	0.035	ug/L	1		8270E SIM	Total/NA
Benzo[g,h,i]perylene	0.031	J	0.19	0.025	ug/L	1		8270E SIM	Total/NA
Dibenz(a,h)anthracene	0.072	J	0.19	0.045	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.081	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Bis(2-ethylhexyl) phthalate	5.1	J	9.4	4.7	ug/L	1		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-247369-1

Client Sample ID: TB-ROX-112723-8260-A
Date Collected: 11/27/23 00:00
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/01/23 15:51	1
Acrolein	ND		20	3.3	ug/L			12/01/23 15:51	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 15:51	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 15:51	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 15:51	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 15:51	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/01/23 15:51	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 15:51	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 15:51	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/01/23 15:51	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 15:51	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 15:51	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 15:51	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 15:51	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 15:51	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 15:51	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 15:51	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 15:51	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 15:51	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 15:51	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 15:51	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 15:51	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 15:51	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 15:51	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 15:51	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 15:51	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 15:51	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 15:51	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 15:51	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 15:51	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 15:51	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 15:51	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 15:51	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 15:51	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 15:51	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 15:51	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 15:51	1
Methylene bromide	ND		5.0	0.22	ug/L			12/01/23 15:51	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 15:51	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 15:51	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/01/23 15:51	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 15:51	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 15:51	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 15:51	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 15:51	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 15:51	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 15:51	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 15:51	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/01/23 15:51	1

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

Job ID: 400-247369-1

Client Sample ID: TB-ROX-112723-8260-A
Date Collected: 11/27/23 00:00
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 15:51	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 15:51	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/01/23 15:51	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 15:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 15:51	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/01/23 15:51	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 15:51	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 15:51	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 15:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 15:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 15:51	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 15:51	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 15:51	1
Trichloroethene	ND		1.0	0.15	ug/L			12/01/23 15:51	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 15:51	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 15:51	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 15:51	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 15:51	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 15:51	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 15:51	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*12/01/23 15:51*	*1*
Dibromofluoromethane	*93*		*75 - 126*		*12/01/23 15:51*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*12/01/23 15:51*	*1*

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

Job ID: 400-247369-1

Client Sample ID: TB-ROX-112723-8011-A
Date Collected: 11/27/23 00:00
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-2
Matrix: Water

Method: EPA 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	*1	0.029	0.017	ug/L		11/29/23 09:31	11/29/23 16:12	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		11/29/23 09:31	11/29/23 16:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*117*		*51 - 149*	*11/29/23 09:31*	*11/29/23 16:12*	*1*

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

Job ID: 400-247369-1

Client Sample ID: MW1-ROX-112723-EB
Date Collected: 11/27/23 08:45
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/01/23 10:00	1
Acrolein	ND		20	3.3	ug/L			12/01/23 10:00	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 10:00	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 10:00	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 10:00	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 10:00	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/01/23 10:00	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 10:00	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 10:00	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/01/23 10:00	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 10:00	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 10:00	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 10:00	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 10:00	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 10:00	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 10:00	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 10:00	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 10:00	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 10:00	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 10:00	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 10:00	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 10:00	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 10:00	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 10:00	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 10:00	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 10:00	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 10:00	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 10:00	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 10:00	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 10:00	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 10:00	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 10:00	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 10:00	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 10:00	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 10:00	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 10:00	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 10:00	1
Methylene bromide	ND		5.0	0.22	ug/L			12/01/23 10:00	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 10:00	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 10:00	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/01/23 10:00	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 10:00	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 10:00	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 10:00	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 10:00	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 10:00	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 10:00	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 10:00	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/01/23 10:00	1

Client Sample ID: MW1-ROX-112723-EB
Date Collected: 11/27/23 08:45
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 10:00	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 10:00	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/01/23 10:00	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 10:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 10:00	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/01/23 10:00	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 10:00	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 10:00	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 10:00	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 10:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 10:00	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 10:00	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 10:00	1
Trichloroethene	ND		1.0	0.15	ug/L			12/01/23 10:00	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 10:00	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 10:00	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 10:00	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 10:00	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 10:00	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 10:00	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 10:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 130*		*12/01/23 10:00*	*1*
Dibromofluoromethane	*91*		*75 - 126*		*12/01/23 10:00*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*12/01/23 10:00*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		11/30/23 10:34	12/01/23 20:51	1
Acenaphthylene	**0.077**	**J**	0.20	0.045	ug/L		11/30/23 10:34	12/01/23 20:51	1
Anthracene	ND		0.20	0.048	ug/L		11/30/23 10:34	12/01/23 20:51	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		11/30/23 10:34	12/01/23 20:51	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		11/30/23 10:34	12/01/23 20:51	1
Benzo[b]fluoranthene	**0.046**	**J**	0.20	0.037	ug/L		11/30/23 10:34	12/01/23 20:51	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		11/30/23 10:34	12/01/23 20:51	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		11/30/23 10:34	12/01/23 20:51	1
Chrysene	ND		0.20	0.033	ug/L		11/30/23 10:34	12/01/23 20:51	1
Dibenz(a,h)anthracene	**0.054**	**J**	0.20	0.049	ug/L		11/30/23 10:34	12/01/23 20:51	1
Fluoranthene	ND		0.20	0.034	ug/L		11/30/23 10:34	12/01/23 20:51	1
Fluorene	ND		0.20	0.090	ug/L		11/30/23 10:34	12/01/23 20:51	1
Indeno[1,2,3-cd]pyrene	**0.065**	**J**	0.20	0.034	ug/L		11/30/23 10:34	12/01/23 20:51	1
Phenanthrene	ND		0.20	0.091	ug/L		11/30/23 10:34	12/01/23 20:51	1
Pyrene	ND		0.20	0.039	ug/L		11/30/23 10:34	12/01/23 20:51	1
1-Methylnaphthalene	ND		0.20	0.081	ug/L		11/30/23 10:34	12/01/23 20:51	1
2-Methylnaphthalene	ND		0.20	0.067	ug/L		11/30/23 10:34	12/01/23 20:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*94*		*18 - 147*	*11/30/23 10:34*	*12/01/23 20:51*	*1*
2-Fluorobiphenyl	*72*		*15 - 128*	*11/30/23 10:34*	*12/01/23 20:51*	*1*

Client Sample ID: MW1-ROX-112723-EB

Date Collected: 11/27/23 08:45
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-3

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*69*		*10 - 144*	*11/30/23 10:34*	*12/01/23 20:51*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.20	0.099	ug/L		12/06/23 08:40	12/07/23 14:39	1
Acenaphthylene	ND	H	0.20	0.044	ug/L		12/06/23 08:40	12/07/23 14:39	1
Anthracene	ND	H	0.20	0.047	ug/L		12/06/23 08:40	12/07/23 14:39	1
Benzo[a]anthracene	ND	H	0.20	0.034	ug/L		12/06/23 08:40	12/07/23 14:39	1
Benzo[a]pyrene	ND	H	0.20	0.064	ug/L		12/06/23 08:40	12/07/23 14:39	1
Benzo[b]fluoranthene	**0.11**	**J H**	0.20	0.037	ug/L		12/06/23 08:40	12/07/23 14:39	1
Benzo[g,h,i]perylene	ND	H	0.20	0.027	ug/L		12/06/23 08:40	12/07/23 14:39	1
Benzo[k]fluoranthene	ND	H	0.20	0.062	ug/L		12/06/23 08:40	12/07/23 14:39	1
Chrysene	ND	H	0.20	0.033	ug/L		12/06/23 08:40	12/07/23 14:39	1
Dibenz(a,h)anthracene	ND	H	0.20	0.048	ug/L		12/06/23 08:40	12/07/23 14:39	1
Fluoranthene	ND	H	0.20	0.034	ug/L		12/06/23 08:40	12/07/23 14:39	1
Fluorene	ND	H	0.20	0.089	ug/L		12/06/23 08:40	12/07/23 14:39	1
Indeno[1,2,3-cd]pyrene	**0.072**	**J H**	0.20	0.034	ug/L		12/06/23 08:40	12/07/23 14:39	1
Phenanthrene	ND	H	0.20	0.090	ug/L		12/06/23 08:40	12/07/23 14:39	1
Pyrene	ND	H	0.20	0.039	ug/L		12/06/23 08:40	12/07/23 14:39	1
1-Methylnaphthalene	ND	H	0.20	0.080	ug/L		12/06/23 08:40	12/07/23 14:39	1
2-Methylnaphthalene	ND	H	0.20	0.066	ug/L		12/06/23 08:40	12/07/23 14:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*164*	*S1+*	*18 - 147*	*12/06/23 08:40*	*12/07/23 14:39*	*1*
2-Fluorobiphenyl	*85*		*15 - 128*	*12/06/23 08:40*	*12/07/23 14:39*	*1*
Nitrobenzene-d5	*79*		*10 - 144*	*12/06/23 08:40*	*12/07/23 14:39*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		11/30/23 10:34	12/01/23 19:19	1
Benzenethiol	ND	*-	10	1.7	ug/L		11/30/23 10:34	12/01/23 19:19	1
Benzoic acid	ND		30	7.4	ug/L		11/30/23 10:34	12/01/23 19:19	1
Benzyl alcohol	ND		10	2.0	ug/L		11/30/23 10:34	12/01/23 19:19	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		11/30/23 10:34	12/01/23 19:19	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		11/30/23 10:34	12/01/23 19:19	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		11/30/23 10:34	12/01/23 19:19	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		11/30/23 10:34	12/01/23 19:19	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		11/30/23 10:34	12/01/23 19:19	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		11/30/23 10:34	12/01/23 19:19	1
4-Chloroaniline	ND		10	3.4	ug/L		11/30/23 10:34	12/01/23 19:19	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		11/30/23 10:34	12/01/23 19:19	1
2-Chloronaphthalene	ND		10	0.14	ug/L		11/30/23 10:34	12/01/23 19:19	1
2-Chlorophenol	ND		10	2.2	ug/L		11/30/23 10:34	12/01/23 19:19	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		11/30/23 10:34	12/01/23 19:19	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		11/30/23 10:34	12/01/23 19:19	1
Dibenzofuran	ND		10	0.17	ug/L		11/30/23 10:34	12/01/23 19:19	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		11/30/23 10:34	12/01/23 19:19	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		11/30/23 10:34	12/01/23 19:19	1
Diethyl phthalate	**0.70**	**J**	10	0.24	ug/L		11/30/23 10:34	12/01/23 19:19	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		11/30/23 10:34	12/01/23 19:19	1

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

Job ID: 400-247369-1

Client Sample ID: MW1-ROX-112723-EB
Date Collected: 11/27/23 08:45
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-3
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		10	0.17	ug/L		11/30/23 10:34	12/01/23 19:19	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		11/30/23 10:34	12/01/23 19:19	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		11/30/23 10:34	12/01/23 19:19	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		11/30/23 10:34	12/01/23 19:19	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 10:34	12/01/23 19:19	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 10:34	12/01/23 19:19	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		11/30/23 10:34	12/01/23 19:19	1
1,4-Dioxane	ND		10	1.0	ug/L		11/30/23 10:34	12/01/23 19:19	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		11/30/23 10:34	12/01/23 19:19	1
Hexachlorobenzene	ND		10	0.17	ug/L		11/30/23 10:34	12/01/23 19:19	1
Hexachlorocyclopentadiene	ND	*-	20	2.6	ug/L		11/30/23 10:34	12/01/23 19:19	1
Hexachloroethane	ND		10	4.3	ug/L		11/30/23 10:34	12/01/23 19:19	1
Indene	ND		10	1.0	ug/L		11/30/23 10:34	12/01/23 19:19	1
Isophorone	ND		10	0.14	ug/L		11/30/23 10:34	12/01/23 19:19	1
2-Methylphenol	ND		10	1.8	ug/L		11/30/23 10:34	12/01/23 19:19	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		11/30/23 10:34	12/01/23 19:19	1
2-Nitroaniline	ND		10	2.2	ug/L		11/30/23 10:34	12/01/23 19:19	1
3-Nitroaniline	ND		10	1.8	ug/L		11/30/23 10:34	12/01/23 19:19	1
4-Nitroaniline	ND		10	1.5	ug/L		11/30/23 10:34	12/01/23 19:19	1
Nitrobenzene	ND		10	0.13	ug/L		11/30/23 10:34	12/01/23 19:19	1
2-Nitrophenol	ND		10	5.3	ug/L		11/30/23 10:34	12/01/23 19:19	1
4-Nitrophenol	ND		10	2.1	ug/L		11/30/23 10:34	12/01/23 19:19	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		11/30/23 10:34	12/01/23 19:19	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		11/30/23 10:34	12/01/23 19:19	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		11/30/23 10:34	12/01/23 19:19	1
Pentachlorophenol	ND		20	1.4	ug/L		11/30/23 10:34	12/01/23 19:19	1
Phenol	ND		10	2.6	ug/L		11/30/23 10:34	12/01/23 19:19	1
Pyridine	ND		10	3.2	ug/L		11/30/23 10:34	12/01/23 19:19	1
Quinoline	ND		10	4.6	ug/L		11/30/23 10:34	12/01/23 19:19	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		11/30/23 10:34	12/01/23 19:19	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		11/30/23 10:34	12/01/23 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*46 - 124*	*11/30/23 10:34*	*12/01/23 19:19*	*1*
2-Fluorophenol	*24*		*13 - 113*	*11/30/23 10:34*	*12/01/23 19:19*	*1*
Nitrobenzene-d5	*72*		*36 - 126*	*11/30/23 10:34*	*12/01/23 19:19*	*1*
Phenol-d5	*59*		*17 - 127*	*11/30/23 10:34*	*12/01/23 19:19*	*1*
Terphenyl-d14	*88*		*44 - 149*	*11/30/23 10:34*	*12/01/23 19:19*	*1*
2,4,6-Tribromophenol	*70*		*26 - 150*	*11/30/23 10:34*	*12/01/23 19:19*	*1*

Method: EPA 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	*1	0.029	0.017	ug/L		11/29/23 09:31	11/29/23 16:33	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		11/29/23 09:31	11/29/23 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*119*		*51 - 149*	*11/29/23 09:31*	*11/29/23 16:33*	*1*

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

Job ID: 400-247369-1

Client Sample ID: MW1-ROX-112723
Date Collected: 11/27/23 10:10
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/01/23 16:16	1
Acrolein	ND		20	3.3	ug/L			12/01/23 16:16	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 16:16	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 16:16	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 16:16	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 16:16	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/01/23 16:16	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 16:16	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 16:16	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/01/23 16:16	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 16:16	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 16:16	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 16:16	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 16:16	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 16:16	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 16:16	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 16:16	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 16:16	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 16:16	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 16:16	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 16:16	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 16:16	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 16:16	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 16:16	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 16:16	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 16:16	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 16:16	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 16:16	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 16:16	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 16:16	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 16:16	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 16:16	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 16:16	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 16:16	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 16:16	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 16:16	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 16:16	1
Methylene bromide	ND		5.0	0.22	ug/L			12/01/23 16:16	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 16:16	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 16:16	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/01/23 16:16	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 16:16	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 16:16	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 16:16	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 16:16	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 16:16	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 16:16	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 16:16	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/01/23 16:16	1

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

Job ID: 400-247369-1

Client Sample ID: MW1-ROX-112723
Date Collected: 11/27/23 10:10
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 16:16	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 16:16	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/01/23 16:16	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 16:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 16:16	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/01/23 16:16	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 16:16	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 16:16	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 16:16	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 16:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 16:16	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 16:16	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 16:16	1
Trichloroethene	ND		1.0	0.15	ug/L			12/01/23 16:16	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 16:16	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 16:16	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 16:16	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 16:16	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 16:16	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 16:16	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*12/01/23 16:16*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*12/01/23 16:16*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*12/01/23 16:16*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		11/30/23 10:34	12/01/23 21:12	1
Acenaphthylene	**0.076**	**J**	0.20	0.045	ug/L		11/30/23 10:34	12/01/23 21:12	1
Anthracene	ND		0.20	0.048	ug/L		11/30/23 10:34	12/01/23 21:12	1
Benzo[a]anthracene	**0.050**	**J**	0.20	0.035	ug/L		11/30/23 10:34	12/01/23 21:12	1
Benzo[a]pyrene	ND		0.20	0.066	ug/L		11/30/23 10:34	12/01/23 21:12	1
Benzo[b]fluoranthene	**0.049**	**J**	0.20	0.038	ug/L		11/30/23 10:34	12/01/23 21:12	1
Benzo[g,h,i]perylene	ND		0.20	0.028	ug/L		11/30/23 10:34	12/01/23 21:12	1
Benzo[k]fluoranthene	ND		0.20	0.064	ug/L		11/30/23 10:34	12/01/23 21:12	1
Chrysene	ND		0.20	0.034	ug/L		11/30/23 10:34	12/01/23 21:12	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		11/30/23 10:34	12/01/23 21:12	1
Fluoranthene	ND		0.20	0.035	ug/L		11/30/23 10:34	12/01/23 21:12	1
Fluorene	ND		0.20	0.091	ug/L		11/30/23 10:34	12/01/23 21:12	1
Indeno[1,2,3-cd]pyrene	**0.069**	**J**	0.20	0.035	ug/L		11/30/23 10:34	12/01/23 21:12	1
Phenanthrene	ND		0.20	0.092	ug/L		11/30/23 10:34	12/01/23 21:12	1
Pyrene	ND		0.20	0.040	ug/L		11/30/23 10:34	12/01/23 21:12	1
1-Methylnaphthalene	ND		0.20	0.082	ug/L		11/30/23 10:34	12/01/23 21:12	1
2-Methylnaphthalene	ND		0.20	0.068	ug/L		11/30/23 10:34	12/01/23 21:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*99*		*18 - 147*	*11/30/23 10:34*	*12/01/23 21:12*	*1*
2-Fluorobiphenyl	*78*		*15 - 128*	*11/30/23 10:34*	*12/01/23 21:12*	*1*

Client Sample ID: MW1-ROX-112723

Date Collected: 11/27/23 10:10
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-4

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*71*		*10 - 144*	*11/30/23 10:34*	*12/01/23 21:12*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.21	0.10	ug/L		12/06/23 08:40	12/07/23 14:59	1
Acenaphthylene	ND	H	0.21	0.046	ug/L		12/06/23 08:40	12/07/23 14:59	1
Anthracene	**0.072**	**J H**	0.21	0.049	ug/L		12/06/23 08:40	12/07/23 14:59	1
Benzo[a]anthracene	ND	H	0.21	0.035	ug/L		12/06/23 08:40	12/07/23 14:59	1
Benzo[a]pyrene	ND	H	0.21	0.067	ug/L		12/06/23 08:40	12/07/23 14:59	1
Benzo[b]fluoranthene	**0.11**	**J H**	0.21	0.038	ug/L		12/06/23 08:40	12/07/23 14:59	1
Benzo[g,h,i]perylene	ND	H	0.21	0.028	ug/L		12/06/23 08:40	12/07/23 14:59	1
Benzo[k]fluoranthene	ND	H	0.21	0.064	ug/L		12/06/23 08:40	12/07/23 14:59	1
Chrysene	ND	H	0.21	0.034	ug/L		12/06/23 08:40	12/07/23 14:59	1
Dibenz(a,h)anthracene	ND	H	0.21	0.050	ug/L		12/06/23 08:40	12/07/23 14:59	1
Fluoranthene	ND	H	0.21	0.035	ug/L		12/06/23 08:40	12/07/23 14:59	1
Fluorene	ND	H	0.21	0.093	ug/L		12/06/23 08:40	12/07/23 14:59	1
Indeno[1,2,3-cd]pyrene	ND	H	0.21	0.035	ug/L		12/06/23 08:40	12/07/23 14:59	1
Phenanthrene	ND	H	0.21	0.094	ug/L		12/06/23 08:40	12/07/23 14:59	1
Pyrene	ND	H	0.21	0.041	ug/L		12/06/23 08:40	12/07/23 14:59	1
1-Methylnaphthalene	ND	H	0.21	0.083	ug/L		12/06/23 08:40	12/07/23 14:59	1
2-Methylnaphthalene	ND	H	0.21	0.069	ug/L		12/06/23 08:40	12/07/23 14:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*97*		*18 - 147*	*12/06/23 08:40*	*12/07/23 14:59*	*1*
2-Fluorobiphenyl	*80*		*15 - 128*	*12/06/23 08:40*	*12/07/23 14:59*	*1*
Nitrobenzene-d5	*79*		*10 - 144*	*12/06/23 08:40*	*12/07/23 14:59*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		11/30/23 10:34	12/01/23 19:41	1
Benzenethiol	ND	*-	10	1.7	ug/L		11/30/23 10:34	12/01/23 19:41	1
Benzoic acid	ND		31	7.5	ug/L		11/30/23 10:34	12/01/23 19:41	1
Benzyl alcohol	ND		10	2.0	ug/L		11/30/23 10:34	12/01/23 19:41	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		11/30/23 10:34	12/01/23 19:41	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		11/30/23 10:34	12/01/23 19:41	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		11/30/23 10:34	12/01/23 19:41	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		11/30/23 10:34	12/05/23 16:42	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		11/30/23 10:34	12/01/23 19:41	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		11/30/23 10:34	12/01/23 19:41	1
4-Chloroaniline	ND		10	3.5	ug/L		11/30/23 10:34	12/01/23 19:41	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		11/30/23 10:34	12/01/23 19:41	1
2-Chloronaphthalene	ND		10	0.14	ug/L		11/30/23 10:34	12/01/23 19:41	1
2-Chlorophenol	ND		10	2.3	ug/L		11/30/23 10:34	12/01/23 19:41	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		11/30/23 10:34	12/01/23 19:41	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		11/30/23 10:34	12/01/23 19:41	1
Dibenzofuran	ND		10	0.17	ug/L		11/30/23 10:34	12/01/23 19:41	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		11/30/23 10:34	12/01/23 19:41	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		11/30/23 10:34	12/01/23 19:41	1
Diethyl phthalate	**0.40**	**J**	10	0.25	ug/L		11/30/23 10:34	12/01/23 19:41	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		11/30/23 10:34	12/01/23 19:41	1

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

Job ID: 400-247369-1

Client Sample ID: MW1-ROX-112723
Date Collected: 11/27/23 10:10
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-4
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		10	0.17	ug/L		11/30/23 10:34	12/01/23 19:41	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		11/30/23 10:34	12/01/23 19:41	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		11/30/23 10:34	12/01/23 19:41	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		11/30/23 10:34	12/01/23 19:41	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 10:34	12/01/23 19:41	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 10:34	12/01/23 19:41	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		11/30/23 10:34	12/01/23 19:41	1
1,4-Dioxane	ND		10	1.0	ug/L		11/30/23 10:34	12/01/23 19:41	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		11/30/23 10:34	12/01/23 19:41	1
Hexachlorobenzene	ND		10	0.17	ug/L		11/30/23 10:34	12/01/23 19:41	1
Hexachlorocyclopentadiene	ND	*-	20	2.7	ug/L		11/30/23 10:34	12/01/23 19:41	1
Hexachloroethane	ND		10	4.3	ug/L		11/30/23 10:34	12/01/23 19:41	1
Indene	ND		10	1.0	ug/L		11/30/23 10:34	12/01/23 19:41	1
Isophorone	ND		10	0.14	ug/L		11/30/23 10:34	12/01/23 19:41	1
2-Methylphenol	ND		10	1.8	ug/L		11/30/23 10:34	12/01/23 19:41	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		11/30/23 10:34	12/01/23 19:41	1
2-Nitroaniline	ND		10	2.3	ug/L		11/30/23 10:34	12/01/23 19:41	1
3-Nitroaniline	ND		10	1.8	ug/L		11/30/23 10:34	12/01/23 19:41	1
4-Nitroaniline	ND		10	1.5	ug/L		11/30/23 10:34	12/01/23 19:41	1
Nitrobenzene	ND		10	0.13	ug/L		11/30/23 10:34	12/01/23 19:41	1
2-Nitrophenol	ND		10	5.3	ug/L		11/30/23 10:34	12/01/23 19:41	1
4-Nitrophenol	ND		10	2.2	ug/L		11/30/23 10:34	12/01/23 19:41	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		11/30/23 10:34	12/01/23 19:41	1
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		11/30/23 10:34	12/01/23 19:41	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		11/30/23 10:34	12/01/23 19:41	1
Pentachlorophenol	ND		20	1.4	ug/L		11/30/23 10:34	12/01/23 19:41	1
Phenol	ND		10	2.7	ug/L		11/30/23 10:34	12/01/23 19:41	1
Pyridine	ND		10	3.3	ug/L		11/30/23 10:34	12/01/23 19:41	1
Quinoline	ND		10	4.6	ug/L		11/30/23 10:34	12/01/23 19:41	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		11/30/23 10:34	12/01/23 19:41	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		11/30/23 10:34	12/01/23 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*46 - 124*	*11/30/23 10:34*	*12/01/23 19:41*	*1*
2-Fluorophenol	*15*		*13 - 113*	*11/30/23 10:34*	*12/01/23 19:41*	*1*
Nitrobenzene-d5	*70*		*36 - 126*	*11/30/23 10:34*	*12/01/23 19:41*	*1*
Phenol-d5	*48*		*17 - 127*	*11/30/23 10:34*	*12/01/23 19:41*	*1*
Terphenyl-d14	*92*		*44 - 149*	*11/30/23 10:34*	*12/01/23 19:41*	*1*
2,4,6-Tribromophenol	*69*		*26 - 150*	*11/30/23 10:34*	*12/01/23 19:41*	*1*

Method: EPA 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	*1	0.029	0.016	ug/L		11/29/23 09:31	11/29/23 16:54	1
1,2-Dibromoethane	ND		0.019	0.014	ug/L		11/29/23 09:31	11/29/23 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*51 - 149*	*11/29/23 09:31*	*11/29/23 16:54*	*1*

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

Job ID: 400-247369-1

Client Sample ID: MW26-ROX-112723
Date Collected: 11/27/23 11:20
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/01/23 16:38	1
Acrolein	ND		20	3.3	ug/L			12/01/23 16:38	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 16:38	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 16:38	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 16:38	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 16:38	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/01/23 16:38	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 16:38	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 16:38	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/01/23 16:38	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 16:38	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 16:38	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 16:38	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 16:38	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 16:38	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 16:38	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 16:38	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 16:38	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 16:38	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 16:38	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 16:38	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 16:38	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 16:38	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 16:38	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 16:38	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 16:38	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 16:38	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 16:38	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 16:38	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 16:38	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 16:38	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 16:38	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 16:38	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 16:38	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 16:38	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 16:38	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 16:38	1
Methylene bromide	ND		5.0	0.22	ug/L			12/01/23 16:38	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 16:38	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 16:38	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/01/23 16:38	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 16:38	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 16:38	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 16:38	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 16:38	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 16:38	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 16:38	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 16:38	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/01/23 16:38	1

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

Job ID: 400-247369-1

Client Sample ID: MW26-ROX-112723
Date Collected: 11/27/23 11:20
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 16:38	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 16:38	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/01/23 16:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 16:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 16:38	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/01/23 16:38	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 16:38	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 16:38	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 16:38	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 16:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 16:38	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 16:38	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 16:38	1
Trichloroethene	ND		1.0	0.15	ug/L			12/01/23 16:38	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 16:38	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 16:38	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 16:38	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 16:38	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 16:38	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 16:38	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*12/01/23 16:38*	*1*
Dibromofluoromethane	*95*		*75 - 126*		*12/01/23 16:38*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*12/01/23 16:38*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.10	ug/L		11/30/23 10:34	12/01/23 21:32	1
Acenaphthylene	ND		0.21	0.046	ug/L		11/30/23 10:34	12/01/23 21:32	1
Anthracene	ND		0.21	0.049	ug/L		11/30/23 10:34	12/01/23 21:32	1
Benzo[a]anthracene	ND		0.21	0.035	ug/L		11/30/23 10:34	12/01/23 21:32	1
Benzo[a]pyrene	ND		0.21	0.066	ug/L		11/30/23 10:34	12/01/23 21:32	1
Benzo[b]fluoranthene	ND		0.21	0.038	ug/L		11/30/23 10:34	12/01/23 21:32	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		11/30/23 10:34	12/01/23 21:32	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		11/30/23 10:34	12/01/23 21:32	1
Chrysene	ND		0.21	0.034	ug/L		11/30/23 10:34	12/01/23 21:32	1
Dibenz(a,h)anthracene	ND		0.21	0.050	ug/L		11/30/23 10:34	12/01/23 21:32	1
Fluoranthene	ND		0.21	0.035	ug/L		11/30/23 10:34	12/01/23 21:32	1
Fluorene	ND		0.21	0.092	ug/L		11/30/23 10:34	12/01/23 21:32	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.035	ug/L		11/30/23 10:34	12/01/23 21:32	1
Phenanthrene	ND		0.21	0.093	ug/L		11/30/23 10:34	12/01/23 21:32	1
Pyrene	ND		0.21	0.040	ug/L		11/30/23 10:34	12/01/23 21:32	1
1-Methylnaphthalene	ND		0.21	0.083	ug/L		11/30/23 10:34	12/01/23 21:32	1
2-Methylnaphthalene	ND		0.21	0.068	ug/L		11/30/23 10:34	12/01/23 21:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*97*		*18 - 147*	*11/30/23 10:34*	*12/01/23 21:32*	*1*
2-Fluorobiphenyl	*75*		*15 - 128*	*11/30/23 10:34*	*12/01/23 21:32*	*1*

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

Job ID: 400-247369-1

Client Sample ID: MW26-ROX-112723
Date Collected: 11/27/23 11:20
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-5
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*70*		*10 - 144*	*11/30/23 10:34*	*12/01/23 21:32*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		11/30/23 10:34	12/01/23 20:03	1
Benzenethiol	ND	*-	10	1.8	ug/L		11/30/23 10:34	12/01/23 20:03	1
Benzoic acid	ND		31	7.6	ug/L		11/30/23 10:34	12/01/23 20:03	1
Benzyl alcohol	ND		10	2.1	ug/L		11/30/23 10:34	12/01/23 20:03	1
Bis(2-chloroethoxy)methane	ND		10	0.17	ug/L		11/30/23 10:34	12/01/23 20:03	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		11/30/23 10:34	12/01/23 20:03	1
bis (2-chloroisopropyl) ether	ND		10	0.17	ug/L		11/30/23 10:34	12/01/23 20:03	1
Bis(2-ethylhexyl) phthalate	ND		10	5.2	ug/L		11/30/23 10:34	12/01/23 20:03	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		11/30/23 10:34	12/01/23 20:03	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		11/30/23 10:34	12/01/23 20:03	1
4-Chloroaniline	ND		10	3.5	ug/L		11/30/23 10:34	12/01/23 20:03	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		11/30/23 10:34	12/01/23 20:03	1
2-Chloronaphthalene	ND		10	0.15	ug/L		11/30/23 10:34	12/01/23 20:03	1
2-Chlorophenol	ND		10	2.3	ug/L		11/30/23 10:34	12/01/23 20:03	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		11/30/23 10:34	12/01/23 20:03	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		11/30/23 10:34	12/01/23 20:03	1
Dibenzofuran	ND		10	0.18	ug/L		11/30/23 10:34	12/01/23 20:03	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		11/30/23 10:34	12/01/23 20:03	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		11/30/23 10:34	12/01/23 20:03	1
Diethyl phthalate	ND		10	0.25	ug/L		11/30/23 10:34	12/01/23 20:03	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		11/30/23 10:34	12/01/23 20:03	1
Dimethyl phthalate	ND		10	0.18	ug/L		11/30/23 10:34	12/01/23 20:03	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		11/30/23 10:34	12/01/23 20:03	1
4,6-Dinitro-ortho-cresol	ND		10	1.7	ug/L		11/30/23 10:34	12/01/23 20:03	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		11/30/23 10:34	12/01/23 20:03	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		11/30/23 10:34	12/01/23 20:03	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		11/30/23 10:34	12/01/23 20:03	1
Di-n-octyl phthalate	ND		10	0.18	ug/L		11/30/23 10:34	12/01/23 20:03	1
1,4-Dioxane	ND		10	1.0	ug/L		11/30/23 10:34	12/01/23 20:03	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		11/30/23 10:34	12/01/23 20:03	1
Hexachlorobenzene	ND		10	0.18	ug/L		11/30/23 10:34	12/01/23 20:03	1
Hexachlorocyclopentadiene	ND	*-	21	2.7	ug/L		11/30/23 10:34	12/01/23 20:03	1
Hexachloroethane	ND		10	4.4	ug/L		11/30/23 10:34	12/01/23 20:03	1
Indene	ND		10	1.0	ug/L		11/30/23 10:34	12/01/23 20:03	1
Isophorone	ND		10	0.15	ug/L		11/30/23 10:34	12/01/23 20:03	1
2-Methylphenol	ND		10	1.9	ug/L		11/30/23 10:34	12/01/23 20:03	1
3 & 4 Methylphenol	ND		21	0.40	ug/L		11/30/23 10:34	12/01/23 20:03	1
2-Nitroaniline	ND		10	2.3	ug/L		11/30/23 10:34	12/01/23 20:03	1
3-Nitroaniline	ND		10	1.9	ug/L		11/30/23 10:34	12/01/23 20:03	1
4-Nitroaniline	ND		10	1.6	ug/L		11/30/23 10:34	12/01/23 20:03	1
Nitrobenzene	ND		10	0.13	ug/L		11/30/23 10:34	12/01/23 20:03	1
2-Nitrophenol	ND		10	5.4	ug/L		11/30/23 10:34	12/01/23 20:03	1
4-Nitrophenol	ND		10	2.2	ug/L		11/30/23 10:34	12/01/23 20:03	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		11/30/23 10:34	12/01/23 20:03	1

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

Job ID: 400-247369-1

Client Sample ID: MW26-ROX-112723

Lab Sample ID: 400-247369-5

Date Collected: 11/27/23 11:20

Matrix: Water

Date Received: 11/28/23 09:15

Method: SW846 8270E - 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		11/30/23 10:34	12/01/23 20:03	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		11/30/23 10:34	12/01/23 20:03	1
Pentachlorophenol	ND		21	1.5	ug/L		11/30/23 10:34	12/01/23 20:03	1
Phenol	ND		10	2.7	ug/L		11/30/23 10:34	12/01/23 20:03	1
Pyridine	ND		10	3.3	ug/L		11/30/23 10:34	12/01/23 20:03	1
Quinoline	ND		10	4.7	ug/L		11/30/23 10:34	12/01/23 20:03	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		11/30/23 10:34	12/01/23 20:03	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		11/30/23 10:34	12/01/23 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*46 - 124*	*11/30/23 10:34*	*12/01/23 20:03*	*1*
2-Fluorophenol	*10*	*S1-*	*13 - 113*	*11/30/23 10:34*	*12/01/23 20:03*	*1*
Nitrobenzene-d5	*69*		*36 - 126*	*11/30/23 10:34*	*12/01/23 20:03*	*1*
Phenol-d5	*32*		*17 - 127*	*11/30/23 10:34*	*12/01/23 20:03*	*1*
Terphenyl-d14	*83*		*44 - 149*	*11/30/23 10:34*	*12/01/23 20:03*	*1*
2,4,6-Tribromophenol	*57*		*26 - 150*	*11/30/23 10:34*	*12/01/23 20:03*	*1*

Method: EPA 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	*1	0.029	0.017	ug/L		11/29/23 09:31	11/29/23 17:15	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		11/29/23 09:31	11/29/23 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*51 - 149*	*11/29/23 09:31*	*11/29/23 17:15*	*1*

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

Job ID: 400-247369-1

Client Sample ID: MW11-ROX-112723
Date Collected: 11/27/23 12:45
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	F1	25	10	ug/L			12/01/23 10:46	1
Acrolein	ND		20	3.3	ug/L			12/01/23 10:46	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 10:46	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 10:46	1
Bromobenzene	ND	F2 F1	1.0	0.54	ug/L			12/01/23 10:46	1
Bromochloromethane	ND	F1	1.0	0.21	ug/L			12/01/23 10:46	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/01/23 10:46	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 10:46	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 10:46	1
2-Butanone (MEK)	ND	F1	25	2.6	ug/L			12/01/23 10:46	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 10:46	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 10:46	1
Chlorobenzene	ND	F1	1.0	0.90	ug/L			12/01/23 10:46	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 10:46	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			12/01/23 10:46	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 10:46	1
1-Chlorohexane	ND	F2 F1	1.0	0.32	ug/L			12/01/23 10:46	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 10:46	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 10:46	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 10:46	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 10:46	1
1,2-Dichlorobenzene	ND	F2 F1	1.0	0.50	ug/L			12/01/23 10:46	1
1,3-Dichlorobenzene	ND	F2 F1	1.0	0.54	ug/L			12/01/23 10:46	1
1,4-Dichlorobenzene	ND	F2 F1	1.0	0.64	ug/L			12/01/23 10:46	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 10:46	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 10:46	1
1,2-Dichloroethane	ND	F1	1.0	0.19	ug/L			12/01/23 10:46	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 10:46	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 10:46	1
1,3-Dichloropropane	ND	F1	1.0	0.50	ug/L			12/01/23 10:46	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 10:46	1
1,1-Dichloropropene	ND	F1	1.0	0.50	ug/L			12/01/23 10:46	1
Ethylbenzene	ND	F2 F1	1.0	0.50	ug/L			12/01/23 10:46	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 10:46	1
Hexachlorobutadiene	ND	F2	5.0	0.90	ug/L			12/01/23 10:46	1
2-Hexanone	ND	F1	25	1.4	ug/L			12/01/23 10:46	1
Isopropylbenzene	ND	F2 F1	1.0	0.53	ug/L			12/01/23 10:46	1
Methylene bromide	ND	F1	5.0	0.22	ug/L			12/01/23 10:46	1
Methylene Chloride	ND	F1	5.0	3.0	ug/L			12/01/23 10:46	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 10:46	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/01/23 10:46	1
m-Xylene & p-Xylene	ND	F2 F1	5.0	0.63	ug/L			12/01/23 10:46	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 10:46	1
n-Butylbenzene	ND	F2	1.0	0.76	ug/L			12/01/23 10:46	1
N-Propylbenzene	ND	F2 F1	1.0	0.69	ug/L			12/01/23 10:46	1
o-Chlorotoluene	ND	F2 F1	1.0	0.57	ug/L			12/01/23 10:46	1
o-Xylene	ND	F2 F1	5.0	0.60	ug/L			12/01/23 10:46	1
p-Chlorotoluene	ND	F2 F1	1.0	0.56	ug/L			12/01/23 10:46	1
p-Isopropyltoluene	ND	F2 F1	1.0	0.71	ug/L			12/01/23 10:46	1

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

Job ID: 400-247369-1

Client Sample ID: MW11-ROX-112723
Date Collected: 11/27/23 12:45
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND	F2 F1	1.0	0.70	ug/L			12/01/23 10:46	1
Styrene	ND	F2 F1	1.0	1.0	ug/L			12/01/23 10:46	1
tert-Butylbenzene	ND	F2	1.0	0.63	ug/L			12/01/23 10:46	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 10:46	1
1,1,2,2-Tetrachloroethane	ND	F1	1.0	0.50	ug/L			12/01/23 10:46	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/01/23 10:46	1
Toluene	ND	F1	1.0	0.90	ug/L			12/01/23 10:46	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 10:46	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 10:46	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 10:46	1
1,2,4-Trichlorobenzene	ND	F2	1.0	0.82	ug/L			12/01/23 10:46	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 10:46	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 10:46	1
Trichloroethene	ND	F1	1.0	0.15	ug/L			12/01/23 10:46	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 10:46	1
1,2,3-Trichloropropane	ND	F1	5.0	0.84	ug/L			12/01/23 10:46	1
1,2,4-Trimethylbenzene	ND	F2 F1	1.0	0.82	ug/L			12/01/23 10:46	1
1,3,5-Trimethylbenzene	ND	F2 F1	1.0	0.56	ug/L			12/01/23 10:46	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 10:46	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 10:46	1
Xylenes, Total	ND	F2 F1	10	1.6	ug/L			12/01/23 10:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*12/01/23 10:46*	*1*
Dibromofluoromethane	*93*		*75 - 126*		*12/01/23 10:46*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*12/01/23 10:46*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		11/30/23 10:34	12/01/23 19:29	1
Acenaphthylene	**0.076**	**J**	0.20	0.045	ug/L		11/30/23 10:34	12/01/23 19:29	1
Anthracene	**0.072**	**J**	0.20	0.048	ug/L		11/30/23 10:34	12/01/23 19:29	1
Benzo[a]anthracene	**0.057**	**J**	0.20	0.035	ug/L		11/30/23 10:34	12/01/23 19:29	1
Benzo[a]pyrene	**0.12**	**J**	0.20	0.065	ug/L		11/30/23 10:34	12/01/23 19:29	1
Benzo[b]fluoranthene	**0.060**	**J**	0.20	0.038	ug/L		11/30/23 10:34	12/01/23 19:29	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		11/30/23 10:34	12/01/23 19:29	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		11/30/23 10:34	12/01/23 19:29	1
Chrysene	ND		0.20	0.034	ug/L		11/30/23 10:34	12/01/23 19:29	1
Dibenz(a,h)anthracene	**0.068**	**J**	0.20	0.049	ug/L		11/30/23 10:34	12/01/23 19:29	1
Fluoranthene	ND		0.20	0.035	ug/L		11/30/23 10:34	12/01/23 19:29	1
Fluorene	ND		0.20	0.091	ug/L		11/30/23 10:34	12/01/23 19:29	1
Indeno[1,2,3-cd]pyrene	**0.078**	**J**	0.20	0.035	ug/L		11/30/23 10:34	12/01/23 19:29	1
Phenanthrene	ND		0.20	0.092	ug/L		11/30/23 10:34	12/01/23 19:29	1
Pyrene	ND		0.20	0.040	ug/L		11/30/23 10:34	12/01/23 19:29	1
1-Methylnaphthalene	ND		0.20	0.081	ug/L		11/30/23 10:34	12/01/23 19:29	1
2-Methylnaphthalene	ND		0.20	0.067	ug/L		11/30/23 10:34	12/01/23 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*112*		*18 - 147*	*11/30/23 10:34*	*12/01/23 19:29*	*1*
2-Fluorobiphenyl	*82*		*15 - 128*	*11/30/23 10:34*	*12/01/23 19:29*	*1*

Client Sample ID: MW11-ROX-112723
Date Collected: 11/27/23 12:45
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-6
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*73*		*10 - 144*	*11/30/23 10:34*	*12/01/23 19:29*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.21	0.10	ug/L		12/06/23 08:40	12/07/23 15:19	1
Acenaphthylene	ND	H	0.21	0.045	ug/L		12/06/23 08:40	12/07/23 15:19	1
Anthracene	ND	H	0.21	0.048	ug/L		12/06/23 08:40	12/07/23 15:19	1
Benzo[a]anthracene	ND	H	0.21	0.035	ug/L		12/06/23 08:40	12/07/23 15:19	1
Benzo[a]pyrene	ND	H	0.21	0.066	ug/L		12/06/23 08:40	12/07/23 15:19	1
Benzo[b]fluoranthene	ND	H	0.21	0.038	ug/L		12/06/23 08:40	12/07/23 15:19	1
Benzo[g,h,i]perylene	ND	H	0.21	0.028	ug/L		12/06/23 08:40	12/07/23 15:19	1
Benzo[k]fluoranthene	ND	H	0.21	0.064	ug/L		12/06/23 08:40	12/07/23 15:19	1
Chrysene	ND	H	0.21	0.034	ug/L		12/06/23 08:40	12/07/23 15:19	1
Dibenz(a,h)anthracene	ND	H	0.21	0.049	ug/L		12/06/23 08:40	12/07/23 15:19	1
Fluoranthene	ND	H	0.21	0.035	ug/L		12/06/23 08:40	12/07/23 15:19	1
Fluorene	ND	H	0.21	0.091	ug/L		12/06/23 08:40	12/07/23 15:19	1
Indeno[1,2,3-cd]pyrene	ND	H	0.21	0.035	ug/L		12/06/23 08:40	12/07/23 15:19	1
Phenanthrene	ND	H	0.21	0.093	ug/L		12/06/23 08:40	12/07/23 15:19	1
Pyrene	ND	H	0.21	0.040	ug/L		12/06/23 08:40	12/07/23 15:19	1
1-Methylnaphthalene	ND	H	0.21	0.082	ug/L		12/06/23 08:40	12/07/23 15:19	1
2-Methylnaphthalene	ND	H	0.21	0.068	ug/L		12/06/23 08:40	12/07/23 15:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*155*	*S1+*	*18 - 147*	*12/06/23 08:40*	*12/07/23 15:19*	*1*
2-Fluorobiphenyl	*82*		*15 - 128*	*12/06/23 08:40*	*12/07/23 15:19*	*1*
Nitrobenzene-d5	*80*		*10 - 144*	*12/06/23 08:40*	*12/07/23 15:19*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		11/30/23 10:34	12/01/23 17:51	1
Benzenethiol	ND	*-	10	1.7	ug/L		11/30/23 10:34	12/01/23 17:51	1
Benzoic acid	ND		31	7.4	ug/L		11/30/23 10:34	12/01/23 17:51	1
Benzyl alcohol	ND		10	2.0	ug/L		11/30/23 10:34	12/01/23 17:51	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		11/30/23 10:34	12/01/23 17:51	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		11/30/23 10:34	12/01/23 17:51	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		11/30/23 10:34	12/01/23 17:51	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		11/30/23 10:34	12/01/23 17:51	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		11/30/23 10:34	12/01/23 17:51	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		11/30/23 10:34	12/01/23 17:51	1
4-Chloroaniline	ND		10	3.5	ug/L		11/30/23 10:34	12/01/23 17:51	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		11/30/23 10:34	12/01/23 17:51	1
2-Chloronaphthalene	ND		10	0.14	ug/L		11/30/23 10:34	12/01/23 17:51	1
2-Chlorophenol	ND	F2	10	2.2	ug/L		11/30/23 10:34	12/01/23 17:51	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		11/30/23 10:34	12/01/23 17:51	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		11/30/23 10:34	12/01/23 17:51	1
Dibenzofuran	ND		10	0.17	ug/L		11/30/23 10:34	12/01/23 17:51	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		11/30/23 10:34	12/01/23 17:51	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		11/30/23 10:34	12/01/23 17:51	1
Diethyl phthalate	**0.25**	**J**	10	0.24	ug/L		11/30/23 10:34	12/01/23 17:51	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		11/30/23 10:34	12/01/23 17:51	1

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

Job ID: 400-247369-1

Client Sample ID: MW11-ROX-112723

Lab Sample ID: 400-247369-6

Date Collected: 11/27/23 12:45

Matrix: Water

Date Received: 11/28/23 09:15

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		10	0.17	ug/L		11/30/23 10:34	12/01/23 17:51	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		11/30/23 10:34	12/01/23 17:51	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		11/30/23 10:34	12/01/23 17:51	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		11/30/23 10:34	12/01/23 17:51	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 10:34	12/01/23 17:51	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 10:34	12/01/23 17:51	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		11/30/23 10:34	12/01/23 17:51	1
1,4-Dioxane	ND		10	1.0	ug/L		11/30/23 10:34	12/01/23 17:51	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		11/30/23 10:34	12/01/23 17:51	1
Hexachlorobenzene	ND		10	0.17	ug/L		11/30/23 10:34	12/01/23 17:51	1
Hexachlorocyclopentadiene	ND	*-	20	2.6	ug/L		11/30/23 10:34	12/01/23 17:51	1
Hexachloroethane	ND		10	4.3	ug/L		11/30/23 10:34	12/01/23 17:51	1
Indene	ND		10	1.0	ug/L		11/30/23 10:34	12/01/23 17:51	1
Isophorone	ND		10	0.14	ug/L		11/30/23 10:34	12/01/23 17:51	1
2-Methylphenol	ND		10	1.8	ug/L		11/30/23 10:34	12/01/23 17:51	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		11/30/23 10:34	12/01/23 17:51	1
2-Nitroaniline	ND		10	2.2	ug/L		11/30/23 10:34	12/01/23 17:51	1
3-Nitroaniline	ND		10	1.8	ug/L		11/30/23 10:34	12/01/23 17:51	1
4-Nitroaniline	ND		10	1.5	ug/L		11/30/23 10:34	12/01/23 17:51	1
Nitrobenzene	ND		10	0.13	ug/L		11/30/23 10:34	12/01/23 17:51	1
2-Nitrophenol	ND		10	5.3	ug/L		11/30/23 10:34	12/01/23 17:51	1
4-Nitrophenol	ND		10	2.1	ug/L		11/30/23 10:34	12/01/23 17:51	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		11/30/23 10:34	12/01/23 17:51	1
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		11/30/23 10:34	12/01/23 17:51	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		11/30/23 10:34	12/01/23 17:51	1
Pentachlorophenol	ND		20	1.4	ug/L		11/30/23 10:34	12/01/23 17:51	1
Phenol	ND		10	2.6	ug/L		11/30/23 10:34	12/01/23 17:51	1
Pyridine	ND		10	3.3	ug/L		11/30/23 10:34	12/01/23 17:51	1
Quinoline	ND		10	4.6	ug/L		11/30/23 10:34	12/01/23 17:51	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		11/30/23 10:34	12/01/23 17:51	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		11/30/23 10:34	12/01/23 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*46 - 124*	*11/30/23 10:34*	*12/01/23 17:51*	*1*
2-Fluorophenol	*12*	*S1-*	*13 - 113*	*11/30/23 10:34*	*12/01/23 17:51*	*1*
Nitrobenzene-d5	*79*		*36 - 126*	*11/30/23 10:34*	*12/01/23 17:51*	*1*
Phenol-d5	*41*		*17 - 127*	*11/30/23 10:34*	*12/01/23 17:51*	*1*
Terphenyl-d14	*94*		*44 - 149*	*11/30/23 10:34*	*12/01/23 17:51*	*1*
2,4,6-Tribromophenol	*66*		*26 - 150*	*11/30/23 10:34*	*12/01/23 17:51*	*1*

Method: EPA 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	*1 F2	0.030	0.017	ug/L		11/29/23 09:31	11/29/23 17:36	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		11/29/23 09:31	11/29/23 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*51 - 149*	*11/29/23 09:31*	*11/29/23 17:36*	*1*

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

Job ID: 400-247369-1

Client Sample ID: MW27-ROX-112723
Date Collected: 11/27/23 13:45
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-7
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/01/23 17:02	1
Acrolein	ND		20	3.3	ug/L			12/01/23 17:02	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 17:02	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 17:02	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 17:02	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 17:02	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/01/23 17:02	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 17:02	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 17:02	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/01/23 17:02	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 17:02	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 17:02	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 17:02	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 17:02	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 17:02	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 17:02	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 17:02	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 17:02	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 17:02	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 17:02	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 17:02	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 17:02	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 17:02	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 17:02	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 17:02	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 17:02	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 17:02	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 17:02	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 17:02	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 17:02	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 17:02	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 17:02	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 17:02	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 17:02	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 17:02	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 17:02	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 17:02	1
Methylene bromide	ND		5.0	0.22	ug/L			12/01/23 17:02	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 17:02	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 17:02	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/01/23 17:02	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 17:02	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 17:02	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 17:02	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 17:02	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 17:02	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 17:02	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 17:02	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/01/23 17:02	1

Client Sample ID: MW27-ROX-112723
Date Collected: 11/27/23 13:45
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-7
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 17:02	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 17:02	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/01/23 17:02	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 17:02	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 17:02	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/01/23 17:02	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 17:02	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 17:02	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 17:02	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 17:02	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 17:02	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 17:02	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 17:02	1
Trichloroethene	ND		1.0	0.15	ug/L			12/01/23 17:02	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 17:02	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 17:02	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 17:02	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 17:02	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 17:02	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 17:02	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*12/01/23 17:02*	*1*
Dibromofluoromethane	*93*		*75 - 126*		*12/01/23 17:02*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*12/01/23 17:02*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		11/30/23 10:34	12/01/23 21:53	1
Acenaphthylene	ND		0.20	0.045	ug/L		11/30/23 10:34	12/01/23 21:53	1
Anthracene	**0.070**	**J**	0.20	0.048	ug/L		11/30/23 10:34	12/01/23 21:53	1
Benzo[a]anthracene	**0.049**	**J**	0.20	0.035	ug/L		11/30/23 10:34	12/01/23 21:53	1
Benzo[a]pyrene	ND		0.20	0.066	ug/L		11/30/23 10:34	12/01/23 21:53	1
Benzo[b]fluoranthene	**0.046**	**J**	0.20	0.038	ug/L		11/30/23 10:34	12/01/23 21:53	1
Benzo[g,h,i]perylene	ND		0.20	0.028	ug/L		11/30/23 10:34	12/01/23 21:53	1
Benzo[k]fluoranthene	ND		0.20	0.064	ug/L		11/30/23 10:34	12/01/23 21:53	1
Chrysene	ND		0.20	0.034	ug/L		11/30/23 10:34	12/01/23 21:53	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		11/30/23 10:34	12/01/23 21:53	1
Fluoranthene	ND		0.20	0.035	ug/L		11/30/23 10:34	12/01/23 21:53	1
Fluorene	ND		0.20	0.091	ug/L		11/30/23 10:34	12/01/23 21:53	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.035	ug/L		11/30/23 10:34	12/01/23 21:53	1
Phenanthrene	ND		0.20	0.092	ug/L		11/30/23 10:34	12/01/23 21:53	1
Pyrene	ND		0.20	0.040	ug/L		11/30/23 10:34	12/01/23 21:53	1
1-Methylnaphthalene	ND		0.20	0.082	ug/L		11/30/23 10:34	12/01/23 21:53	1
2-Methylnaphthalene	ND		0.20	0.068	ug/L		11/30/23 10:34	12/01/23 21:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*83*		*18 - 147*	*11/30/23 10:34*	*12/01/23 21:53*	*1*
2-Fluorobiphenyl	*63*		*15 - 128*	*11/30/23 10:34*	*12/01/23 21:53*	*1*

Client Sample ID: MW27-ROX-112723
Date Collected: 11/27/23 13:45
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-7
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*57*		*10 - 144*	*11/30/23 10:34*	*12/01/23 21:53*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.21	0.10	ug/L		12/06/23 08:40	12/07/23 15:40	1
Acenaphthylene	ND	H	0.21	0.045	ug/L		12/06/23 08:40	12/07/23 15:40	1
Anthracene	ND	H	0.21	0.048	ug/L		12/06/23 08:40	12/07/23 15:40	1
Benzo[a]anthracene	ND	H	0.21	0.035	ug/L		12/06/23 08:40	12/07/23 15:40	1
Benzo[a]pyrene	ND	H	0.21	0.066	ug/L		12/06/23 08:40	12/07/23 15:40	1
Benzo[b]fluoranthene	ND	H	0.21	0.038	ug/L		12/06/23 08:40	12/07/23 15:40	1
Benzo[g,h,i]perylene	ND	H	0.21	0.028	ug/L		12/06/23 08:40	12/07/23 15:40	1
Benzo[k]fluoranthene	ND	H	0.21	0.064	ug/L		12/06/23 08:40	12/07/23 15:40	1
Chrysene	ND	H	0.21	0.034	ug/L		12/06/23 08:40	12/07/23 15:40	1
Dibenz(a,h)anthracene	ND	H	0.21	0.050	ug/L		12/06/23 08:40	12/07/23 15:40	1
Fluoranthene	ND	H	0.21	0.035	ug/L		12/06/23 08:40	12/07/23 15:40	1
Fluorene	ND	H	0.21	0.092	ug/L		12/06/23 08:40	12/07/23 15:40	1
Indeno[1,2,3-cd]pyrene	ND	H	0.21	0.035	ug/L		12/06/23 08:40	12/07/23 15:40	1
Phenanthrene	ND	H	0.21	0.093	ug/L		12/06/23 08:40	12/07/23 15:40	1
Pyrene	ND	H	0.21	0.040	ug/L		12/06/23 08:40	12/07/23 15:40	1
1-Methylnaphthalene	ND	H	0.21	0.083	ug/L		12/06/23 08:40	12/07/23 15:40	1
2-Methylnaphthalene	ND	H	0.21	0.068	ug/L		12/06/23 08:40	12/07/23 15:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*158*	*S1+*	*18 - 147*	*12/06/23 08:40*	*12/07/23 15:40*	*1*
2-Fluorobiphenyl	*81*		*15 - 128*	*12/06/23 08:40*	*12/07/23 15:40*	*1*
Nitrobenzene-d5	*79*		*10 - 144*	*12/06/23 08:40*	*12/07/23 15:40*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		11/30/23 10:34	12/01/23 20:26	1
Benzenethiol	ND	*-	10	1.7	ug/L		11/30/23 10:34	12/01/23 20:26	1
Benzoic acid	ND		31	7.5	ug/L		11/30/23 10:34	12/01/23 20:26	1
Benzyl alcohol	ND		10	2.0	ug/L		11/30/23 10:34	12/01/23 20:26	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		11/30/23 10:34	12/01/23 20:26	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		11/30/23 10:34	12/01/23 20:26	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		11/30/23 10:34	12/01/23 20:26	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		11/30/23 10:34	12/01/23 20:26	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		11/30/23 10:34	12/01/23 20:26	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		11/30/23 10:34	12/01/23 20:26	1
4-Chloroaniline	ND		10	3.5	ug/L		11/30/23 10:34	12/01/23 20:26	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		11/30/23 10:34	12/01/23 20:26	1
2-Chloronaphthalene	ND		10	0.14	ug/L		11/30/23 10:34	12/01/23 20:26	1
2-Chlorophenol	ND		10	2.3	ug/L		11/30/23 10:34	12/01/23 20:26	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		11/30/23 10:34	12/01/23 20:26	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		11/30/23 10:34	12/01/23 20:26	1
Dibenzofuran	ND		10	0.17	ug/L		11/30/23 10:34	12/01/23 20:26	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		11/30/23 10:34	12/01/23 20:26	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		11/30/23 10:34	12/01/23 20:26	1
Diethyl phthalate	ND		10	0.25	ug/L		11/30/23 10:34	12/01/23 20:26	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		11/30/23 10:34	12/01/23 20:26	1

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

Job ID: 400-247369-1

Client Sample ID: MW27-ROX-112723
Date Collected: 11/27/23 13:45
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-7
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		10	0.17	ug/L		11/30/23 10:34	12/01/23 20:26	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		11/30/23 10:34	12/01/23 20:26	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		11/30/23 10:34	12/01/23 20:26	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		11/30/23 10:34	12/01/23 20:26	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 10:34	12/01/23 20:26	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 10:34	12/01/23 20:26	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		11/30/23 10:34	12/01/23 20:26	1
1,4-Dioxane	ND		10	1.0	ug/L		11/30/23 10:34	12/01/23 20:26	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		11/30/23 10:34	12/01/23 20:26	1
Hexachlorobenzene	ND		10	0.17	ug/L		11/30/23 10:34	12/01/23 20:26	1
Hexachlorocyclopentadiene	ND	*-	20	2.7	ug/L		11/30/23 10:34	12/01/23 20:26	1
Hexachloroethane	ND		10	4.3	ug/L		11/30/23 10:34	12/01/23 20:26	1
Indene	ND		10	1.0	ug/L		11/30/23 10:34	12/01/23 20:26	1
Isophorone	ND		10	0.14	ug/L		11/30/23 10:34	12/01/23 20:26	1
2-Methylphenol	ND		10	1.8	ug/L		11/30/23 10:34	12/01/23 20:26	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		11/30/23 10:34	12/01/23 20:26	1
2-Nitroaniline	ND		10	2.3	ug/L		11/30/23 10:34	12/01/23 20:26	1
3-Nitroaniline	ND		10	1.8	ug/L		11/30/23 10:34	12/01/23 20:26	1
4-Nitroaniline	ND		10	1.5	ug/L		11/30/23 10:34	12/01/23 20:26	1
Nitrobenzene	ND		10	0.13	ug/L		11/30/23 10:34	12/01/23 20:26	1
2-Nitrophenol	ND		10	5.3	ug/L		11/30/23 10:34	12/01/23 20:26	1
4-Nitrophenol	ND		10	2.2	ug/L		11/30/23 10:34	12/01/23 20:26	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		11/30/23 10:34	12/01/23 20:26	1
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		11/30/23 10:34	12/01/23 20:26	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		11/30/23 10:34	12/01/23 20:26	1
Pentachlorophenol	ND		20	1.4	ug/L		11/30/23 10:34	12/01/23 20:26	1
Phenol	ND		10	2.7	ug/L		11/30/23 10:34	12/01/23 20:26	1
Pyridine	ND		10	3.3	ug/L		11/30/23 10:34	12/01/23 20:26	1
Quinoline	ND		10	4.6	ug/L		11/30/23 10:34	12/01/23 20:26	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		11/30/23 10:34	12/01/23 20:26	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		11/30/23 10:34	12/01/23 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*46 - 124*	*11/30/23 10:34*	*12/01/23 20:26*	*1*
2-Fluorophenol	*7*	*S1-*	*13 - 113*	*11/30/23 10:34*	*12/01/23 20:26*	*1*
Nitrobenzene-d5	*61*		*36 - 126*	*11/30/23 10:34*	*12/01/23 20:26*	*1*
Phenol-d5	*24*		*17 - 127*	*11/30/23 10:34*	*12/01/23 20:26*	*1*
Terphenyl-d14	*75*		*44 - 149*	*11/30/23 10:34*	*12/01/23 20:26*	*1*
2,4,6-Tribromophenol	*55*		*26 - 150*	*11/30/23 10:34*	*12/01/23 20:26*	*1*

Method: EPA 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	*1	0.029	0.017	ug/L		11/29/23 09:31	11/29/23 18:38	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		11/29/23 09:31	11/29/23 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*51 - 149*	*11/29/23 09:31*	*11/29/23 18:38*	*1*

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

Job ID: 400-247369-1

Client Sample ID: TB-ROX-112723-8260-B
Date Collected: 11/27/23 00:00
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-8
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/01/23 14:16	1
Acrolein	ND		20	3.3	ug/L			12/01/23 14:16	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 14:16	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 14:16	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 14:16	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 14:16	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/01/23 14:16	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 14:16	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 14:16	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/01/23 14:16	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 14:16	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 14:16	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 14:16	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 14:16	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 14:16	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 14:16	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 14:16	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 14:16	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 14:16	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 14:16	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 14:16	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 14:16	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 14:16	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 14:16	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 14:16	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 14:16	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 14:16	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 14:16	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 14:16	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 14:16	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 14:16	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 14:16	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 14:16	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 14:16	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 14:16	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 14:16	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 14:16	1
Methylene bromide	ND		5.0	0.22	ug/L			12/01/23 14:16	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 14:16	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 14:16	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/01/23 14:16	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 14:16	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 14:16	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 14:16	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 14:16	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 14:16	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 14:16	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 14:16	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/01/23 14:16	1

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

Job ID: 400-247369-1

Client Sample ID: TB-ROX-112723-8260-B
Date Collected: 11/27/23 00:00
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-8
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 14:16	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 14:16	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/01/23 14:16	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 14:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 14:16	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/01/23 14:16	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 14:16	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 14:16	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 14:16	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 14:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 14:16	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 14:16	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 14:16	1
Trichloroethene	ND		1.0	0.15	ug/L			12/01/23 14:16	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 14:16	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 14:16	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 14:16	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 14:16	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 14:16	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 14:16	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*12/01/23 14:16*	*1*
Dibromofluoromethane	*92*		*75 - 126*		*12/01/23 14:16*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*12/01/23 14:16*	*1*

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

Job ID: 400-247369-1

Client Sample ID: TB-ROX-112723-8011-B
Date Collected: 11/27/23 00:00
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-9
Matrix: Water

Method: EPA 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	*1	0.030	0.017	ug/L		11/29/23 09:31	11/29/23 18:59	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		11/29/23 09:31	11/29/23 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*51 - 149*	*11/29/23 09:31*	*11/29/23 18:59*	*1*

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

Job ID: 400-247369-1

Client Sample ID: MW9-ROX-112723-EB
Date Collected: 11/27/23 09:30
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-10
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/01/23 10:24	1
Acrolein	ND		20	3.3	ug/L			12/01/23 10:24	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 10:24	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 10:24	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 10:24	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 10:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/01/23 10:24	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 10:24	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 10:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/01/23 10:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 10:24	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 10:24	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 10:24	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 10:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 10:24	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 10:24	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 10:24	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 10:24	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 10:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 10:24	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 10:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 10:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 10:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 10:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 10:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 10:24	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 10:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 10:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 10:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 10:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 10:24	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 10:24	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 10:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 10:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 10:24	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 10:24	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 10:24	1
Methylene bromide	ND		5.0	0.22	ug/L			12/01/23 10:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 10:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 10:24	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/01/23 10:24	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 10:24	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 10:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 10:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 10:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 10:24	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 10:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 10:24	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/01/23 10:24	1

Client Sample ID: MW9-ROX-112723-EB
Date Collected: 11/27/23 09:30
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-10
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 10:24	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 10:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/01/23 10:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 10:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 10:24	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/01/23 10:24	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 10:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 10:24	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 10:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 10:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 10:24	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 10:24	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 10:24	1
Trichloroethene	ND		1.0	0.15	ug/L			12/01/23 10:24	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 10:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 10:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 10:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 10:24	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 10:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 10:24	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 10:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*12/01/23 10:24*	*1*
Dibromofluoromethane	*93*		*75 - 126*		*12/01/23 10:24*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*12/01/23 10:24*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.093	ug/L		11/30/23 10:34	12/01/23 22:13	1
Acenaphthylene	ND		0.19	0.042	ug/L		11/30/23 10:34	12/01/23 22:13	1
Anthracene	ND		0.19	0.044	ug/L		11/30/23 10:34	12/01/23 22:13	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		11/30/23 10:34	12/01/23 22:13	1
Benzo[a]pyrene	ND		0.19	0.060	ug/L		11/30/23 10:34	12/01/23 22:13	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		11/30/23 10:34	12/01/23 22:13	1
Benzo[g,h,i]perylene	ND		0.19	0.025	ug/L		11/30/23 10:34	12/01/23 22:13	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		11/30/23 10:34	12/01/23 22:13	1
Chrysene	ND		0.19	0.031	ug/L		11/30/23 10:34	12/01/23 22:13	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		11/30/23 10:34	12/01/23 22:13	1
Fluoranthene	ND		0.19	0.032	ug/L		11/30/23 10:34	12/01/23 22:13	1
Fluorene	ND		0.19	0.084	ug/L		11/30/23 10:34	12/01/23 22:13	1
Indeno[1,2,3-cd]pyrene	**0.062**	**J**	0.19	0.032	ug/L		11/30/23 10:34	12/01/23 22:13	1
Phenanthrene	ND		0.19	0.085	ug/L		11/30/23 10:34	12/01/23 22:13	1
Pyrene	ND		0.19	0.037	ug/L		11/30/23 10:34	12/01/23 22:13	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		11/30/23 10:34	12/01/23 22:13	1
2-Methylnaphthalene	ND		0.19	0.062	ug/L		11/30/23 10:34	12/01/23 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*101*		*18 - 147*	*11/30/23 10:34*	*12/01/23 22:13*	*1*
2-Fluorobiphenyl	*74*		*15 - 128*	*11/30/23 10:34*	*12/01/23 22:13*	*1*

Client Sample ID: MW9-ROX-112723-EB
Date Collected: 11/27/23 09:30
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-10
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*69*		*10 - 144*	*11/30/23 10:34*	*12/01/23 22:13*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.19	0.094	ug/L		12/06/23 08:40	12/07/23 16:00	1
Acenaphthylene	ND	H	0.19	0.042	ug/L		12/06/23 08:40	12/07/23 16:00	1
Anthracene	ND	H	0.19	0.044	ug/L		12/06/23 08:40	12/07/23 16:00	1
Benzo[a]anthracene	ND	H	0.19	0.032	ug/L		12/06/23 08:40	12/07/23 16:00	1
Benzo[a]pyrene	ND	H	0.19	0.061	ug/L		12/06/23 08:40	12/07/23 16:00	1
Benzo[b]fluoranthene	ND	H	0.19	0.035	ug/L		12/06/23 08:40	12/07/23 16:00	1
Benzo[g,h,i]perylene	ND	H	0.19	0.026	ug/L		12/06/23 08:40	12/07/23 16:00	1
Benzo[k]fluoranthene	ND	H	0.19	0.059	ug/L		12/06/23 08:40	12/07/23 16:00	1
Chrysene	ND	H	0.19	0.031	ug/L		12/06/23 08:40	12/07/23 16:00	1
Dibenz(a,h)anthracene	ND	H	0.19	0.045	ug/L		12/06/23 08:40	12/07/23 16:00	1
Fluoranthene	ND	H	0.19	0.032	ug/L		12/06/23 08:40	12/07/23 16:00	1
Fluorene	ND	H	0.19	0.084	ug/L		12/06/23 08:40	12/07/23 16:00	1
Indeno[1,2,3-cd]pyrene	ND	H	0.19	0.032	ug/L		12/06/23 08:40	12/07/23 16:00	1
Phenanthrene	ND	H	0.19	0.085	ug/L		12/06/23 08:40	12/07/23 16:00	1
Pyrene	ND	H	0.19	0.037	ug/L		12/06/23 08:40	12/07/23 16:00	1
1-Methylnaphthalene	ND	H	0.19	0.076	ug/L		12/06/23 08:40	12/07/23 16:00	1
2-Methylnaphthalene	ND	H	0.19	0.062	ug/L		12/06/23 08:40	12/07/23 16:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*137*		*18 - 147*	*12/06/23 08:40*	*12/07/23 16:00*	*1*
2-Fluorobiphenyl	*79*		*15 - 128*	*12/06/23 08:40*	*12/07/23 16:00*	*1*
Nitrobenzene-d5	*78*		*10 - 144*	*12/06/23 08:40*	*12/07/23 16:00*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.4	3.6	ug/L		11/30/23 10:34	12/01/23 20:48	1
Benzenethiol	ND	*-	9.4	1.6	ug/L		11/30/23 10:34	12/01/23 20:48	1
Benzoic acid	ND		28	6.9	ug/L		11/30/23 10:34	12/01/23 20:48	1
Benzyl alcohol	ND		9.4	1.9	ug/L		11/30/23 10:34	12/01/23 20:48	1
Bis(2-chloroethoxy)methane	ND		9.4	0.15	ug/L		11/30/23 10:34	12/01/23 20:48	1
Bis(2-chloroethyl)ether	ND		9.4	2.5	ug/L		11/30/23 10:34	12/01/23 20:48	1
bis (2-chloroisopropyl) ether	ND		9.4	0.15	ug/L		11/30/23 10:34	12/01/23 20:48	1
Bis(2-ethylhexyl) phthalate	ND		9.4	4.7	ug/L		11/30/23 10:34	12/01/23 20:48	1
4-Bromophenyl phenyl ether	ND		9.4	0.19	ug/L		11/30/23 10:34	12/01/23 20:48	1
Butyl benzyl phthalate	ND		9.4	0.18	ug/L		11/30/23 10:34	12/01/23 20:48	1
4-Chloroaniline	ND		9.4	3.2	ug/L		11/30/23 10:34	12/01/23 20:48	1
4-Chloro-3-methylphenol	ND		9.4	3.6	ug/L		11/30/23 10:34	12/01/23 20:48	1
2-Chloronaphthalene	ND		9.4	0.13	ug/L		11/30/23 10:34	12/01/23 20:48	1
2-Chlorophenol	ND		9.4	2.1	ug/L		11/30/23 10:34	12/01/23 20:48	1
4-Chlorophenyl phenyl ether	ND		9.4	1.9	ug/L		11/30/23 10:34	12/01/23 20:48	1
Dibenz[a,h]acridine	ND		9.4	0.94	ug/L		11/30/23 10:34	12/01/23 20:48	1
Dibenzofuran	ND		9.4	0.16	ug/L		11/30/23 10:34	12/01/23 20:48	1
3,3'-Dichlorobenzidine	ND		9.4	2.5	ug/L		11/30/23 10:34	12/01/23 20:48	1
2,4-Dichlorophenol	ND		9.4	2.8	ug/L		11/30/23 10:34	12/01/23 20:48	1
Diethyl phthalate	ND		9.4	0.23	ug/L		11/30/23 10:34	12/01/23 20:48	1
2,4-Dimethylphenol	ND		9.4	3.3	ug/L		11/30/23 10:34	12/01/23 20:48	1

Client Sample ID: MW9-ROX-112723-EB
Date Collected: 11/27/23 09:30
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-10
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.4	0.16	ug/L		11/30/23 10:34	12/01/23 20:48	1
Di-n-butyl phthalate	ND		9.4	2.5	ug/L		11/30/23 10:34	12/01/23 20:48	1
4,6-Dinitro-ortho-cresol	ND		9.4	1.5	ug/L		11/30/23 10:34	12/01/23 20:48	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		11/30/23 10:34	12/01/23 20:48	1
2,4-Dinitrotoluene	ND		9.4	1.8	ug/L		11/30/23 10:34	12/01/23 20:48	1
2,6-Dinitrotoluene	ND		9.4	1.8	ug/L		11/30/23 10:34	12/01/23 20:48	1
Di-n-octyl phthalate	ND		9.4	0.16	ug/L		11/30/23 10:34	12/01/23 20:48	1
1,4-Dioxane	ND		9.4	0.94	ug/L		11/30/23 10:34	12/01/23 20:48	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	0.94	ug/L		11/30/23 10:34	12/01/23 20:48	1
Hexachlorobenzene	ND		9.4	0.16	ug/L		11/30/23 10:34	12/01/23 20:48	1
Hexachlorocyclopentadiene	ND	*-	19	2.5	ug/L		11/30/23 10:34	12/01/23 20:48	1
Hexachloroethane	ND		9.4	4.0	ug/L		11/30/23 10:34	12/01/23 20:48	1
Indene	ND		9.4	0.94	ug/L		11/30/23 10:34	12/01/23 20:48	1
Isophorone	ND		9.4	0.13	ug/L		11/30/23 10:34	12/01/23 20:48	1
2-Methylphenol	ND		9.4	1.7	ug/L		11/30/23 10:34	12/01/23 20:48	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		11/30/23 10:34	12/01/23 20:48	1
2-Nitroaniline	ND		9.4	2.1	ug/L		11/30/23 10:34	12/01/23 20:48	1
3-Nitroaniline	ND		9.4	1.7	ug/L		11/30/23 10:34	12/01/23 20:48	1
4-Nitroaniline	ND		9.4	1.4	ug/L		11/30/23 10:34	12/01/23 20:48	1
Nitrobenzene	ND		9.4	0.12	ug/L		11/30/23 10:34	12/01/23 20:48	1
2-Nitrophenol	ND		9.4	4.9	ug/L		11/30/23 10:34	12/01/23 20:48	1
4-Nitrophenol	ND		9.4	2.0	ug/L		11/30/23 10:34	12/01/23 20:48	1
N-Nitrosodimethylamine	ND		9.4	3.3	ug/L		11/30/23 10:34	12/01/23 20:48	1
N-Nitrosodi-n-propylamine	ND		9.4	3.1	ug/L		11/30/23 10:34	12/01/23 20:48	1
N-Nitrosodiphenylamine	ND		9.4	0.17	ug/L		11/30/23 10:34	12/01/23 20:48	1
Pentachlorophenol	ND		19	1.3	ug/L		11/30/23 10:34	12/01/23 20:48	1
Phenol	ND		9.4	2.5	ug/L		11/30/23 10:34	12/01/23 20:48	1
Pyridine	ND		9.4	3.0	ug/L		11/30/23 10:34	12/01/23 20:48	1
Quinoline	ND		9.4	4.2	ug/L		11/30/23 10:34	12/01/23 20:48	1
2,4,5-Trichlorophenol	ND		9.4	3.5	ug/L		11/30/23 10:34	12/01/23 20:48	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		11/30/23 10:34	12/01/23 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*46 - 124*	*11/30/23 10:34*	*12/01/23 20:48*	*1*
2-Fluorophenol	*30*		*13 - 113*	*11/30/23 10:34*	*12/01/23 20:48*	*1*
Nitrobenzene-d5	*66*		*36 - 126*	*11/30/23 10:34*	*12/01/23 20:48*	*1*
Phenol-d5	*56*		*17 - 127*	*11/30/23 10:34*	*12/01/23 20:48*	*1*
Terphenyl-d14	*79*		*44 - 149*	*11/30/23 10:34*	*12/01/23 20:48*	*1*
2,4,6-Tribromophenol	*64*		*26 - 150*	*11/30/23 10:34*	*12/01/23 20:48*	*1*

Method: EPA 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	*1	0.029	0.016	ug/L		11/29/23 09:31	11/29/23 19:20	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		11/29/23 09:31	11/29/23 19:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*51 - 149*	*11/29/23 09:31*	*11/29/23 19:20*	*1*

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

Job ID: 400-247369-1

Client Sample ID: MW9-ROX-112723
Date Collected: 11/27/23 10:25
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-11
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/01/23 17:27	1
Acrolein	ND		20	3.3	ug/L			12/01/23 17:27	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 17:27	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 17:27	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 17:27	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 17:27	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/01/23 17:27	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 17:27	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 17:27	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/01/23 17:27	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 17:27	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 17:27	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 17:27	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 17:27	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 17:27	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 17:27	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 17:27	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 17:27	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 17:27	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 17:27	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 17:27	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 17:27	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 17:27	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 17:27	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 17:27	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 17:27	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 17:27	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 17:27	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 17:27	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 17:27	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 17:27	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 17:27	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 17:27	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 17:27	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 17:27	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 17:27	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 17:27	1
Methylene bromide	ND		5.0	0.22	ug/L			12/01/23 17:27	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 17:27	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 17:27	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/01/23 17:27	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 17:27	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 17:27	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 17:27	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 17:27	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 17:27	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 17:27	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 17:27	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/01/23 17:27	1

Client Sample ID: MW9-ROX-112723
Date Collected: 11/27/23 10:25
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-11
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 17:27	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 17:27	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/01/23 17:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 17:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 17:27	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/01/23 17:27	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 17:27	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 17:27	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 17:27	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 17:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 17:27	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 17:27	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 17:27	1
Trichloroethene	ND		1.0	0.15	ug/L			12/01/23 17:27	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 17:27	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 17:27	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 17:27	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 17:27	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 17:27	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 17:27	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*12/01/23 17:27*	*1*
Dibromofluoromethane	*95*		*75 - 126*		*12/01/23 17:27*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*12/01/23 17:27*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.095	ug/L		11/30/23 10:34	12/01/23 22:34	1
Acenaphthylene	ND		0.19	0.042	ug/L		11/30/23 10:34	12/01/23 22:34	1
Anthracene	ND		0.19	0.045	ug/L		11/30/23 10:34	12/01/23 22:34	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		11/30/23 10:34	12/01/23 22:34	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		11/30/23 10:34	12/01/23 22:34	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		11/30/23 10:34	12/01/23 22:34	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		11/30/23 10:34	12/01/23 22:34	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		11/30/23 10:34	12/01/23 22:34	1
Chrysene	ND		0.19	0.032	ug/L		11/30/23 10:34	12/01/23 22:34	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		11/30/23 10:34	12/01/23 22:34	1
Fluoranthene	ND		0.19	0.032	ug/L		11/30/23 10:34	12/01/23 22:34	1
Fluorene	ND		0.19	0.085	ug/L		11/30/23 10:34	12/01/23 22:34	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		11/30/23 10:34	12/01/23 22:34	1
Phenanthrene	ND		0.19	0.086	ug/L		11/30/23 10:34	12/01/23 22:34	1
Pyrene	ND		0.19	0.037	ug/L		11/30/23 10:34	12/01/23 22:34	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		11/30/23 10:34	12/01/23 22:34	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		11/30/23 10:34	12/01/23 22:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*91*		*18 - 147*	*11/30/23 10:34*	*12/01/23 22:34*	*1*
2-Fluorobiphenyl	*67*		*15 - 128*	*11/30/23 10:34*	*12/01/23 22:34*	*1*

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

Job ID: 400-247369-1

Client Sample ID: MW9-ROX-112723
Date Collected: 11/27/23 10:25
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-11
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*63*		*10 - 144*	*11/30/23 10:34*	*12/01/23 22:34*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		11/30/23 10:34	12/01/23 21:10	1
Benzenethiol	ND	*-	9.5	1.6	ug/L		11/30/23 10:34	12/01/23 21:10	1
Benzoic acid	ND		29	7.0	ug/L		11/30/23 10:34	12/01/23 21:10	1
Benzyl alcohol	ND		9.5	1.9	ug/L		11/30/23 10:34	12/01/23 21:10	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		11/30/23 10:34	12/01/23 21:10	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		11/30/23 10:34	12/01/23 21:10	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		11/30/23 10:34	12/01/23 21:10	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		11/30/23 10:34	12/01/23 21:10	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		11/30/23 10:34	12/01/23 21:10	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		11/30/23 10:34	12/01/23 21:10	1
4-Chloroaniline	ND		9.5	3.2	ug/L		11/30/23 10:34	12/01/23 21:10	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		11/30/23 10:34	12/01/23 21:10	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		11/30/23 10:34	12/01/23 21:10	1
2-Chlorophenol	ND		9.5	2.1	ug/L		11/30/23 10:34	12/01/23 21:10	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		11/30/23 10:34	12/01/23 21:10	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		11/30/23 10:34	12/01/23 21:10	1
Dibenzofuran	ND		9.5	0.16	ug/L		11/30/23 10:34	12/01/23 21:10	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		11/30/23 10:34	12/01/23 21:10	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		11/30/23 10:34	12/01/23 21:10	1
Diethyl phthalate	ND		9.5	0.23	ug/L		11/30/23 10:34	12/01/23 21:10	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		11/30/23 10:34	12/01/23 21:10	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		11/30/23 10:34	12/01/23 21:10	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		11/30/23 10:34	12/01/23 21:10	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		11/30/23 10:34	12/01/23 21:10	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		11/30/23 10:34	12/01/23 21:10	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		11/30/23 10:34	12/01/23 21:10	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		11/30/23 10:34	12/01/23 21:10	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		11/30/23 10:34	12/01/23 21:10	1
1,4-Dioxane	ND		9.5	0.95	ug/L		11/30/23 10:34	12/01/23 21:10	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		11/30/23 10:34	12/01/23 21:10	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		11/30/23 10:34	12/01/23 21:10	1
Hexachlorocyclopentadiene	ND	*-	19	2.5	ug/L		11/30/23 10:34	12/01/23 21:10	1
Hexachloroethane	ND		9.5	4.0	ug/L		11/30/23 10:34	12/01/23 21:10	1
Indene	ND		9.5	0.95	ug/L		11/30/23 10:34	12/01/23 21:10	1
Isophorone	ND		9.5	0.13	ug/L		11/30/23 10:34	12/01/23 21:10	1
2-Methylphenol	ND		9.5	1.7	ug/L		11/30/23 10:34	12/01/23 21:10	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		11/30/23 10:34	12/01/23 21:10	1
2-Nitroaniline	ND		9.5	2.1	ug/L		11/30/23 10:34	12/01/23 21:10	1
3-Nitroaniline	ND		9.5	1.7	ug/L		11/30/23 10:34	12/01/23 21:10	1
4-Nitroaniline	ND		9.5	1.4	ug/L		11/30/23 10:34	12/01/23 21:10	1
Nitrobenzene	ND		9.5	0.12	ug/L		11/30/23 10:34	12/01/23 21:10	1
2-Nitrophenol	ND		9.5	5.0	ug/L		11/30/23 10:34	12/01/23 21:10	1
4-Nitrophenol	ND		9.5	2.0	ug/L		11/30/23 10:34	12/01/23 21:10	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		11/30/23 10:34	12/01/23 21:10	1

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

Job ID: 400-247369-1

Client Sample ID: MW9-ROX-112723
Date Collected: 11/27/23 10:25
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-11
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.2	ug/L		11/30/23 10:34	12/01/23 21:10	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		11/30/23 10:34	12/01/23 21:10	1
Pentachlorophenol	ND		19	1.3	ug/L		11/30/23 10:34	12/01/23 21:10	1
Phenol	ND		9.5	2.5	ug/L		11/30/23 10:34	12/01/23 21:10	1
Pyridine	ND		9.5	3.1	ug/L		11/30/23 10:34	12/01/23 21:10	1
Quinoline	ND		9.5	4.3	ug/L		11/30/23 10:34	12/01/23 21:10	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		11/30/23 10:34	12/01/23 21:10	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		11/30/23 10:34	12/01/23 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*46 - 124*	*11/30/23 10:34*	*12/01/23 21:10*	*1*
2-Fluorophenol	*7*	*S1-*	*13 - 113*	*11/30/23 10:34*	*12/01/23 21:10*	*1*
Nitrobenzene-d5	*66*		*36 - 126*	*11/30/23 10:34*	*12/01/23 21:10*	*1*
Phenol-d5	*33*		*17 - 127*	*11/30/23 10:34*	*12/01/23 21:10*	*1*
Terphenyl-d14	*85*		*44 - 149*	*11/30/23 10:34*	*12/01/23 21:10*	*1*
2,4,6-Tribromophenol	*55*		*26 - 150*	*11/30/23 10:34*	*12/01/23 21:10*	*1*

Method: EPA 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	*1	0.030	0.017	ug/L		11/29/23 09:31	11/29/23 20:01	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		11/29/23 09:31	11/29/23 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*51 - 149*	*11/29/23 09:31*	*11/29/23 20:01*	*1*

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

Job ID: 400-247369-1

Client Sample ID: MW10-ROX-112723
Date Collected: 11/27/23 11:45
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-12
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	F1	25	10	ug/L			12/01/23 11:10	1
Acrolein	ND		20	3.3	ug/L			12/01/23 11:10	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 11:10	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 11:10	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 11:10	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 11:10	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/01/23 11:10	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 11:10	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 11:10	1
2-Butanone (MEK)	ND	F1	25	2.6	ug/L			12/01/23 11:10	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 11:10	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 11:10	1
Chlorobenzene	ND	F1	1.0	0.90	ug/L			12/01/23 11:10	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 11:10	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			12/01/23 11:10	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 11:10	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 11:10	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 11:10	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 11:10	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 11:10	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 11:10	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 11:10	1
1,3-Dichlorobenzene	ND	F1	1.0	0.54	ug/L			12/01/23 11:10	1
1,4-Dichlorobenzene	ND	F1	1.0	0.64	ug/L			12/01/23 11:10	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 11:10	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 11:10	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 11:10	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 11:10	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 11:10	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 11:10	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 11:10	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 11:10	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 11:10	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 11:10	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 11:10	1
2-Hexanone	ND	F1	25	1.4	ug/L			12/01/23 11:10	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 11:10	1
Methylene bromide	ND		5.0	0.22	ug/L			12/01/23 11:10	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 11:10	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 11:10	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/01/23 11:10	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 11:10	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 11:10	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 11:10	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 11:10	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 11:10	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 11:10	1
p-Chlorotoluene	ND	F1	1.0	0.56	ug/L			12/01/23 11:10	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/01/23 11:10	1

Client Sample ID: MW10-ROX-112723
Date Collected: 11/27/23 11:45
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-12
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 11:10	1
Styrene	ND	F1	1.0	1.0	ug/L			12/01/23 11:10	1
tert-Butylbenzene	ND	F1	1.0	0.63	ug/L			12/01/23 11:10	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 11:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 11:10	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/01/23 11:10	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 11:10	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 11:10	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 11:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 11:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 11:10	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 11:10	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 11:10	1
Trichloroethene	ND		1.0	0.15	ug/L			12/01/23 11:10	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 11:10	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 11:10	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 11:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 11:10	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 11:10	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 11:10	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 11:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*12/01/23 11:10*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*12/01/23 11:10*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*12/01/23 11:10*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.094	ug/L		11/30/23 10:34	12/01/23 20:30	1
Acenaphthylene	**0.070**	**J**	0.19	0.042	ug/L		11/30/23 10:34	12/01/23 20:30	1
Anthracene	**0.066**	**J**	0.19	0.045	ug/L		11/30/23 10:34	12/01/23 20:30	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		11/30/23 10:34	12/01/23 20:30	1
Benzo[a]pyrene	**0.11**	**J**	0.19	0.061	ug/L		11/30/23 10:34	12/01/23 20:30	1
Benzo[b]fluoranthene	**0.049**	**J**	0.19	0.035	ug/L		11/30/23 10:34	12/01/23 20:30	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		11/30/23 10:34	12/01/23 20:30	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		11/30/23 10:34	12/01/23 20:30	1
Chrysene	ND		0.19	0.031	ug/L		11/30/23 10:34	12/01/23 20:30	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		11/30/23 10:34	12/01/23 20:30	1
Fluoranthene	ND		0.19	0.032	ug/L		11/30/23 10:34	12/01/23 20:30	1
Fluorene	ND		0.19	0.085	ug/L		11/30/23 10:34	12/01/23 20:30	1
Indeno[1,2,3-cd]pyrene	**0.065**	**J**	0.19	0.032	ug/L		11/30/23 10:34	12/01/23 20:30	1
Phenanthrene	ND		0.19	0.086	ug/L		11/30/23 10:34	12/01/23 20:30	1
Pyrene	ND		0.19	0.037	ug/L		11/30/23 10:34	12/01/23 20:30	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		11/30/23 10:34	12/01/23 20:30	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		11/30/23 10:34	12/01/23 20:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*96*		*18 - 147*	*11/30/23 10:34*	*12/01/23 20:30*	*1*
2-Fluorobiphenyl	*71*		*15 - 128*	*11/30/23 10:34*	*12/01/23 20:30*	*1*

Client Sample ID: MW10-ROX-112723
Date Collected: 11/27/23 11:45
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-12
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*64*		*10 - 144*	*11/30/23 10:34*	*12/01/23 20:30*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.19	0.094	ug/L		12/06/23 08:40	12/07/23 16:21	1
Acenaphthylene	ND	H	0.19	0.042	ug/L		12/06/23 08:40	12/07/23 16:21	1
Anthracene	ND	H	0.19	0.045	ug/L		12/06/23 08:40	12/07/23 16:21	1
Benzo[a]anthracene	ND	H	0.19	0.032	ug/L		12/06/23 08:40	12/07/23 16:21	1
Benzo[a]pyrene	ND	H	0.19	0.061	ug/L		12/06/23 08:40	12/07/23 16:21	1
Benzo[b]fluoranthene	**0.068**	**J H**	0.19	0.035	ug/L		12/06/23 08:40	12/07/23 16:21	1
Benzo[g,h,i]perylene	ND	H	0.19	0.026	ug/L		12/06/23 08:40	12/07/23 16:21	1
Benzo[k]fluoranthene	ND	H	0.19	0.059	ug/L		12/06/23 08:40	12/07/23 16:21	1
Chrysene	ND	H	0.19	0.031	ug/L		12/06/23 08:40	12/07/23 16:21	1
Dibenz(a,h)anthracene	ND	H	0.19	0.046	ug/L		12/06/23 08:40	12/07/23 16:21	1
Fluoranthene	ND	H	0.19	0.032	ug/L		12/06/23 08:40	12/07/23 16:21	1
Fluorene	ND	H	0.19	0.085	ug/L		12/06/23 08:40	12/07/23 16:21	1
Indeno[1,2,3-cd]pyrene	ND	H	0.19	0.032	ug/L		12/06/23 08:40	12/07/23 16:21	1
Phenanthrene	ND	H	0.19	0.086	ug/L		12/06/23 08:40	12/07/23 16:21	1
Pyrene	ND	H	0.19	0.037	ug/L		12/06/23 08:40	12/07/23 16:21	1
1-Methylnaphthalene	ND	H	0.19	0.076	ug/L		12/06/23 08:40	12/07/23 16:21	1
2-Methylnaphthalene	ND	H	0.19	0.063	ug/L		12/06/23 08:40	12/07/23 16:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*157*	*S1+*	*18 - 147*	*12/06/23 08:40*	*12/07/23 16:21*	*1*
2-Fluorobiphenyl	*82*		*15 - 128*	*12/06/23 08:40*	*12/07/23 16:21*	*1*
Nitrobenzene-d5	*79*		*10 - 144*	*12/06/23 08:40*	*12/07/23 16:21*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		11/30/23 10:34	12/01/23 18:57	1
Benzenethiol	ND	*-	9.5	1.6	ug/L		11/30/23 10:34	12/01/23 18:57	1
Benzoic acid	ND		29	6.9	ug/L		11/30/23 10:34	12/01/23 18:57	1
Benzyl alcohol	ND		9.5	1.9	ug/L		11/30/23 10:34	12/01/23 18:57	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		11/30/23 10:34	12/01/23 18:57	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		11/30/23 10:34	12/01/23 18:57	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		11/30/23 10:34	12/01/23 18:57	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		11/30/23 10:34	12/01/23 18:57	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		11/30/23 10:34	12/01/23 18:57	1
Butyl benzyl phthalate	**2.9**	**J**	9.5	0.18	ug/L		11/30/23 10:34	12/01/23 18:57	1
4-Chloroaniline	ND		9.5	3.2	ug/L		11/30/23 10:34	12/01/23 18:57	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		11/30/23 10:34	12/01/23 18:57	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		11/30/23 10:34	12/01/23 18:57	1
2-Chlorophenol	ND		9.5	2.1	ug/L		11/30/23 10:34	12/01/23 18:57	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		11/30/23 10:34	12/01/23 18:57	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		11/30/23 10:34	12/01/23 18:57	1
Dibenzofuran	ND		9.5	0.16	ug/L		11/30/23 10:34	12/01/23 18:57	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		11/30/23 10:34	12/01/23 18:57	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		11/30/23 10:34	12/01/23 18:57	1
Diethyl phthalate	ND		9.5	0.23	ug/L		11/30/23 10:34	12/01/23 18:57	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		11/30/23 10:34	12/01/23 18:57	1

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

Job ID: 400-247369-1

Client Sample ID: MW10-ROX-112723
Date Collected: 11/27/23 11:45
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-12
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.5	0.16	ug/L		11/30/23 10:34	12/01/23 18:57	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		11/30/23 10:34	12/01/23 18:57	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		11/30/23 10:34	12/01/23 18:57	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		11/30/23 10:34	12/01/23 18:57	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		11/30/23 10:34	12/01/23 18:57	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		11/30/23 10:34	12/01/23 18:57	1
Di-n-octyl phthalate	**4.3**	**J**	9.5	0.16	ug/L		11/30/23 10:34	12/01/23 18:57	1
1,4-Dioxane	ND		9.5	0.95	ug/L		11/30/23 10:34	12/01/23 18:57	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		11/30/23 10:34	12/01/23 18:57	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		11/30/23 10:34	12/01/23 18:57	1
Hexachlorocyclopentadiene	ND	*-	19	2.5	ug/L		11/30/23 10:34	12/01/23 18:57	1
Hexachloroethane	ND		9.5	4.0	ug/L		11/30/23 10:34	12/01/23 18:57	1
Indene	ND		9.5	0.95	ug/L		11/30/23 10:34	12/01/23 18:57	1
Isophorone	ND		9.5	0.13	ug/L		11/30/23 10:34	12/01/23 18:57	1
2-Methylphenol	ND		9.5	1.7	ug/L		11/30/23 10:34	12/01/23 18:57	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		11/30/23 10:34	12/01/23 18:57	1
2-Nitroaniline	ND		9.5	2.1	ug/L		11/30/23 10:34	12/01/23 18:57	1
3-Nitroaniline	ND		9.5	1.7	ug/L		11/30/23 10:34	12/01/23 18:57	1
4-Nitroaniline	ND		9.5	1.4	ug/L		11/30/23 10:34	12/01/23 18:57	1
Nitrobenzene	ND		9.5	0.12	ug/L		11/30/23 10:34	12/01/23 18:57	1
2-Nitrophenol	ND		9.5	4.9	ug/L		11/30/23 10:34	12/01/23 18:57	1
4-Nitrophenol	ND		9.5	2.0	ug/L		11/30/23 10:34	12/01/23 18:57	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		11/30/23 10:34	12/01/23 18:57	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		11/30/23 10:34	12/01/23 18:57	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		11/30/23 10:34	12/01/23 18:57	1
Pentachlorophenol	ND		19	1.3	ug/L		11/30/23 10:34	12/01/23 18:57	1
Phenol	ND		9.5	2.5	ug/L		11/30/23 10:34	12/01/23 18:57	1
Pyridine	ND		9.5	3.0	ug/L		11/30/23 10:34	12/01/23 18:57	1
Quinoline	ND		9.5	4.3	ug/L		11/30/23 10:34	12/01/23 18:57	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		11/30/23 10:34	12/01/23 18:57	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		11/30/23 10:34	12/01/23 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*64*		*46 - 124*	*11/30/23 10:34*	*12/01/23 18:57*	*1*
2-Fluorophenol	*6*	*S1-*	*13 - 113*	*11/30/23 10:34*	*12/01/23 18:57*	*1*
Nitrobenzene-d5	*65*		*36 - 126*	*11/30/23 10:34*	*12/01/23 18:57*	*1*
Phenol-d5	*33*		*17 - 127*	*11/30/23 10:34*	*12/01/23 18:57*	*1*
Terphenyl-d14	*86*		*44 - 149*	*11/30/23 10:34*	*12/01/23 18:57*	*1*
2,4,6-Tribromophenol	*57*		*26 - 150*	*11/30/23 10:34*	*12/01/23 18:57*	*1*

Method: EPA 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	*1	0.031	0.017	ug/L		11/29/23 09:31	11/29/23 20:22	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		11/29/23 09:31	11/29/23 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*11/29/23 09:31*	*11/29/23 20:22*	*1*

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

Job ID: 400-247369-1

Client Sample ID: MW28-ROX-112723
Date Collected: 11/27/23 13:30
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-13
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/01/23 17:51	1
Acrolein	ND		20	3.3	ug/L			12/01/23 17:51	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 17:51	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 17:51	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 17:51	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 17:51	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/01/23 17:51	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 17:51	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 17:51	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/01/23 17:51	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 17:51	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 17:51	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 17:51	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 17:51	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 17:51	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 17:51	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 17:51	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 17:51	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 17:51	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 17:51	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 17:51	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 17:51	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 17:51	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 17:51	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 17:51	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 17:51	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 17:51	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 17:51	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 17:51	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 17:51	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 17:51	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 17:51	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 17:51	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 17:51	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 17:51	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 17:51	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 17:51	1
Methylene bromide	ND		5.0	0.22	ug/L			12/01/23 17:51	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 17:51	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 17:51	1
Methyl tert-butyl ether	**0.39**	**J**	1.0	0.22	ug/L			12/01/23 17:51	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 17:51	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 17:51	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 17:51	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 17:51	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 17:51	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 17:51	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 17:51	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/01/23 17:51	1

Client Sample ID: MW28-ROX-112723
Date Collected: 11/27/23 13:30
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-13
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 17:51	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 17:51	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/01/23 17:51	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 17:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 17:51	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/01/23 17:51	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 17:51	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 17:51	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 17:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 17:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 17:51	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 17:51	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 17:51	1
Trichloroethene	ND		1.0	0.15	ug/L			12/01/23 17:51	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 17:51	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 17:51	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 17:51	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 17:51	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 17:51	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 17:51	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*12/01/23 17:51*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*12/01/23 17:51*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*12/01/23 17:51*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.093	ug/L		11/30/23 10:34	12/01/23 22:54	1
Acenaphthylene	ND		0.19	0.041	ug/L		11/30/23 10:34	12/01/23 22:54	1
Anthracene	**0.065**	**J**	0.19	0.044	ug/L		11/30/23 10:34	12/01/23 22:54	1
Benzo[a]anthracene	**0.064**	**J**	0.19	0.032	ug/L		11/30/23 10:34	12/01/23 22:54	1
Benzo[a]pyrene	**0.11**	**J**	0.19	0.060	ug/L		11/30/23 10:34	12/01/23 22:54	1
Benzo[b]fluoranthene	**0.062**	**J**	0.19	0.035	ug/L		11/30/23 10:34	12/01/23 22:54	1
Benzo[g,h,i]perylene	**0.031**	**J**	0.19	0.025	ug/L		11/30/23 10:34	12/01/23 22:54	1
Benzo[k]fluoranthene	ND		0.19	0.058	ug/L		11/30/23 10:34	12/01/23 22:54	1
Chrysene	ND		0.19	0.031	ug/L		11/30/23 10:34	12/01/23 22:54	1
Dibenz(a,h)anthracene	**0.072**	**J**	0.19	0.045	ug/L		11/30/23 10:34	12/01/23 22:54	1
Fluoranthene	ND		0.19	0.032	ug/L		11/30/23 10:34	12/01/23 22:54	1
Fluorene	ND		0.19	0.083	ug/L		11/30/23 10:34	12/01/23 22:54	1
Indeno[1,2,3-cd]pyrene	**0.081**	**J**	0.19	0.032	ug/L		11/30/23 10:34	12/01/23 22:54	1
Phenanthrene	ND		0.19	0.084	ug/L		11/30/23 10:34	12/01/23 22:54	1
Pyrene	ND		0.19	0.037	ug/L		11/30/23 10:34	12/01/23 22:54	1
1-Methylnaphthalene	ND		0.19	0.075	ug/L		11/30/23 10:34	12/01/23 22:54	1
2-Methylnaphthalene	ND		0.19	0.062	ug/L		11/30/23 10:34	12/01/23 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*92*		*18 - 147*	*11/30/23 10:34*	*12/01/23 22:54*	*1*
2-Fluorobiphenyl	*74*		*15 - 128*	*11/30/23 10:34*	*12/01/23 22:54*	*1*

Client Sample ID: MW28-ROX-112723
Date Collected: 11/27/23 13:30
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-13
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*69*		*10 - 144*	*11/30/23 10:34*	*12/01/23 22:54*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.19	0.093	ug/L		12/06/23 08:40	12/07/23 16:41	1
Acenaphthylene	ND	H	0.19	0.041	ug/L		12/06/23 08:40	12/07/23 16:41	1
Anthracene	ND	H	0.19	0.044	ug/L		12/06/23 08:40	12/07/23 16:41	1
Benzo[a]anthracene	ND	H	0.19	0.032	ug/L		12/06/23 08:40	12/07/23 16:41	1
Benzo[a]pyrene	ND	H	0.19	0.060	ug/L		12/06/23 08:40	12/07/23 16:41	1
Benzo[b]fluoranthene	ND	H	0.19	0.035	ug/L		12/06/23 08:40	12/07/23 16:41	1
Benzo[g,h,i]perylene	ND	H	0.19	0.025	ug/L		12/06/23 08:40	12/07/23 16:41	1
Benzo[k]fluoranthene	ND	H	0.19	0.058	ug/L		12/06/23 08:40	12/07/23 16:41	1
Chrysene	ND	H	0.19	0.031	ug/L		12/06/23 08:40	12/07/23 16:41	1
Dibenz(a,h)anthracene	ND	H	0.19	0.045	ug/L		12/06/23 08:40	12/07/23 16:41	1
Fluoranthene	ND	H	0.19	0.032	ug/L		12/06/23 08:40	12/07/23 16:41	1
Fluorene	ND	H	0.19	0.083	ug/L		12/06/23 08:40	12/07/23 16:41	1
Indeno[1,2,3-cd]pyrene	ND	H	0.19	0.032	ug/L		12/06/23 08:40	12/07/23 16:41	1
Phenanthrene	ND	H	0.19	0.084	ug/L		12/06/23 08:40	12/07/23 16:41	1
Pyrene	ND	H	0.19	0.037	ug/L		12/06/23 08:40	12/07/23 16:41	1
1-Methylnaphthalene	ND	H	0.19	0.075	ug/L		12/06/23 08:40	12/07/23 16:41	1
2-Methylnaphthalene	ND	H	0.19	0.062	ug/L		12/06/23 08:40	12/07/23 16:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*157*	*S1+*	*18 - 147*	*12/06/23 08:40*	*12/07/23 16:41*	*1*
2-Fluorobiphenyl	*79*		*15 - 128*	*12/06/23 08:40*	*12/07/23 16:41*	*1*
Nitrobenzene-d5	*80*		*10 - 144*	*12/06/23 08:40*	*12/07/23 16:41*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.4	3.6	ug/L		11/30/23 10:34	12/01/23 21:32	1
Benzenethiol	ND	*-	9.4	1.6	ug/L		11/30/23 10:34	12/01/23 21:32	1
Benzoic acid	ND		28	6.8	ug/L		11/30/23 10:34	12/01/23 21:32	1
Benzyl alcohol	ND		9.4	1.9	ug/L		11/30/23 10:34	12/01/23 21:32	1
Bis(2-chloroethoxy)methane	ND		9.4	0.15	ug/L		11/30/23 10:34	12/01/23 21:32	1
Bis(2-chloroethyl)ether	ND		9.4	2.5	ug/L		11/30/23 10:34	12/01/23 21:32	1
bis (2-chloroisopropyl) ether	ND		9.4	0.15	ug/L		11/30/23 10:34	12/01/23 21:32	1
Bis(2-ethylhexyl) phthalate	**5.1**	**J**	9.4	4.7	ug/L		11/30/23 10:34	12/01/23 21:32	1
4-Bromophenyl phenyl ether	ND		9.4	0.19	ug/L		11/30/23 10:34	12/01/23 21:32	1
Butyl benzyl phthalate	ND		9.4	0.18	ug/L		11/30/23 10:34	12/01/23 21:32	1
4-Chloroaniline	ND		9.4	3.2	ug/L		11/30/23 10:34	12/01/23 21:32	1
4-Chloro-3-methylphenol	ND		9.4	3.6	ug/L		11/30/23 10:34	12/01/23 21:32	1
2-Chloronaphthalene	ND		9.4	0.13	ug/L		11/30/23 10:34	12/01/23 21:32	1
2-Chlorophenol	ND		9.4	2.1	ug/L		11/30/23 10:34	12/01/23 21:32	1
4-Chlorophenyl phenyl ether	ND		9.4	1.9	ug/L		11/30/23 10:34	12/01/23 21:32	1
Dibenz[a,h]acridine	ND		9.4	0.94	ug/L		11/30/23 10:34	12/01/23 21:32	1
Dibenzofuran	ND		9.4	0.16	ug/L		11/30/23 10:34	12/01/23 21:32	1
3,3'-Dichlorobenzidine	ND		9.4	2.4	ug/L		11/30/23 10:34	12/01/23 21:32	1
2,4-Dichlorophenol	ND		9.4	2.8	ug/L		11/30/23 10:34	12/01/23 21:32	1
Diethyl phthalate	ND		9.4	0.22	ug/L		11/30/23 10:34	12/01/23 21:32	1
2,4-Dimethylphenol	ND		9.4	3.3	ug/L		11/30/23 10:34	12/01/23 21:32	1

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

Job ID: 400-247369-1

Client Sample ID: MW28-ROX-112723
Date Collected: 11/27/23 13:30
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-13
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.4	0.16	ug/L		11/30/23 10:34	12/01/23 21:32	1
Di-n-butyl phthalate	ND		9.4	2.5	ug/L		11/30/23 10:34	12/01/23 21:32	1
4,6-Dinitro-ortho-cresol	ND		9.4	1.5	ug/L		11/30/23 10:34	12/01/23 21:32	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		11/30/23 10:34	12/01/23 21:32	1
2,4-Dinitrotoluene	ND		9.4	1.8	ug/L		11/30/23 10:34	12/01/23 21:32	1
2,6-Dinitrotoluene	ND		9.4	1.8	ug/L		11/30/23 10:34	12/01/23 21:32	1
Di-n-octyl phthalate	ND		9.4	0.16	ug/L		11/30/23 10:34	12/01/23 21:32	1
1,4-Dioxane	ND		9.4	0.94	ug/L		11/30/23 10:34	12/01/23 21:32	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	0.94	ug/L		11/30/23 10:34	12/01/23 21:32	1
Hexachlorobenzene	ND		9.4	0.16	ug/L		11/30/23 10:34	12/01/23 21:32	1
Hexachlorocyclopentadiene	ND	*-	19	2.4	ug/L		11/30/23 10:34	12/01/23 21:32	1
Hexachloroethane	ND		9.4	3.9	ug/L		11/30/23 10:34	12/01/23 21:32	1
Indene	ND		9.4	0.94	ug/L		11/30/23 10:34	12/01/23 21:32	1
Isophorone	ND		9.4	0.13	ug/L		11/30/23 10:34	12/01/23 21:32	1
2-Methylphenol	ND		9.4	1.7	ug/L		11/30/23 10:34	12/01/23 21:32	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		11/30/23 10:34	12/01/23 21:32	1
2-Nitroaniline	ND		9.4	2.1	ug/L		11/30/23 10:34	12/01/23 21:32	1
3-Nitroaniline	ND		9.4	1.7	ug/L		11/30/23 10:34	12/01/23 21:32	1
4-Nitroaniline	ND		9.4	1.4	ug/L		11/30/23 10:34	12/01/23 21:32	1
Nitrobenzene	ND		9.4	0.12	ug/L		11/30/23 10:34	12/01/23 21:32	1
2-Nitrophenol	ND		9.4	4.9	ug/L		11/30/23 10:34	12/01/23 21:32	1
4-Nitrophenol	ND		9.4	2.0	ug/L		11/30/23 10:34	12/01/23 21:32	1
N-Nitrosodimethylamine	ND		9.4	3.3	ug/L		11/30/23 10:34	12/01/23 21:32	1
N-Nitrosodi-n-propylamine	ND		9.4	3.1	ug/L		11/30/23 10:34	12/01/23 21:32	1
N-Nitrosodiphenylamine	ND		9.4	0.17	ug/L		11/30/23 10:34	12/01/23 21:32	1
Pentachlorophenol	ND		19	1.3	ug/L		11/30/23 10:34	12/01/23 21:32	1
Phenol	ND		9.4	2.4	ug/L		11/30/23 10:34	12/01/23 21:32	1
Pyridine	ND		9.4	3.0	ug/L		11/30/23 10:34	12/01/23 21:32	1
Quinoline	ND		9.4	4.2	ug/L		11/30/23 10:34	12/01/23 21:32	1
2,4,5-Trichlorophenol	ND		9.4	3.5	ug/L		11/30/23 10:34	12/01/23 21:32	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		11/30/23 10:34	12/01/23 21:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*46 - 124*	*11/30/23 10:34*	*12/01/23 21:32*	*1*
2-Fluorophenol	*14*		*13 - 113*	*11/30/23 10:34*	*12/01/23 21:32*	*1*
Nitrobenzene-d5	*70*		*36 - 126*	*11/30/23 10:34*	*12/01/23 21:32*	*1*
Phenol-d5	*39*		*17 - 127*	*11/30/23 10:34*	*12/01/23 21:32*	*1*
Terphenyl-d14	*84*		*44 - 149*	*11/30/23 10:34*	*12/01/23 21:32*	*1*
2,4,6-Tribromophenol	*56*		*26 - 150*	*11/30/23 10:34*	*12/01/23 21:32*	*1*

Method: EPA 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		11/30/23 09:36	11/30/23 14:02	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		11/30/23 09:36	11/30/23 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*51 - 149*	*11/30/23 09:36*	*11/30/23 14:02*	*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
*-	LCS and/or LCSD is outside acceptance limits, low biased.
F2	MS/MSD RPD exceeds control limits
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
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
*1	LCS/LCSD RPD exceeds control limits.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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 MONTHLY GW

Job ID: 400-247369-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-130)	(75-126)	(64-132)
400-247369-1	TB-ROX-112723-8260-A	106	93	101
400-247369-3	MW1-ROX-112723-EB	107	91	101
400-247369-4	MW1-ROX-112723	104	94	102
400-247369-5	MW26-ROX-112723	105	95	99
400-247369-6	MW11-ROX-112723	106	93	100
400-247369-6 MS	MW11-ROX-112723	103	93	100
400-247369-6 MSD	MW11-ROX-112723	105	91	101
400-247369-7	MW27-ROX-112723	104	93	102
400-247369-8	TB-ROX-112723-8260-B	106	92	101
400-247369-10	MW9-ROX-112723-EB	104	93	101
400-247369-11	MW9-ROX-112723	106	95	101
400-247369-12	MW10-ROX-112723	103	94	100
400-247369-12 MS	MW10-ROX-112723	103	92	101
400-247369-12 MSD	MW10-ROX-112723	104	94	100
400-247369-13	MW28-ROX-112723	105	94	102
LCS 400-652440/1002	Lab Control Sample	105	92	101
MB 400-652440/5	Method Blank	105	92	102

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - 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)
400-247369-3	MW1-ROX-112723-EB	71	24	72	59	88	70
400-247369-4	MW1-ROX-112723	72	15	70	48	92	69
400-247369-5	MW26-ROX-112723	70	10 S1-	69	32	83	57
400-247369-6	MW11-ROX-112723	77	12 S1-	79	41	94	66
400-247369-6 MS	MW11-ROX-112723	69	12 S1-	80	47	88	78
400-247369-6 MSD	MW11-ROX-112723	66	35	74	66	82	77
400-247369-7	MW27-ROX-112723	61	7 S1-	61	24	75	55
400-247369-10	MW9-ROX-112723-EB	66	30	66	56	79	64
400-247369-11	MW9-ROX-112723	69	7 S1-	66	33	85	55
400-247369-12	MW10-ROX-112723	64	6 S1-	65	33	86	57
400-247369-12 MS	MW10-ROX-112723	69	48	77	72	86	80
400-247369-12 MSD	MW10-ROX-112723	72	30	83	67	96	84
400-247369-13	MW28-ROX-112723	69	14	70	39	84	56
LCS 400-652297/2-A	Lab Control Sample	64	35	76	63	80	77
LCS 400-652297/3-A	Lab Control Sample	73	26	72	58	89	68
LCSD 400-652297/4-A	Lab Control Sample Dup	71	41	70	66	88	66
MB 400-652297/1-A	Method Blank	76	20	79	60	92	72

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5

Client: AECOM Technical Services Inc. Job ID: 400-247369-1
Project/Site: ROXANA MONTHLY GW

PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	TPHL (18-147)	FBP (15-128)	NBZ (10-144)
400-247369-3	MW1-ROX-112723-EB	94	72	69
400-247369-3 - RERA	MW1-ROX-112723-EB	164 S1+	85	79
400-247369-4	MW1-ROX-112723	99	78	71
400-247369-4 - RERA	MW1-ROX-112723	97	80	79
400-247369-5	MW26-ROX-112723	97	75	70
400-247369-6	MW11-ROX-112723	112	82	73
400-247369-6 - RERA	MW11-ROX-112723	155 S1+	82	80
400-247369-6 MS	MW11-ROX-112723	76	74	60
400-247369-6 MSD	MW11-ROX-112723	69	69	71
400-247369-7	MW27-ROX-112723	83	63	57
400-247369-7 - RERA	MW27-ROX-112723	158 S1+	81	79
400-247369-10	MW9-ROX-112723-EB	101	74	69
400-247369-10 - RERA	MW9-ROX-112723-EB	137	79	78
400-247369-11	MW9-ROX-112723	91	67	63
400-247369-12	MW10-ROX-112723	96	71	64
400-247369-12 - RERA	MW10-ROX-112723	157 S1+	82	79
400-247369-12 MS	MW10-ROX-112723	77	75	81
400-247369-12 MSD	MW10-ROX-112723	80	78	86
400-247369-13	MW28-ROX-112723	92	74	69
400-247369-13 - RERA	MW28-ROX-112723	157 S1+	79	80
LCS 400-652297/2-A	Lab Control Sample	70	71	75
LCS 400-652972/2-A	Lab Control Sample	93	70	72
LCSD 400-652972/3-A	Lab Control Sample Dup	87	67	76
MB 400-652297/1-A	Method Blank	117	79	71
MB 400-652972/1-A	Method Blank	158 S1+	73	71

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

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)
400-247369-2	TB-ROX-112723-8011-A	117
400-247369-3	MW1-ROX-112723-EB	119
400-247369-4	MW1-ROX-112723	112
400-247369-5	MW26-ROX-112723	107
400-247369-6	MW11-ROX-112723	92
400-247369-6 MS	MW11-ROX-112723	108
400-247369-6 MSD	MW11-ROX-112723	98
400-247369-7	MW27-ROX-112723	103
400-247369-9	TB-ROX-112723-8011-B	114
400-247369-10	MW9-ROX-112723-EB	104

Surrogate Summary

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

Job ID: 400-247369-1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-247369-11	MW9-ROX-112723	113
400-247369-12	MW10-ROX-112723	94
400-247369-12 MS	MW10-ROX-112723	112
400-247369-12 MSD	MW10-ROX-112723	111
LCS 400-652100/2-A	Lab Control Sample	101
LCSD 400-652100/3-A	Lab Control Sample Dup	109
MB 400-652100/1-A	Method Blank	125

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-247369-13	MW28-ROX-112723	93
LCS 400-652288/2-A	Lab Control Sample	75
LCSD 400-652288/3-A	Lab Control Sample Dup	75
MB 400-652288/1-A	Method Blank	79

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-247369-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

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

Job ID: 400-247369-1

Client Sample ID: TB-ROX-112723-8260-A
Lab Sample ID: 400-247369-1
Date Collected: 11/27/23 00:00
Matrix: Water
Date Received: 11/28/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652440	12/01/23 15:51	WPD	EET PEN

Client Sample ID: TB-ROX-112723-8011-A
Lab Sample ID: 400-247369-2
Date Collected: 11/27/23 00:00
Matrix: Water
Date Received: 11/28/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.8 mL	35 mL	652100	11/29/23 09:31	PG	EET PEN
Total/NA	Analysis	8011		1			652129	11/29/23 16:12	PG	EET PEN

Client Sample ID: MW1-ROX-112723-EB
Lab Sample ID: 400-247369-3
Date Collected: 11/27/23 08:45
Matrix: Water
Date Received: 11/28/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652440	12/01/23 10:00	WPD	EET PEN
Total/NA	Prep	3520C			247 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 19:19	VC1	EET PEN
Total/NA	Prep	3520C			247 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	652559	12/01/23 20:51	KJA	EET PEN
Total/NA	Prep	3520C	RERA		250 mL	1 mL	652972	12/06/23 08:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	653388	12/07/23 14:39	S1B	EET PEN
Total/NA	Prep	8011			36 mL	35 mL	652100	11/29/23 09:31	PG	EET PEN
Total/NA	Analysis	8011		1			652129	11/29/23 16:33	PG	EET PEN

Client Sample ID: MW1-ROX-112723
Lab Sample ID: 400-247369-4
Date Collected: 11/27/23 10:10
Matrix: Water
Date Received: 11/28/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652440	12/01/23 16:16	WPD	EET PEN
Total/NA	Prep	3520C			244 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653033	12/05/23 16:42	VC1	EET PEN
Total/NA	Prep	3520C			244 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 19:41	VC1	EET PEN
Total/NA	Prep	3520C			244 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	652559	12/01/23 21:12	KJA	EET PEN
Total/NA	Prep	3520C	RERA		240.4 mL	1 mL	652972	12/06/23 08:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	653388	12/07/23 14:59	S1B	EET PEN
Total/NA	Prep	8011			36.3 mL	35 mL	652100	11/29/23 09:31	PG	EET PEN
Total/NA	Analysis	8011		1			652129	11/29/23 16:54	PG	EET PEN

Client Sample ID: MW26-ROX-112723

Lab Sample ID: 400-247369-5

Date Collected: 11/27/23 11:20

Matrix: Water

Date Received: 11/28/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652440	12/01/23 16:38	WPD	EET PEN
Total/NA	Prep	3520C			241 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 20:03	VC1	EET PEN
Total/NA	Prep	3520C			241 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	652559	12/01/23 21:32	KJA	EET PEN
Total/NA	Prep	8011			35.6 mL	35 mL	652100	11/29/23 09:31	PG	EET PEN
Total/NA	Analysis	8011		1			652129	11/29/23 17:15	PG	EET PEN

Client Sample ID: MW11-ROX-112723

Lab Sample ID: 400-247369-6

Date Collected: 11/27/23 12:45

Matrix: Water

Date Received: 11/28/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652440	12/01/23 10:46	WPD	EET PEN
Total/NA	Prep	3520C			245.6 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 17:51	VC1	EET PEN
Total/NA	Prep	3520C			245.6 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	652559	12/01/23 19:29	KJA	EET PEN
Total/NA	Prep	3520C	RERA		243.2 mL	1 mL	652972	12/06/23 08:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	653388	12/07/23 15:19	S1B	EET PEN
Total/NA	Prep	8011			35.1 mL	35 mL	652100	11/29/23 09:31	PG	EET PEN
Total/NA	Analysis	8011		1			652129	11/29/23 17:36	PG	EET PEN

Client Sample ID: MW27-ROX-112723

Lab Sample ID: 400-247369-7

Date Collected: 11/27/23 13:45

Matrix: Water

Date Received: 11/28/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652440	12/01/23 17:02	WPD	EET PEN
Total/NA	Prep	3520C			244 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 20:26	VC1	EET PEN
Total/NA	Prep	3520C			244 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	652559	12/01/23 21:53	KJA	EET PEN
Total/NA	Prep	3520C	RERA		242.4 mL	1 mL	652972	12/06/23 08:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	653388	12/07/23 15:40	S1B	EET PEN
Total/NA	Prep	8011			36 mL	35 mL	652100	11/29/23 09:31	PG	EET PEN
Total/NA	Analysis	8011		1			652129	11/29/23 18:38	PG	EET PEN

Client Sample ID: TB-ROX-112723-8260-B

Lab Sample ID: 400-247369-8

Date Collected: 11/27/23 00:00

Matrix: Water

Date Received: 11/28/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652440	12/01/23 14:16	WPD	EET PEN

Client Sample ID: TB-ROX-112723-8011-B

Lab Sample ID: 400-247369-9

Date Collected: 11/27/23 00:00

Matrix: Water

Date Received: 11/28/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.5 mL	35 mL	652100	11/29/23 09:31	PG	EET PEN
Total/NA	Analysis	8011		1			652129	11/29/23 18:59	PG	EET PEN

Client Sample ID: MW9-ROX-112723-EB

Lab Sample ID: 400-247369-10

Date Collected: 11/27/23 09:30

Matrix: Water

Date Received: 11/28/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652440	12/01/23 10:24	WPD	EET PEN
Total/NA	Prep	3520C			264.8 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 20:48	VC1	EET PEN
Total/NA	Prep	3520C			264.8 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	652559	12/01/23 22:13	KJA	EET PEN
Total/NA	Prep	3520C	RERA		264.4 mL	1 mL	652972	12/06/23 08:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	653388	12/07/23 16:00	S1B	EET PEN
Total/NA	Prep	8011			36.2 mL	35 mL	652100	11/29/23 09:31	PG	EET PEN
Total/NA	Analysis	8011		1			652129	11/29/23 19:20	PG	EET PEN

Client Sample ID: MW9-ROX-112723

Lab Sample ID: 400-247369-11

Date Collected: 11/27/23 10:25

Matrix: Water

Date Received: 11/28/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652440	12/01/23 17:27	WPD	EET PEN
Total/NA	Prep	3520C			261.8 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 21:10	VC1	EET PEN
Total/NA	Prep	3520C			261.8 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	652559	12/01/23 22:34	KJA	EET PEN
Total/NA	Prep	8011			35.5 mL	35 mL	652100	11/29/23 09:31	PG	EET PEN
Total/NA	Analysis	8011		1			652129	11/29/23 20:01	PG	EET PEN

Client Sample ID: MW10-ROX-112723

Lab Sample ID: 400-247369-12

Date Collected: 11/27/23 11:45

Matrix: Water

Date Received: 11/28/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652440	12/01/23 11:10	WPD	EET PEN
Total/NA	Prep	3520C			262.8 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 18:57	VC1	EET PEN
Total/NA	Prep	3520C			262.8 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	652559	12/01/23 20:30	KJA	EET PEN
Total/NA	Prep	3520C	RERA		262.4 mL	1 mL	652972	12/06/23 08:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	653388	12/07/23 16:21	S1B	EET PEN
Total/NA	Prep	8011			34.4 mL	35 mL	652100	11/29/23 09:31	PG	EET PEN
Total/NA	Analysis	8011		1			652129	11/29/23 20:22	PG	EET PEN

Lab Chronicle

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

Job ID: 400-247369-1

Client Sample ID: MW28-ROX-112723

Lab Sample ID: 400-247369-13

Date Collected: 11/27/23 13:30

Matrix: Water

Date Received: 11/28/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652440	12/01/23 17:51	WPD	EET PEN
Total/NA	Prep	3520C			267 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 21:32	VC1	EET PEN
Total/NA	Prep	3520C			267 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	652559	12/01/23 22:54	KJA	EET PEN
Total/NA	Prep	3520C	RERA		266.6 mL	1 mL	652972	12/06/23 08:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	653388	12/07/23 16:41	S1B	EET PEN
Total/NA	Prep	8011			34.9 mL	35 mL	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 14:02	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-652100/1-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	652100	11/29/23 09:31	PG	EET PEN
Total/NA	Analysis	8011		1			652129	11/29/23 12:22	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-652288/1-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	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 13:00	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-652297/1-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	652297	11/30/23 10:33	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 15:36	VC1	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	652297	11/30/23 10:33	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	652559	12/01/23 18:06	KJA	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-652440/5

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	8260D		1	5 mL	5 mL	652440	12/01/23 09:36	WPD	EET PEN

Lab Chronicle

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

Job ID: 400-247369-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-652972/1-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653195	12/06/23 15:44	TH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652100/2-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	652100	11/29/23 09:31	PG	EET PEN
Total/NA	Analysis	8011		1			652129	11/29/23 12:43	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652288/2-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	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 13:20	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652297/2-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	652297	11/30/23 10:33	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 16:44	VC1	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	652297	11/30/23 10:33	AR	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	652559	12/01/23 18:27	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652297/3-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	652297	11/30/23 10:33	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 15:59	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652440/1002
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	8260D		1	5 mL	5 mL	652440	12/01/23 08:43	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652972/2-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	653195	12/06/23 16:04	TH	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-652100/3-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	652100	11/29/23 09:31	PG	EET PEN
Total/NA	Analysis	8011		1			652129	11/29/23 13:04	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-652288/3-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	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 13:41	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-652297/4-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	652297	11/30/23 10:33	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 16:21	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-652972/3-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	653195	12/06/23 16:25	TH	EET PEN

Client Sample ID: MW11-ROX-112723
Lab Sample ID: 400-247369-6 MS
Date Collected: 11/27/23 12:45
Matrix: Water
Date Received: 11/28/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652440	12/01/23 12:18	WPD	EET PEN
Total/NA	Prep	3520C			240 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 17:06	VC1	EET PEN
Total/NA	Prep	3520C			240 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	652559	12/01/23 18:47	KJA	EET PEN

Client Sample ID: MW11-ROX-112723
Date Collected: 11/27/23 12:45
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-6 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	Prep	8011			35.2 mL	35 mL	652100	11/29/23 09:31	PG	EET PEN
Total/NA	Analysis	8011		1			652129	11/29/23 17:57	PG	EET PEN

Client Sample ID: MW11-ROX-112723
Date Collected: 11/27/23 12:45
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-6 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	8260D		1	5 mL	5 mL	652440	12/01/23 12:43	WPD	EET PEN
Total/NA	Prep	3520C			246.6 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 17:28	VC1	EET PEN
Total/NA	Prep	3520C			246.6 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	652559	12/01/23 19:08	KJA	EET PEN
Total/NA	Prep	8011			35.3 mL	35 mL	652100	11/29/23 09:31	PG	EET PEN
Total/NA	Analysis	8011		1			652129	11/29/23 18:17	PG	EET PEN

Client Sample ID: MW10-ROX-112723
Date Collected: 11/27/23 11:45
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-12 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	8260D		1	5 mL	5 mL	652440	12/01/23 13:05	WPD	EET PEN
Total/NA	Prep	3520C			265.4 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 18:13	VC1	EET PEN
Total/NA	Prep	3520C			265.4 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	652559	12/01/23 19:49	KJA	EET PEN
Total/NA	Prep	8011			35.5 mL	35 mL	652100	11/29/23 09:31	PG	EET PEN
Total/NA	Analysis	8011		1			652129	11/29/23 20:43	PG	EET PEN

Client Sample ID: MW10-ROX-112723
Date Collected: 11/27/23 11:45
Date Received: 11/28/23 09:15

Lab Sample ID: 400-247369-12 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	8260D		1	5 mL	5 mL	652440	12/01/23 13:27	WPD	EET PEN
Total/NA	Prep	3520C			264.2 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 18:35	VC1	EET PEN
Total/NA	Prep	3520C			264.2 mL	1 mL	652297	11/30/23 10:34	AR	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	652559	12/01/23 20:10	KJA	EET PEN
Total/NA	Prep	8011			35.9 mL	35 mL	652100	11/29/23 11:13	PG	EET PEN
Total/NA	Analysis	8011		1			652129	11/29/23 21:03	PG	EET PEN

Laboratory References:
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 652440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247369-1	TB-ROX-112723-8260-A	Total/NA	Water	8260D	
400-247369-3	MW1-ROX-112723-EB	Total/NA	Water	8260D	
400-247369-4	MW1-ROX-112723	Total/NA	Water	8260D	
400-247369-5	MW26-ROX-112723	Total/NA	Water	8260D	
400-247369-6	MW11-ROX-112723	Total/NA	Water	8260D	
400-247369-7	MW27-ROX-112723	Total/NA	Water	8260D	
400-247369-8	TB-ROX-112723-8260-B	Total/NA	Water	8260D	
400-247369-10	MW9-ROX-112723-EB	Total/NA	Water	8260D	
400-247369-11	MW9-ROX-112723	Total/NA	Water	8260D	
400-247369-12	MW10-ROX-112723	Total/NA	Water	8260D	
400-247369-13	MW28-ROX-112723	Total/NA	Water	8260D	
MB 400-652440/5	Method Blank	Total/NA	Water	8260D	
LCS 400-652440/1002	Lab Control Sample	Total/NA	Water	8260D	
400-247369-6 MS	MW11-ROX-112723	Total/NA	Water	8260D	
400-247369-6 MSD	MW11-ROX-112723	Total/NA	Water	8260D	
400-247369-12 MS	MW10-ROX-112723	Total/NA	Water	8260D	
400-247369-12 MSD	MW10-ROX-112723	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 652297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247369-3	MW1-ROX-112723-EB	Total/NA	Water	3520C	
400-247369-4	MW1-ROX-112723	Total/NA	Water	3520C	
400-247369-5	MW26-ROX-112723	Total/NA	Water	3520C	
400-247369-6	MW11-ROX-112723	Total/NA	Water	3520C	
400-247369-7	MW27-ROX-112723	Total/NA	Water	3520C	
400-247369-10	MW9-ROX-112723-EB	Total/NA	Water	3520C	
400-247369-11	MW9-ROX-112723	Total/NA	Water	3520C	
400-247369-12	MW10-ROX-112723	Total/NA	Water	3520C	
400-247369-13	MW28-ROX-112723	Total/NA	Water	3520C	
MB 400-652297/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-652297/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-652297/3-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-652297/4-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-247369-6 MS	MW11-ROX-112723	Total/NA	Water	3520C	
400-247369-6 MSD	MW11-ROX-112723	Total/NA	Water	3520C	
400-247369-12 MS	MW10-ROX-112723	Total/NA	Water	3520C	
400-247369-12 MSD	MW10-ROX-112723	Total/NA	Water	3520C	

Analysis Batch: 652457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247369-3	MW1-ROX-112723-EB	Total/NA	Water	8270E	652297
400-247369-4	MW1-ROX-112723	Total/NA	Water	8270E	652297
400-247369-5	MW26-ROX-112723	Total/NA	Water	8270E	652297
400-247369-6	MW11-ROX-112723	Total/NA	Water	8270E	652297
400-247369-7	MW27-ROX-112723	Total/NA	Water	8270E	652297
400-247369-10	MW9-ROX-112723-EB	Total/NA	Water	8270E	652297
400-247369-11	MW9-ROX-112723	Total/NA	Water	8270E	652297
400-247369-12	MW10-ROX-112723	Total/NA	Water	8270E	652297
400-247369-13	MW28-ROX-112723	Total/NA	Water	8270E	652297

GC/MS Semi VOA (Continued)

Analysis Batch: 652457 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-652297/1-A	Method Blank	Total/NA	Water	8270E	652297
LCS 400-652297/2-A	Lab Control Sample	Total/NA	Water	8270E	652297
LCS 400-652297/3-A	Lab Control Sample	Total/NA	Water	8270E	652297
LCSD 400-652297/4-A	Lab Control Sample Dup	Total/NA	Water	8270E	652297
400-247369-6 MS	MW11-ROX-112723	Total/NA	Water	8270E	652297
400-247369-6 MSD	MW11-ROX-112723	Total/NA	Water	8270E	652297
400-247369-12 MS	MW10-ROX-112723	Total/NA	Water	8270E	652297
400-247369-12 MSD	MW10-ROX-112723	Total/NA	Water	8270E	652297

Analysis Batch: 652559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247369-3	MW1-ROX-112723-EB	Total/NA	Water	8270E SIM	652297
400-247369-4	MW1-ROX-112723	Total/NA	Water	8270E SIM	652297
400-247369-5	MW26-ROX-112723	Total/NA	Water	8270E SIM	652297
400-247369-6	MW11-ROX-112723	Total/NA	Water	8270E SIM	652297
400-247369-7	MW27-ROX-112723	Total/NA	Water	8270E SIM	652297
400-247369-10	MW9-ROX-112723-EB	Total/NA	Water	8270E SIM	652297
400-247369-11	MW9-ROX-112723	Total/NA	Water	8270E SIM	652297
400-247369-12	MW10-ROX-112723	Total/NA	Water	8270E SIM	652297
400-247369-13	MW28-ROX-112723	Total/NA	Water	8270E SIM	652297
MB 400-652297/1-A	Method Blank	Total/NA	Water	8270E SIM	652297
LCS 400-652297/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	652297
400-247369-6 MS	MW11-ROX-112723	Total/NA	Water	8270E SIM	652297
400-247369-6 MSD	MW11-ROX-112723	Total/NA	Water	8270E SIM	652297
400-247369-12 MS	MW10-ROX-112723	Total/NA	Water	8270E SIM	652297
400-247369-12 MSD	MW10-ROX-112723	Total/NA	Water	8270E SIM	652297

Prep Batch: 652972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247369-3 - RERA	MW1-ROX-112723-EB	Total/NA	Water	3520C	
400-247369-4 - RERA	MW1-ROX-112723	Total/NA	Water	3520C	
400-247369-6 - RERA	MW11-ROX-112723	Total/NA	Water	3520C	
400-247369-7 - RERA	MW27-ROX-112723	Total/NA	Water	3520C	
400-247369-10 - RERA	MW9-ROX-112723-EB	Total/NA	Water	3520C	
400-247369-12 - RERA	MW10-ROX-112723	Total/NA	Water	3520C	
400-247369-13 - RERA	MW28-ROX-112723	Total/NA	Water	3520C	
MB 400-652972/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-652972/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-652972/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 653033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247369-4	MW1-ROX-112723	Total/NA	Water	8270E	652297

Analysis Batch: 653195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-652972/1-A	Method Blank	Total/NA	Water	8270E SIM	652972
LCS 400-652972/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	652972
LCSD 400-652972/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	652972

GC/MS Semi VOA

Analysis Batch: 653388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247369-3 - RERA	MW1-ROX-112723-EB	Total/NA	Water	8270E SIM	652972
400-247369-4 - RERA	MW1-ROX-112723	Total/NA	Water	8270E SIM	652972
400-247369-6 - RERA	MW11-ROX-112723	Total/NA	Water	8270E SIM	652972
400-247369-7 - RERA	MW27-ROX-112723	Total/NA	Water	8270E SIM	652972
400-247369-10 - RERA	MW9-ROX-112723-EB	Total/NA	Water	8270E SIM	652972
400-247369-12 - RERA	MW10-ROX-112723	Total/NA	Water	8270E SIM	652972
400-247369-13 - RERA	MW28-ROX-112723	Total/NA	Water	8270E SIM	652972

GC Semi VOA

Prep Batch: 652100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247369-2	TB-ROX-112723-8011-A	Total/NA	Water	8011	
400-247369-3	MW1-ROX-112723-EB	Total/NA	Water	8011	
400-247369-4	MW1-ROX-112723	Total/NA	Water	8011	
400-247369-5	MW26-ROX-112723	Total/NA	Water	8011	
400-247369-6	MW11-ROX-112723	Total/NA	Water	8011	
400-247369-7	MW27-ROX-112723	Total/NA	Water	8011	
400-247369-9	TB-ROX-112723-8011-B	Total/NA	Water	8011	
400-247369-10	MW9-ROX-112723-EB	Total/NA	Water	8011	
400-247369-11	MW9-ROX-112723	Total/NA	Water	8011	
400-247369-12	MW10-ROX-112723	Total/NA	Water	8011	
MB 400-652100/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-652100/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-652100/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-247369-6 MS	MW11-ROX-112723	Total/NA	Water	8011	
400-247369-6 MSD	MW11-ROX-112723	Total/NA	Water	8011	
400-247369-12 MS	MW10-ROX-112723	Total/NA	Water	8011	
400-247369-12 MSD	MW10-ROX-112723	Total/NA	Water	8011	

Analysis Batch: 652129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247369-2	TB-ROX-112723-8011-A	Total/NA	Water	8011	652100
400-247369-3	MW1-ROX-112723-EB	Total/NA	Water	8011	652100
400-247369-4	MW1-ROX-112723	Total/NA	Water	8011	652100
400-247369-5	MW26-ROX-112723	Total/NA	Water	8011	652100
400-247369-6	MW11-ROX-112723	Total/NA	Water	8011	652100
400-247369-7	MW27-ROX-112723	Total/NA	Water	8011	652100
400-247369-9	TB-ROX-112723-8011-B	Total/NA	Water	8011	652100
400-247369-10	MW9-ROX-112723-EB	Total/NA	Water	8011	652100
400-247369-11	MW9-ROX-112723	Total/NA	Water	8011	652100
400-247369-12	MW10-ROX-112723	Total/NA	Water	8011	652100
MB 400-652100/1-A	Method Blank	Total/NA	Water	8011	652100
LCS 400-652100/2-A	Lab Control Sample	Total/NA	Water	8011	652100
LCSD 400-652100/3-A	Lab Control Sample Dup	Total/NA	Water	8011	652100
400-247369-6 MS	MW11-ROX-112723	Total/NA	Water	8011	652100
400-247369-6 MSD	MW11-ROX-112723	Total/NA	Water	8011	652100
400-247369-12 MS	MW10-ROX-112723	Total/NA	Water	8011	652100
400-247369-12 MSD	MW10-ROX-112723	Total/NA	Water	8011	652100

GC Semi VOA

Analysis Batch: 652266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247369-13	MW28-ROX-112723	Total/NA	Water	8011	652288
MB 400-652288/1-A	Method Blank	Total/NA	Water	8011	652288
LCS 400-652288/2-A	Lab Control Sample	Total/NA	Water	8011	652288
LCSD 400-652288/3-A	Lab Control Sample Dup	Total/NA	Water	8011	652288

Prep Batch: 652288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247369-13	MW28-ROX-112723	Total/NA	Water	8011	
MB 400-652288/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-652288/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-652288/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-652440/5
Matrix: Water
Analysis Batch: 652440

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			12/01/23 09:36	1
Acrolein	ND		20	3.3	ug/L			12/01/23 09:36	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 09:36	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 09:36	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 09:36	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 09:36	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/01/23 09:36	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 09:36	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 09:36	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/01/23 09:36	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 09:36	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 09:36	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 09:36	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 09:36	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 09:36	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 09:36	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 09:36	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 09:36	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 09:36	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 09:36	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 09:36	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 09:36	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 09:36	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 09:36	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 09:36	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 09:36	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 09:36	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 09:36	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 09:36	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 09:36	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 09:36	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 09:36	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 09:36	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 09:36	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 09:36	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 09:36	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 09:36	1
Methylene bromide	ND		5.0	0.22	ug/L			12/01/23 09:36	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 09:36	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 09:36	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/01/23 09:36	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 09:36	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 09:36	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 09:36	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 09:36	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 09:36	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 09:36	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 09:36	1

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

Lab Sample ID: MB 400-652440/5
Matrix: Water
Analysis Batch: 652440

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			12/01/23 09:36	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 09:36	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 09:36	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/01/23 09:36	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 09:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 09:36	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/01/23 09:36	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 09:36	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 09:36	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 09:36	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 09:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 09:36	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 09:36	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 09:36	1
Trichloroethene	ND		1.0	0.15	ug/L			12/01/23 09:36	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 09:36	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 09:36	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 09:36	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 09:36	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 09:36	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 09:36	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 09:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*12/01/23 09:36*	*1*
Dibromofluoromethane	*92*		*75 - 126*		*12/01/23 09:36*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*12/01/23 09:36*	*1*

Lab Sample ID: LCS 400-652440/1002
Matrix: Water
Analysis Batch: 652440

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	210		ug/L		105	43 - 160
Acrolein	250	197		ug/L		79	38 - 160
Acrylonitrile	500	471		ug/L		94	64 - 142
Benzene	50.0	45.0		ug/L		90	70 - 130
Bromobenzene	50.0	47.8		ug/L		96	70 - 132
Bromochloromethane	50.0	41.3		ug/L		83	70 - 130
Bromodichloromethane	50.0	45.4		ug/L		91	67 - 133
Bromoform	50.0	52.8		ug/L		106	57 - 140
Bromomethane	25.0	17.3		ug/L		69	10 - 160
2-Butanone (MEK)	200	222		ug/L		111	61 - 145
Carbon disulfide	50.0	41.3		ug/L		83	61 - 137
Carbon tetrachloride	50.0	45.0		ug/L		90	61 - 137
Chlorobenzene	50.0	45.8		ug/L		92	70 - 130
Chloroethane	25.0	17.5		ug/L		70	55 - 141
2-Chloroethyl vinyl ether	25.0	15.7		ug/L		63	10 - 160

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

Lab Sample ID: LCS 400-652440/1002
Matrix: Water
Analysis Batch: 652440

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	42.8		ug/L		86	69 - 130
1-Chlorohexane	50.0	49.9		ug/L		100	69 - 130
Chloromethane	25.0	24.3		ug/L		97	58 - 137
cis-1,2-Dichloroethene	50.0	44.4		ug/L		89	68 - 130
cis-1,3-Dichloropropene	50.0	46.5		ug/L		93	69 - 132
Dibromochloromethane	50.0	48.0		ug/L		96	67 - 135
1,2-Dichlorobenzene	50.0	46.4		ug/L		93	67 - 130
1,3-Dichlorobenzene	50.0	48.5		ug/L		97	70 - 130
1,4-Dichlorobenzene	50.0	48.2		ug/L		96	70 - 130
Dichlorodifluoromethane	25.0	17.0		ug/L		68	41 - 146
1,1-Dichloroethane	50.0	46.2		ug/L		92	70 - 130
1,2-Dichloroethane	50.0	40.4		ug/L		81	69 - 130
1,1-Dichloroethene	50.0	41.2		ug/L		82	63 - 134
1,2-Dichloropropane	50.0	46.9		ug/L		94	70 - 130
1,3-Dichloropropane	50.0	46.3		ug/L		93	70 - 130
2,2-Dichloropropane	50.0	43.1		ug/L		86	52 - 135
1,1-Dichloropropene	50.0	44.1		ug/L		88	70 - 130
Ethylbenzene	50.0	47.5		ug/L		95	70 - 130
Ethyl methacrylate	50.0	45.8		ug/L		92	68 - 130
Hexachlorobutadiene	50.0	56.5		ug/L		113	53 - 140
2-Hexanone	200	221		ug/L		111	65 - 137
Isopropylbenzene	50.0	46.6		ug/L		93	70 - 130
Methylene bromide	50.0	42.0		ug/L		84	70 - 130
Methylene Chloride	50.0	41.8		ug/L		84	66 - 135
4-Methyl-2-pentanone (MIBK)	200	178		ug/L		89	69 - 138
Methyl tert-butyl ether	50.0	43.6		ug/L		87	66 - 130
m-Xylene & p-Xylene	50.0	47.0		ug/L		94	70 - 130
Naphthalene	50.0	44.8		ug/L		90	47 - 149
n-Butylbenzene	50.0	46.8		ug/L		94	67 - 130
N-Propylbenzene	50.0	49.1		ug/L		98	70 - 130
o-Chlorotoluene	50.0	48.5		ug/L		97	70 - 130
o-Xylene	50.0	46.5		ug/L		93	70 - 130
p-Chlorotoluene	50.0	47.8		ug/L		96	70 - 130
p-Isopropyltoluene	50.0	48.7		ug/L		97	65 - 130
sec-Butylbenzene	50.0	48.4		ug/L		97	66 - 130
Styrene	50.0	44.5		ug/L		89	70 - 130
tert-Butylbenzene	50.0	53.8		ug/L		108	64 - 139
1,1,1,2-Tetrachloroethane	50.0	48.1		ug/L		96	67 - 131
1,1,2,2-Tetrachloroethane	50.0	46.4		ug/L		93	70 - 131
Tetrachloroethene	50.0	46.1		ug/L		92	65 - 130
Toluene	50.0	46.9		ug/L		94	70 - 130
trans-1,2-Dichloroethene	50.0	45.0		ug/L		90	70 - 130
trans-1,3-Dichloropropene	50.0	45.8		ug/L		92	63 - 130
1,2,3-Trichlorobenzene	50.0	50.0		ug/L		100	60 - 138
1,2,4-Trichlorobenzene	50.0	50.4		ug/L		101	60 - 140
1,1,1-Trichloroethane	50.0	42.8		ug/L		86	68 - 130
1,1,2-Trichloroethane	50.0	46.8		ug/L		94	70 - 130
Trichloroethene	50.0	44.4		ug/L		89	70 - 130
Trichlorofluoromethane	25.0	18.6		ug/L		74	65 - 138

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

Lab Sample ID: LCS 400-652440/1002
Matrix: Water
Analysis Batch: 652440

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	44.8		ug/L		90	70 - 130
1,2,4-Trimethylbenzene	50.0	47.8		ug/L		96	70 - 130
1,3,5-Trimethylbenzene	50.0	47.6		ug/L		95	69 - 130
Vinyl acetate	50.0	39.5		ug/L		79	26 - 160
Vinyl chloride	25.0	20.9		ug/L		84	59 - 136
Xylenes, Total	100	93.5		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*72 - 130*
Dibromofluoromethane	*92*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

Lab Sample ID: 400-247369-6 MS
Matrix: Water
Analysis Batch: 652440

Client Sample ID: MW11-ROX-112723
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND	F1	200	61.7	F1	ug/L		31	43 - 150
Acrolein	ND		250	188		ug/L		75	38 - 150
Acrylonitrile	ND		500	404		ug/L		81	62 - 149
Benzene	ND		50.0	37.5		ug/L		75	56 - 142
Bromobenzene	ND	F2 F1	50.0	37.1		ug/L		74	59 - 136
Bromochloromethane	ND	F1	50.0	36.1		ug/L		72	64 - 140
Bromodichloromethane	ND		50.0	38.9		ug/L		78	59 - 143
Bromoform	ND		50.0	44.0		ug/L		88	50 - 140
Bromomethane	ND		25.0	15.5		ug/L		62	10 - 150
2-Butanone (MEK)	ND	F1	200	102	F1	ug/L		51	55 - 150
Carbon disulfide	ND		50.0	35.2		ug/L		70	48 - 150
Carbon tetrachloride	ND		50.0	39.1		ug/L		78	55 - 145
Chlorobenzene	ND	F1	50.0	37.0		ug/L		74	64 - 130
Chloroethane	ND		25.0	17.0		ug/L		68	50 - 150
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	36.7		ug/L		73	60 - 141
1-Chlorohexane	ND	F2 F1	50.0	39.8		ug/L		80	56 - 136
Chloromethane	ND		25.0	22.9		ug/L		92	49 - 148
cis-1,2-Dichloroethene	ND		50.0	38.3		ug/L		77	59 - 143
cis-1,3-Dichloropropene	ND		50.0	38.6		ug/L		77	57 - 140
Dibromochloromethane	ND		50.0	40.8		ug/L		82	56 - 143
1,2-Dichlorobenzene	ND	F2 F1	50.0	35.2		ug/L		70	52 - 137
1,3-Dichlorobenzene	ND	F2 F1	50.0	36.2		ug/L		72	54 - 135
1,4-Dichlorobenzene	ND	F2 F1	50.0	35.8		ug/L		72	53 - 135
Dichlorodifluoromethane	ND		25.0	15.6		ug/L		63	16 - 150
1,1-Dichloroethane	ND		50.0	37.7		ug/L		75	61 - 144
1,2-Dichloroethane	ND	F1	50.0	35.1		ug/L		70	60 - 141
1,1-Dichloroethene	ND		50.0	35.2		ug/L		70	54 - 147
1,2-Dichloropropane	ND		50.0	40.4		ug/L		81	66 - 137
1,3-Dichloropropane	ND	F1	50.0	38.7		ug/L		77	66 - 133
2,2-Dichloropropane	ND		50.0	37.0		ug/L		74	42 - 144

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

Lab Sample ID: 400-247369-6 MS
Matrix: Water
Analysis Batch: 652440

Client Sample ID: MW11-ROX-112723
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	50.0	37.9		ug/L		76	65 - 136
Ethylbenzene	ND	F2 F1	50.0	37.2		ug/L		74	58 - 131
Ethyl methacrylate	ND		50.0	39.5		ug/L		79	64 - 130
Hexachlorobutadiene	ND	F2	50.0	42.3		ug/L		85	31 - 149
2-Hexanone	ND	F1	200	118	F1	ug/L		59	65 - 140
Isopropylbenzene	ND	F2 F1	50.0	36.3		ug/L		73	56 - 133
Methylene bromide	ND	F1	50.0	35.8		ug/L		72	63 - 138
Methylene Chloride	ND	F1	50.0	33.5		ug/L		67	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	144		ug/L		72	63 - 146
Methyl tert-butyl ether	ND		50.0	37.3		ug/L		75	59 - 137
m-Xylene & p-Xylene	ND	F2 F1	50.0	37.1		ug/L		74	57 - 130
Naphthalene	ND		50.0	35.8		ug/L		72	25 - 150
n-Butylbenzene	ND	F2	50.0	34.3		ug/L		69	41 - 142
N-Propylbenzene	ND	F2 F1	50.0	35.8		ug/L		72	51 - 138
o-Chlorotoluene	ND	F2 F1	50.0	36.2		ug/L		72	53 - 134
o-Xylene	ND	F2 F1	50.0	36.8		ug/L		74	61 - 130
p-Chlorotoluene	ND	F2 F1	50.0	35.5		ug/L		71	54 - 133
p-Isopropyltoluene	ND	F2 F1	50.0	35.3		ug/L		71	48 - 139
sec-Butylbenzene	ND	F2 F1	50.0	35.9		ug/L		72	50 - 138
Styrene	ND	F2 F1	50.0	34.6		ug/L		69	58 - 131
tert-Butylbenzene	ND	F2	50.0	40.8		ug/L		82	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	39.9		ug/L		80	59 - 137
1,1,2,2-Tetrachloroethane	ND	F1	50.0	37.3		ug/L		75	66 - 135
Tetrachloroethene	ND		50.0	37.4		ug/L		75	52 - 133
Toluene	ND	F1	50.0	38.4		ug/L		77	65 - 130
trans-1,2-Dichloroethene	ND		50.0	36.6		ug/L		73	61 - 143
trans-1,3-Dichloropropene	ND		50.0	38.9		ug/L		78	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	38.0		ug/L		76	43 - 145
1,2,4-Trichlorobenzene	ND	F2	50.0	37.4		ug/L		75	39 - 148
1,1,1-Trichloroethane	ND		50.0	37.5		ug/L		75	57 - 142
1,1,2-Trichloroethane	ND		50.0	39.5		ug/L		79	66 - 131
Trichloroethene	ND	F1	50.0	37.0		ug/L		74	64 - 136
Trichlorofluoromethane	ND		25.0	17.1		ug/L		68	54 - 150
1,2,3-Trichloropropane	ND	F1	50.0	37.3		ug/L		75	65 - 133
1,2,4-Trimethylbenzene	ND	F2 F1	50.0	35.5		ug/L		71	50 - 139
1,3,5-Trimethylbenzene	ND	F2 F1	50.0	35.7		ug/L		71	52 - 135
Vinyl acetate	ND		50.0	40.3		ug/L		81	26 - 150
Vinyl chloride	ND		25.0	19.1		ug/L		77	46 - 150
Xylenes, Total	ND	F2 F1	100	73.9		ug/L		74	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*72 - 130*
Dibromofluoromethane	*93*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

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

Lab Sample ID: 400-247369-6 MSD
Matrix: Water
Analysis Batch: 652440

Client Sample ID: MW11-ROX-112723
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	200	56.6	F1	ug/L		28	43 - 150	9	30
Acrolein	ND		250	176		ug/L		71	38 - 150	7	31
Acrylonitrile	ND		500	371		ug/L		74	62 - 149	9	30
Benzene	ND		50.0	30.8		ug/L		62	56 - 142	20	30
Bromobenzene	ND	F2 F1	50.0	27.3	F2 F1	ug/L		55	59 - 136	31	30
Bromochloromethane	ND	F1	50.0	30.4	F1	ug/L		61	64 - 140	17	30
Bromodichloromethane	ND		50.0	31.5		ug/L		63	59 - 143	21	30
Bromoform	ND		50.0	36.7		ug/L		73	50 - 140	18	30
Bromomethane	ND		25.0	12.9		ug/L		51	10 - 150	19	50
2-Butanone (MEK)	ND	F1	200	90.2	F1	ug/L		45	55 - 150	13	30
Carbon disulfide	ND		50.0	29.6		ug/L		59	48 - 150	17	30
Carbon tetrachloride	ND		50.0	31.9		ug/L		64	55 - 145	20	30
Chlorobenzene	ND	F1	50.0	27.4	F1	ug/L		55	64 - 130	30	30
Chloroethane	ND		25.0	14.2		ug/L		57	50 - 150	18	30
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	30.6		ug/L		61	60 - 141	18	30
1-Chlorohexane	ND	F2 F1	50.0	27.6	F2 F1	ug/L		55	56 - 136	36	30
Chloromethane	ND		25.0	19.3		ug/L		77	49 - 148	17	31
cis-1,2-Dichloroethene	ND		50.0	32.0		ug/L		64	59 - 143	18	30
cis-1,3-Dichloropropene	ND		50.0	31.0		ug/L		62	57 - 140	22	30
Dibromochloromethane	ND		50.0	32.9		ug/L		66	56 - 143	21	30
1,2-Dichlorobenzene	ND	F2 F1	50.0	25.2	F2 F1	ug/L		50	52 - 137	33	30
1,3-Dichlorobenzene	ND	F2 F1	50.0	25.6	F2 F1	ug/L		51	54 - 135	34	30
1,4-Dichlorobenzene	ND	F2 F1	50.0	25.0	F2 F1	ug/L		50	53 - 135	36	30
Dichlorodifluoromethane	ND		25.0	13.3		ug/L		53	16 - 150	16	31
1,1-Dichloroethane	ND		50.0	31.7		ug/L		63	61 - 144	17	30
1,2-Dichloroethane	ND	F1	50.0	29.2	F1	ug/L		58	60 - 141	18	30
1,1-Dichloroethene	ND		50.0	30.8		ug/L		62	54 - 147	13	30
1,2-Dichloropropane	ND		50.0	33.5		ug/L		67	66 - 137	19	30
1,3-Dichloropropane	ND	F1	50.0	32.6	F1	ug/L		65	66 - 133	17	30
2,2-Dichloropropane	ND		50.0	31.7		ug/L		63	42 - 144	15	31
1,1-Dichloropropene	ND	F1	50.0	30.5	F1	ug/L		61	65 - 136	22	30
Ethylbenzene	ND	F2 F1	50.0	27.0	F2 F1	ug/L		54	58 - 131	32	30
Ethyl methacrylate	ND		50.0	33.8		ug/L		68	64 - 130	16	30
Hexachlorobutadiene	ND	F2	50.0	27.0	F2	ug/L		54	31 - 149	44	36
2-Hexanone	ND	F1	200	106	F1	ug/L		53	65 - 140	11	30
Isopropylbenzene	ND	F2 F1	50.0	24.9	F2 F1	ug/L		50	56 - 133	37	30
Methylene bromide	ND	F1	50.0	30.3	F1	ug/L		61	63 - 138	17	30
Methylene Chloride	ND	F1	50.0	29.3	F1	ug/L		59	60 - 146	13	32
4-Methyl-2-pentanone (MIBK)	ND		200	126		ug/L		63	63 - 146	13	30
Methyl tert-butyl ether	ND		50.0	32.5		ug/L		65	59 - 137	14	30
m-Xylene & p-Xylene	ND	F2 F1	50.0	26.4	F2 F1	ug/L		53	57 - 130	34	30
Naphthalene	ND		50.0	29.0		ug/L		58	25 - 150	21	30
n-Butylbenzene	ND	F2	50.0	21.8	F2	ug/L		44	41 - 142	44	31
N-Propylbenzene	ND	F2 F1	50.0	24.4	F2 F1	ug/L		49	51 - 138	38	30
o-Chlorotoluene	ND	F2 F1	50.0	25.6	F2 F1	ug/L		51	53 - 134	34	30
o-Xylene	ND	F2 F1	50.0	26.7	F2 F1	ug/L		53	61 - 130	32	30
p-Chlorotoluene	ND	F2 F1	50.0	24.5	F2 F1	ug/L		49	54 - 133	37	30

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

Lab Sample ID: 400-247369-6 MSD
Matrix: Water
Analysis Batch: 652440

Client Sample ID: MW11-ROX-112723
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	F2 F1	50.0	23.1	F2 F1	ug/L		46	48 - 139	42	30
sec-Butylbenzene	ND	F2 F1	50.0	24.0	F2 F1	ug/L		48	50 - 138	40	30
Styrene	ND	F2 F1	50.0	25.1	F2 F1	ug/L		50	58 - 131	32	30
tert-Butylbenzene	ND	F2	50.0	28.1	F2	ug/L		56	54 - 146	37	30
1,1,1,2-Tetrachloroethane	ND		50.0	30.7		ug/L		61	59 - 137	26	30
1,1,2,2-Tetrachloroethane	ND	F1	50.0	32.7	F1	ug/L		65	66 - 135	13	30
Tetrachloroethene	ND		50.0	27.6		ug/L		55	52 - 133	30	30
Toluene	ND	F1	50.0	30.1	F1	ug/L		60	65 - 130	24	30
trans-1,2-Dichloroethene	ND		50.0	30.4		ug/L		61	61 - 143	18	30
trans-1,3-Dichloropropene	ND		50.0	31.2		ug/L		62	53 - 133	22	30
1,2,3-Trichlorobenzene	ND		50.0	28.2		ug/L		56	43 - 145	30	30
1,2,4-Trichlorobenzene	ND	F2	50.0	25.9	F2	ug/L		52	39 - 148	36	30
1,1,1-Trichloroethane	ND		50.0	30.8		ug/L		62	57 - 142	19	30
1,1,2-Trichloroethane	ND		50.0	33.5		ug/L		67	66 - 131	16	30
Trichloroethene	ND	F1	50.0	29.1	F1	ug/L		58	64 - 136	24	30
Trichlorofluoromethane	ND		25.0	15.5		ug/L		62	54 - 150	10	30
1,2,3-Trichloropropane	ND	F1	50.0	32.2	F1	ug/L		64	65 - 133	15	30
1,2,4-Trimethylbenzene	ND	F2 F1	50.0	24.1	F2 F1	ug/L		48	50 - 139	38	30
1,3,5-Trimethylbenzene	ND	F2 F1	50.0	24.4	F2 F1	ug/L		49	52 - 135	38	30
Vinyl acetate	ND		50.0	32.4		ug/L		65	26 - 150	22	33
Vinyl chloride	ND		25.0	16.7		ug/L		67	46 - 150	14	30
Xylenes, Total	ND	F2 F1	100	53.1	F2 F1	ug/L		53	59 - 130	33	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*72 - 130*
Dibromofluoromethane	*91*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

Lab Sample ID: 400-247369-12 MS
Matrix: Water
Analysis Batch: 652440

Client Sample ID: MW10-ROX-112723
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND	F1	200	63.4	F1	ug/L		32	43 - 150
Acrolein	ND		250	182		ug/L		73	38 - 150
Acrylonitrile	ND		500	424		ug/L		85	62 - 149
Benzene	ND		50.0	36.9		ug/L		74	56 - 142
Bromobenzene	ND		50.0	30.6		ug/L		61	59 - 136
Bromochloromethane	ND		50.0	35.9		ug/L		72	64 - 140
Bromodichloromethane	ND		50.0	36.9		ug/L		74	59 - 143
Bromoform	ND		50.0	42.4		ug/L		85	50 - 140
Bromomethane	ND		25.0	14.6		ug/L		59	10 - 150
2-Butanone (MEK)	ND	F1	200	108	F1	ug/L		54	55 - 150
Carbon disulfide	ND		50.0	35.5		ug/L		71	48 - 150
Carbon tetrachloride	ND		50.0	37.9		ug/L		76	55 - 145
Chlorobenzene	ND	F1	50.0	31.4	F1	ug/L		63	64 - 130
Chloroethane	ND		25.0	16.0		ug/L		64	50 - 150
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150

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

Lab Sample ID: 400-247369-12 MS
Matrix: Water
Analysis Batch: 652440

Client Sample ID: MW10-ROX-112723
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	ND		50.0	36.1		ug/L		72	60 - 141
1-Chlorohexane	ND		50.0	31.6		ug/L		63	56 - 136
Chloromethane	ND		25.0	21.6		ug/L		86	49 - 148
cis-1,2-Dichloroethene	ND		50.0	38.3		ug/L		77	59 - 143
cis-1,3-Dichloropropene	ND		50.0	36.5		ug/L		73	57 - 140
Dibromochloromethane	ND		50.0	38.2		ug/L		76	56 - 143
1,2-Dichlorobenzene	ND		50.0	28.2		ug/L		56	52 - 137
1,3-Dichlorobenzene	ND	F1	50.0	27.5		ug/L		55	54 - 135
1,4-Dichlorobenzene	ND	F1	50.0	27.3		ug/L		55	53 - 135
Dichlorodifluoromethane	ND		25.0	14.6		ug/L		58	16 - 150
1,1-Dichloroethane	ND		50.0	39.2		ug/L		78	61 - 144
1,2-Dichloroethane	ND		50.0	34.4		ug/L		69	60 - 141
1,1-Dichloroethene	ND		50.0	35.9		ug/L		72	54 - 147
1,2-Dichloropropane	ND		50.0	38.5		ug/L		77	66 - 137
1,3-Dichloropropane	ND		50.0	37.7		ug/L		75	66 - 133
2,2-Dichloropropane	ND		50.0	36.9		ug/L		74	42 - 144
1,1-Dichloropropene	ND		50.0	36.7		ug/L		73	65 - 136
Ethylbenzene	ND		50.0	31.1		ug/L		62	58 - 131
Ethyl methacrylate	ND		50.0	37.9		ug/L		76	64 - 130
Hexachlorobutadiene	ND		50.0	28.1		ug/L		56	31 - 149
2-Hexanone	ND	F1	200	120	F1	ug/L		60	65 - 140
Isopropylbenzene	ND		50.0	28.4		ug/L		57	56 - 133
Methylene bromide	ND		50.0	34.9		ug/L		70	63 - 138
Methylene Chloride	ND		50.0	36.0		ug/L		72	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	146		ug/L		73	63 - 146
Methyl tert-butyl ether	ND		50.0	37.9		ug/L		76	59 - 137
m-Xylene & p-Xylene	ND		50.0	30.3		ug/L		61	57 - 130
Naphthalene	ND		50.0	32.8		ug/L		66	25 - 150
n-Butylbenzene	ND		50.0	22.1		ug/L		44	41 - 142
N-Propylbenzene	ND		50.0	27.1		ug/L		54	51 - 138
o-Chlorotoluene	ND		50.0	27.6		ug/L		55	53 - 134
o-Xylene	ND		50.0	30.4		ug/L		61	61 - 130
p-Chlorotoluene	ND	F1	50.0	27.2		ug/L		54	54 - 133
p-Isopropyltoluene	ND		50.0	25.1		ug/L		50	48 - 139
sec-Butylbenzene	ND		50.0	26.0		ug/L		52	50 - 138
Styrene	ND	F1	50.0	28.4	F1	ug/L		57	58 - 131
tert-Butylbenzene	ND	F1	50.0	31.2		ug/L		62	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	35.3		ug/L		71	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	37.0		ug/L		74	66 - 135
Tetrachloroethene	ND		50.0	32.3		ug/L		65	52 - 133
Toluene	ND		50.0	35.3		ug/L		71	65 - 130
trans-1,2-Dichloroethene	ND		50.0	36.3		ug/L		73	61 - 143
trans-1,3-Dichloropropene	ND		50.0	36.5		ug/L		73	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	30.5		ug/L		61	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	28.6		ug/L		57	39 - 148
1,1,1-Trichloroethane	ND		50.0	36.7		ug/L		73	57 - 142
1,1,2-Trichloroethane	ND		50.0	39.0		ug/L		78	66 - 131
Trichloroethene	ND		50.0	34.8		ug/L		70	64 - 136
Trichlorofluoromethane	ND		25.0	16.1		ug/L		64	54 - 150

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

Lab Sample ID: 400-247369-12 MS
Matrix: Water
Analysis Batch: 652440

Client Sample ID: MW10-ROX-112723
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	ND		50.0	35.3		ug/L		71	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	25.9		ug/L		52	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	27.0		ug/L		54	52 - 135
Vinyl acetate	ND		50.0	35.5		ug/L		71	26 - 150
Vinyl chloride	ND		25.0	18.2		ug/L		73	46 - 150
Xylenes, Total	ND		100	60.7		ug/L		61	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*72 - 130*
Dibromofluoromethane	*92*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

Lab Sample ID: 400-247369-12 MSD
Matrix: Water
Analysis Batch: 652440

Client Sample ID: MW10-ROX-112723
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	200	67.2	F1	ug/L		34	43 - 150	6	30
Acrolein	ND		250	200		ug/L		80	38 - 150	10	31
Acrylonitrile	ND		500	454		ug/L		91	62 - 149	7	30
Benzene	ND		50.0	38.9		ug/L		78	56 - 142	5	30
Bromobenzene	ND		50.0	30.9		ug/L		62	59 - 136	1	30
Bromochloromethane	ND		50.0	37.8		ug/L		76	64 - 140	5	30
Bromodichloromethane	ND		50.0	39.7		ug/L		79	59 - 143	7	30
Bromoform	ND		50.0	42.3		ug/L		85	50 - 140	0	30
Bromomethane	ND		25.0	15.6		ug/L		63	10 - 150	7	50
2-Butanone (MEK)	ND	F1	200	111		ug/L		56	55 - 150	3	30
Carbon disulfide	ND		50.0	37.8		ug/L		76	48 - 150	6	30
Carbon tetrachloride	ND		50.0	39.5		ug/L		79	55 - 145	4	30
Chlorobenzene	ND	F1	50.0	31.9		ug/L		64	64 - 130	1	30
Chloroethane	ND		25.0	16.6		ug/L		66	50 - 150	4	30
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	38.4		ug/L		77	60 - 141	6	30
1-Chlorohexane	ND		50.0	32.2		ug/L		64	56 - 136	2	30
Chloromethane	ND		25.0	23.6		ug/L		95	49 - 148	9	31
cis-1,2-Dichloroethene	ND		50.0	40.1		ug/L		80	59 - 143	5	30
cis-1,3-Dichloropropene	ND		50.0	38.1		ug/L		76	57 - 140	4	30
Dibromochloromethane	ND		50.0	39.6		ug/L		79	56 - 143	3	30
1,2-Dichlorobenzene	ND		50.0	26.6		ug/L		53	52 - 137	6	30
1,3-Dichlorobenzene	ND	F1	50.0	26.1	F1	ug/L		52	54 - 135	5	30
1,4-Dichlorobenzene	ND	F1	50.0	25.3	F1	ug/L		51	53 - 135	8	30
Dichlorodifluoromethane	ND		25.0	15.4		ug/L		62	16 - 150	5	31
1,1-Dichloroethane	ND		50.0	40.4		ug/L		81	61 - 144	3	30
1,2-Dichloroethane	ND		50.0	36.7		ug/L		73	60 - 141	6	30
1,1-Dichloroethene	ND		50.0	40.3		ug/L		81	54 - 147	11	30
1,2-Dichloropropane	ND		50.0	41.6		ug/L		83	66 - 137	8	30
1,3-Dichloropropane	ND		50.0	39.7		ug/L		79	66 - 133	5	30
2,2-Dichloropropane	ND		50.0	39.9		ug/L		80	42 - 144	8	31

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

Lab Sample ID: 400-247369-12 MSD
Matrix: Water
Analysis Batch: 652440

Client Sample ID: MW10-ROX-112723
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloropropene	ND		50.0	38.8		ug/L		78	65 - 136	6	30
Ethylbenzene	ND		50.0	31.5		ug/L		63	58 - 131	1	30
Ethyl methacrylate	ND		50.0	39.0		ug/L		78	64 - 130	3	30
Hexachlorobutadiene	ND		50.0	24.5		ug/L		49	31 - 149	14	36
2-Hexanone	ND	F1	200	123	F1	ug/L		61	65 - 140	3	30
Isopropylbenzene	ND		50.0	29.0		ug/L		58	56 - 133	2	30
Methylene bromide	ND		50.0	37.4		ug/L		75	63 - 138	7	30
Methylene Chloride	ND		50.0	37.4		ug/L		75	60 - 146	4	32
4-Methyl-2-pentanone (MIBK)	ND		200	154		ug/L		77	63 - 146	5	30
Methyl tert-butyl ether	ND		50.0	40.7		ug/L		81	59 - 137	7	30
m-Xylene & p-Xylene	ND		50.0	30.5		ug/L		61	57 - 130	1	30
Naphthalene	ND		50.0	30.0		ug/L		60	25 - 150	9	30
n-Butylbenzene	ND		50.0	21.5		ug/L		43	41 - 142	2	31
N-Propylbenzene	ND		50.0	26.7		ug/L		53	51 - 138	1	30
o-Chlorotoluene	ND		50.0	28.4		ug/L		57	53 - 134	3	30
o-Xylene	ND		50.0	31.0		ug/L		62	61 - 130	2	30
p-Chlorotoluene	ND	F1	50.0	25.9	F1	ug/L		52	54 - 133	5	30
p-Isopropyltoluene	ND		50.0	23.8		ug/L		48	48 - 139	5	30
sec-Butylbenzene	ND		50.0	25.9		ug/L		52	50 - 138	1	30
Styrene	ND	F1	50.0	28.7	F1	ug/L		57	58 - 131	1	30
tert-Butylbenzene	ND	F1	50.0	25.8	F1	ug/L		52	54 - 146	19	30
1,1,1,2-Tetrachloroethane	ND		50.0	37.1		ug/L		74	59 - 137	5	30
1,1,2,2-Tetrachloroethane	ND		50.0	36.7		ug/L		73	66 - 135	1	30
Tetrachloroethene	ND		50.0	32.7		ug/L		65	52 - 133	1	30
Toluene	ND		50.0	36.1		ug/L		72	65 - 130	2	30
trans-1,2-Dichloroethene	ND		50.0	38.5		ug/L		77	61 - 143	6	30
trans-1,3-Dichloropropene	ND		50.0	37.1		ug/L		74	53 - 133	2	30
1,2,3-Trichlorobenzene	ND		50.0	27.4		ug/L		55	43 - 145	11	30
1,2,4-Trichlorobenzene	ND		50.0	25.2		ug/L		50	39 - 148	12	30
1,1,1-Trichloroethane	ND		50.0	39.3		ug/L		79	57 - 142	7	30
1,1,2-Trichloroethane	ND		50.0	40.0		ug/L		80	66 - 131	2	30
Trichloroethene	ND		50.0	37.0		ug/L		74	64 - 136	6	30
Trichlorofluoromethane	ND		25.0	17.5		ug/L		70	54 - 150	8	30
1,2,3-Trichloropropane	ND		50.0	37.3		ug/L		75	65 - 133	5	30
1,2,4-Trimethylbenzene	ND		50.0	25.0		ug/L		50	50 - 139	3	30
1,3,5-Trimethylbenzene	ND		50.0	26.6		ug/L		53	52 - 135	1	30
Vinyl acetate	ND		50.0	38.0		ug/L		76	26 - 150	7	33
Vinyl chloride	ND		25.0	19.6		ug/L		79	46 - 150	8	30
Xylenes, Total	ND		100	61.5		ug/L		61	59 - 130	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*72 - 130*
Dibromofluoromethane	*94*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-652297/1-A
Matrix: Water
Analysis Batch: 652457

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		11/30/23 10:33	12/01/23 15:36	1
Benzenethiol	ND		10	1.7	ug/L		11/30/23 10:33	12/01/23 15:36	1
Benzoic acid	ND		30	7.3	ug/L		11/30/23 10:33	12/01/23 15:36	1
Benzyl alcohol	ND		10	2.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		11/30/23 10:33	12/01/23 15:36	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		11/30/23 10:33	12/01/23 15:36	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		11/30/23 10:33	12/01/23 15:36	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		11/30/23 10:33	12/01/23 15:36	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		11/30/23 10:33	12/01/23 15:36	1
4-Chloroaniline	ND		10	3.4	ug/L		11/30/23 10:33	12/01/23 15:36	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		11/30/23 10:33	12/01/23 15:36	1
2-Chloronaphthalene	ND		10	0.14	ug/L		11/30/23 10:33	12/01/23 15:36	1
2-Chlorophenol	ND		10	2.2	ug/L		11/30/23 10:33	12/01/23 15:36	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
Dibenzofuran	ND		10	0.17	ug/L		11/30/23 10:33	12/01/23 15:36	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
Diethyl phthalate	ND		10	0.24	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		11/30/23 10:33	12/01/23 15:36	1
Dimethyl phthalate	ND		10	0.17	ug/L		11/30/23 10:33	12/01/23 15:36	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		11/30/23 10:33	12/01/23 15:36	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 10:33	12/01/23 15:36	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		11/30/23 10:33	12/01/23 15:36	1
1,4-Dioxane	ND		10	1.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
Hexachlorobenzene	ND		10	0.17	ug/L		11/30/23 10:33	12/01/23 15:36	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		11/30/23 10:33	12/01/23 15:36	1
Hexachloroethane	ND		10	4.2	ug/L		11/30/23 10:33	12/01/23 15:36	1
Indene	ND		10	1.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
Isophorone	ND		10	0.14	ug/L		11/30/23 10:33	12/01/23 15:36	1
2-Methylphenol	ND		10	1.8	ug/L		11/30/23 10:33	12/01/23 15:36	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		11/30/23 10:33	12/01/23 15:36	1
2-Nitroaniline	ND		10	2.2	ug/L		11/30/23 10:33	12/01/23 15:36	1
3-Nitroaniline	ND		10	1.8	ug/L		11/30/23 10:33	12/01/23 15:36	1
4-Nitroaniline	ND		10	1.5	ug/L		11/30/23 10:33	12/01/23 15:36	1
Nitrobenzene	ND		10	0.13	ug/L		11/30/23 10:33	12/01/23 15:36	1
2-Nitrophenol	ND		10	5.2	ug/L		11/30/23 10:33	12/01/23 15:36	1
4-Nitrophenol	ND		10	2.1	ug/L		11/30/23 10:33	12/01/23 15:36	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		11/30/23 10:33	12/01/23 15:36	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		11/30/23 10:33	12/01/23 15:36	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		11/30/23 10:33	12/01/23 15:36	1
Pentachlorophenol	ND		20	1.4	ug/L		11/30/23 10:33	12/01/23 15:36	1
Phenol	ND		10	2.6	ug/L		11/30/23 10:33	12/01/23 15:36	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-652297/1-A
Matrix: Water
Analysis Batch: 652457

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	ND		10	3.2	ug/L		11/30/23 10:33	12/01/23 15:36	1
Quinoline	ND		10	4.5	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		11/30/23 10:33	12/01/23 15:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*46 - 124*	*11/30/23 10:33*	*12/01/23 15:36*	*1*
2-Fluorophenol	*20*		*13 - 113*	*11/30/23 10:33*	*12/01/23 15:36*	*1*
Nitrobenzene-d5	*79*		*36 - 126*	*11/30/23 10:33*	*12/01/23 15:36*	*1*
Phenol-d5	*60*		*17 - 127*	*11/30/23 10:33*	*12/01/23 15:36*	*1*
Terphenyl-d14	*92*		*44 - 149*	*11/30/23 10:33*	*12/01/23 15:36*	*1*
2,4,6-Tribromophenol	*72*		*26 - 150*	*11/30/23 10:33*	*12/01/23 15:36*	*1*

Lab Sample ID: LCS 400-652297/2-A
Matrix: Water
Analysis Batch: 652457

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	61.1		ug/L		51	21 - 120
Benzoic acid	120	51.3		ug/L		43	10 - 144
Benzyl alcohol	120	85.5		ug/L		71	28 - 120
Bis(2-chloroethoxy)methane	120	78.9		ug/L		66	47 - 120
Bis(2-chloroethyl)ether	120	93.7		ug/L		78	44 - 120
bis (2-chloroisopropyl) ether	120	74.2		ug/L		62	33 - 121
Bis(2-ethylhexyl) phthalate	120	108		ug/L		90	52 - 147
4-Bromophenyl phenyl ether	120	94.9		ug/L		79	54 - 122
Butyl benzyl phthalate	120	97.5		ug/L		81	54 - 133
4-Chloroaniline	120	66.1		ug/L		55	26 - 120
4-Chloro-3-methylphenol	120	90.5		ug/L		75	48 - 131
2-Chloronaphthalene	120	82.6		ug/L		69	52 - 121
2-Chlorophenol	120	72.6		ug/L		60	40 - 120
4-Chlorophenyl phenyl ether	120	89.3		ug/L		74	56 - 125
Dibenz[a,h]acridine	120	134		ug/L		112	31 - 150
Dibenzofuran	120	83.3		ug/L		69	56 - 122
3,3'-Dichlorobenzidine	160	178		ug/L		111	36 - 132
2,4-Dichlorophenol	120	83.7		ug/L		70	49 - 120
Diethyl phthalate	120	95.6		ug/L		80	50 - 137
2,4-Dimethylphenol	120	83.5		ug/L		70	48 - 120
Dimethyl phthalate	120	87.2		ug/L		73	57 - 124
Di-n-butyl phthalate	120	118		ug/L		98	58 - 126
4,6-Dinitro-ortho-cresol	240	227		ug/L		95	23 - 148
2,4-Dinitrophenol	240	169		ug/L		71	10 - 150
2,4-Dinitrotoluene	120	90.5		ug/L		75	54 - 142
2,6-Dinitrotoluene	120	89.9		ug/L		75	55 - 130
Di-n-octyl phthalate	120	110		ug/L		91	57 - 138
1,4-Dioxane	120	62.2		ug/L		52	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	86.9		ug/L		72	45 - 124
Hexachlorobenzene	120	105		ug/L		87	52 - 129

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-652297/2-A
Matrix: Water
Analysis Batch: 652457

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorocyclopentadiene	120	8.76	J *-	ug/L		7	10 - 134
Hexachloroethane	120	84.7		ug/L		71	20 - 120
Indene	120	96.1		ug/L		80	49 - 120
Isophorone	120	83.7		ug/L		70	48 - 120
2-Methylphenol	120	88.8		ug/L		74	46 - 124
3 & 4 Methylphenol	120	82.0		ug/L		68	45 - 120
2-Nitroaniline	120	88.4		ug/L		74	51 - 145
3-Nitroaniline	120	79.8		ug/L		66	37 - 127
4-Nitroaniline	120	101		ug/L		84	36 - 137
Nitrobenzene	120	81.4		ug/L		68	45 - 120
2-Nitrophenol	120	86.4		ug/L		72	40 - 124
4-Nitrophenol	240	150		ug/L		63	23 - 146
N-Nitrosodimethylamine	120	75.9		ug/L		63	29 - 137
N-Nitrosodi-n-propylamine	120	77.4		ug/L		65	45 - 120
N-Nitrosodiphenylamine	119	88.1		ug/L		74	54 - 120
Pentachlorophenol	240	178		ug/L		74	31 - 130
Phenol	120	83.1		ug/L		69	11 - 120
Pyridine	240	129		ug/L		54	16 - 120
Quinoline	120	85.1		ug/L		71	49 - 130
2,4,5-Trichlorophenol	120	81.5		ug/L		68	51 - 136
2,4,6-Trichlorophenol	120	82.8		ug/L		69	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*64*		*46 - 124*
2-Fluorophenol	*35*		*13 - 113*
Nitrobenzene-d5	*76*		*36 - 126*
Phenol-d5	*63*		*17 - 127*
Terphenyl-d14	*80*		*44 - 149*
2,4,6-Tribromophenol	*77*		*26 - 150*

Lab Sample ID: LCS 400-652297/3-A
Matrix: Water
Analysis Batch: 652457

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	5.96	J *-	ug/L		5	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*46 - 124*
2-Fluorophenol	*26*		*13 - 113*
Nitrobenzene-d5	*72*		*36 - 126*
Phenol-d5	*58*		*17 - 127*
Terphenyl-d14	*89*		*44 - 149*
2,4,6-Tribromophenol	*68*		*26 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-652297/4-A
Matrix: Water
Analysis Batch: 652457

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652297

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	5.87	J *-	ug/L		5	10 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*71*		*46 - 124*
2-Fluorophenol	*41*		*13 - 113*
Nitrobenzene-d5	*70*		*36 - 126*
Phenol-d5	*66*		*17 - 127*
Terphenyl-d14	*88*		*44 - 149*
2,4,6-Tribromophenol	*66*		*26 - 150*

Lab Sample ID: 400-247369-6 MS
Matrix: Water
Analysis Batch: 652457

Client Sample ID: MW11-ROX-112723
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	ND		125	74.2		ug/L		59	10 - 120
Benzoic acid	ND		125	56.4		ug/L		45	10 - 149
Benzyl alcohol	ND		125	95.9		ug/L		77	33 - 120
Bis(2-chloroethoxy)methane	ND		125	87.2		ug/L		70	26 - 120
Bis(2-chloroethyl)ether	ND		125	103		ug/L		83	42 - 120
bis (2-chloroisopropyl) ether	ND		125	83.4		ug/L		67	28 - 120
Bis(2-ethylhexyl) phthalate	ND		125	122		ug/L		97	39 - 120
4-Bromophenyl phenyl ether	ND		125	105		ug/L		84	40 - 120
Butyl benzyl phthalate	ND		125	110		ug/L		88	45 - 120
4-Chloroaniline	ND		125	75.3		ug/L		60	10 - 120
4-Chloro-3-methylphenol	ND		125	97.3		ug/L		78	34 - 120
2-Chloronaphthalene	ND		125	92.9		ug/L		74	39 - 120
2-Chlorophenol	ND	F2	125	46.0		ug/L		37	25 - 120
4-Chlorophenyl phenyl ether	ND		125	102		ug/L		81	44 - 120
Dibenz[a,h]acridine	ND		125	156		ug/L		125	50 - 150
Dibenzofuran	ND		125	93.6		ug/L		75	25 - 130
3,3'-Dichlorobenzidine	ND		167	186		ug/L		112	10 - 120
2,4-Dichlorophenol	ND		125	74.8		ug/L		60	31 - 120
Diethyl phthalate	0.25	J	125	109		ug/L		87	46 - 120
2,4-Dimethylphenol	ND		125	89.8		ug/L		72	21 - 120
Dimethyl phthalate	ND		125	100		ug/L		80	38 - 120
Di-n-butyl phthalate	ND		125	131		ug/L		105	49 - 120
4,6-Dinitro-ortho-cresol	ND		250	253		ug/L		101	25 - 120
2,4-Dinitrophenol	ND		250	190		ug/L		76	15 - 140
2,4-Dinitrotoluene	ND		125	106		ug/L		85	53 - 120
2,6-Dinitrotoluene	ND		125	102		ug/L		82	43 - 120
Di-n-octyl phthalate	ND		125	126		ug/L		101	35 - 121
1,4-Dioxane	ND		125	67.8		ug/L		54	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		125	96.6		ug/L		77	50 - 150
Hexachlorobenzene	ND		125	117		ug/L		94	38 - 122
Hexachlorocyclopentadiene	ND	*-	125	14.6	J	ug/L		12	10 - 120
Hexachloroethane	ND		125	90.3		ug/L		72	10 - 150

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-247369-6 MS
Matrix: Water
Analysis Batch: 652457

Client Sample ID: MW11-ROX-112723
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Indene	ND		125	106		ug/L		85	50 - 150
Isophorone	ND		125	92.2		ug/L		74	42 - 120
2-Methylphenol	ND		125	92.2		ug/L		74	28 - 120
3 & 4 Methylphenol	ND		125	82.8		ug/L		66	31 - 120
2-Nitroaniline	ND		125	93.9		ug/L		75	45 - 120
3-Nitroaniline	ND		125	91.5		ug/L		73	10 - 130
4-Nitroaniline	ND		125	111		ug/L		89	10 - 132
Nitrobenzene	ND		125	90.5		ug/L		72	39 - 120
2-Nitrophenol	ND		125	72.0		ug/L		58	33 - 120
4-Nitrophenol	ND		250	172		ug/L		69	10 - 120
N-Nitrosodimethylamine	ND		125	76.5		ug/L		61	10 - 139
N-Nitrosodi-n-propylamine	ND		125	87.5		ug/L		70	37 - 124
N-Nitrosodiphenylamine	ND		124	98.1		ug/L		79	10 - 150
Pentachlorophenol	ND		250	184		ug/L		74	29 - 130
Phenol	ND		125	67.5		ug/L		54	10 - 150
Pyridine	ND		250	144		ug/L		58	10 - 120
Quinoline	ND		125	94.5		ug/L		76	51 - 120
2,4,5-Trichlorophenol	ND		125	82.4		ug/L		66	34 - 120
2,4,6-Trichlorophenol	ND		125	83.5		ug/L		67	33 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*69*		*46 - 124*
2-Fluorophenol	*12*	*S1-*	*13 - 113*
Nitrobenzene-d5	*80*		*36 - 126*
Phenol-d5	*47*		*17 - 127*
Terphenyl-d14	*88*		*44 - 149*
2,4,6-Tribromophenol	*78*		*26 - 150*

Lab Sample ID: 400-247369-6 MSD
Matrix: Water
Analysis Batch: 652457

Client Sample ID: MW11-ROX-112723
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	ND		122	75.9		ug/L		62	10 - 120	2	63
Benzoic acid	ND		122	63.2		ug/L		52	10 - 149	11	49
Benzyl alcohol	ND		122	90.0		ug/L		74	33 - 120	6	37
Bis(2-chloroethoxy)methane	ND		122	77.9		ug/L		64	26 - 120	11	70
Bis(2-chloroethyl)ether	ND		122	90.2		ug/L		74	42 - 120	14	42
bis (2-chloroisopropyl) ether	ND		122	76.7		ug/L		63	28 - 120	8	41
Bis(2-ethylhexyl) phthalate	ND		122	113		ug/L		93	39 - 120	7	35
4-Bromophenyl phenyl ether	ND		122	95.1		ug/L		78	40 - 120	10	30
Butyl benzyl phthalate	ND		122	103		ug/L		85	45 - 120	6	32
4-Chloroaniline	ND		122	65.7		ug/L		54	10 - 120	14	94
4-Chloro-3-methylphenol	ND		122	91.2		ug/L		75	34 - 120	6	40
2-Chloronaphthalene	ND		122	86.2		ug/L		71	39 - 120	8	29
2-Chlorophenol	ND	F2	122	74.8	F2	ug/L		62	25 - 120	48	42
4-Chlorophenyl phenyl ether	ND		122	92.8		ug/L		76	44 - 120	9	27
Dibenz[a,h]acridine	ND		121	131		ug/L		108	50 - 150	18	40

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-247369-6 MSD
Matrix: Water
Analysis Batch: 652457

Client Sample ID: MW11-ROX-112723
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dibenzofuran	ND		122	86.8		ug/L		71	25 - 130	8	29
3,3'-Dichlorobenzidine	ND		162	161		ug/L		99	10 - 120	14	58
2,4-Dichlorophenol	ND		122	82.8		ug/L		68	31 - 120	10	43
Diethyl phthalate	0.25	J	122	100		ug/L		82	46 - 120	8	40
2,4-Dimethylphenol	ND		122	81.9		ug/L		67	21 - 120	9	47
Dimethyl phthalate	ND		122	91.7		ug/L		75	38 - 120	9	36
Di-n-butyl phthalate	ND		122	119		ug/L		98	49 - 120	10	32
4,6-Dinitro-ortho-cresol	ND		243	236		ug/L		97	25 - 120	7	42
2,4-Dinitrophenol	ND		243	179		ug/L		74	15 - 140	6	36
2,4-Dinitrotoluene	ND		122	95.4		ug/L		78	53 - 120	11	28
2,6-Dinitrotoluene	ND		122	94.6		ug/L		78	43 - 120	8	28
Di-n-octyl phthalate	ND		122	114		ug/L		94	35 - 121	10	35
1,4-Dioxane	ND		122	63.4		ug/L		52	50 - 150	7	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		122	88.5		ug/L		73	50 - 150	9	40
Hexachlorobenzene	ND		122	106		ug/L		87	38 - 122	10	33
Hexachlorocyclopentadiene	ND	*-	122	16.4	J	ug/L		13	10 - 120	12	50
Hexachloroethane	ND		122	84.9		ug/L		70	10 - 150	6	41
Indene	ND		122	97.8		ug/L		80	50 - 150	8	40
Isophorone	ND		122	83.1		ug/L		68	42 - 120	10	33
2-Methylphenol	ND		122	93.8		ug/L		77	28 - 120	2	47
3 & 4 Methylphenol	ND		122	86.5		ug/L		71	31 - 120	4	47
2-Nitroaniline	ND		122	86.4		ug/L		71	45 - 120	8	33
3-Nitroaniline	ND		122	83.4		ug/L		69	10 - 130	9	39
4-Nitroaniline	ND		122	98.9		ug/L		81	10 - 132	12	50
Nitrobenzene	ND		122	81.1		ug/L		67	39 - 120	11	35
2-Nitrophenol	ND		122	86.1		ug/L		71	33 - 120	18	43
4-Nitrophenol	ND		243	151		ug/L		62	10 - 120	13	82
N-Nitrosodimethylamine	ND		122	87.7		ug/L		72	10 - 139	14	62
N-Nitrosodi-n-propylamine	ND		122	82.2		ug/L		68	37 - 124	6	36
N-Nitrosodiphenylamine	ND		121	89.3		ug/L		74	10 - 150	9	34
Pentachlorophenol	ND		243	174		ug/L		71	29 - 130	6	42
Phenol	ND		122	86.9		ug/L		71	10 - 150	25	52
Pyridine	ND		243	119		ug/L		49	10 - 120	19	55
Quinoline	ND		121	84.7		ug/L		70	51 - 120	11	40
2,4,5-Trichlorophenol	ND		122	84.9		ug/L		70	34 - 120	3	42
2,4,6-Trichlorophenol	ND		122	86.5		ug/L		71	33 - 120	4	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*46 - 124*
2-Fluorophenol	*35*		*13 - 113*
Nitrobenzene-d5	*74*		*36 - 126*
Phenol-d5	*66*		*17 - 127*
Terphenyl-d14	*82*		*44 - 149*
2,4,6-Tribromophenol	*77*		*26 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-247369-12 MS
Matrix: Water
Analysis Batch: 652457

Client Sample ID: MW10-ROX-112723
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	ND		113	60.9		ug/L		54	10 - 120
Benzoic acid	ND		113	50.8		ug/L		45	10 - 149
Benzyl alcohol	ND		113	85.9		ug/L		76	33 - 120
Bis(2-chloroethoxy)methane	ND		113	76.4		ug/L		68	26 - 120
Bis(2-chloroethyl)ether	ND		113	101		ug/L		90	42 - 120
bis (2-chloroisopropyl) ether	ND		113	75.4		ug/L		67	28 - 120
Bis(2-ethylhexyl) phthalate	ND		113	111		ug/L		98	39 - 120
4-Bromophenyl phenyl ether	ND		113	97.2		ug/L		86	40 - 120
Butyl benzyl phthalate	2.9	J	113	98.9		ug/L		85	45 - 120
4-Chloroaniline	ND		113	66.4		ug/L		59	10 - 120
4-Chloro-3-methylphenol	ND		113	88.3		ug/L		78	34 - 120
2-Chloronaphthalene	ND		113	83.6		ug/L		74	39 - 120
2-Chlorophenol	ND		113	81.5		ug/L		72	25 - 120
4-Chlorophenyl phenyl ether	ND		113	90.6		ug/L		80	44 - 120
Dibenz[a,h]acridine	ND		113	148		ug/L		131	50 - 150
Dibenzofuran	ND		113	84.1		ug/L		74	25 - 130
3,3'-Dichlorobenzidine	ND		151	170		ug/L		113	10 - 120
2,4-Dichlorophenol	ND		113	83.7		ug/L		74	31 - 120
Diethyl phthalate	ND		113	97.8		ug/L		86	46 - 120
2,4-Dimethylphenol	ND		113	79.1		ug/L		70	21 - 120
Dimethyl phthalate	ND		113	89.2		ug/L		79	38 - 120
Di-n-butyl phthalate	ND		113	119		ug/L		105	49 - 120
4,6-Dinitro-ortho-cresol	ND		226	231		ug/L		102	25 - 120
2,4-Dinitrophenol	ND		226	174		ug/L		77	15 - 140
2,4-Dinitrotoluene	ND		113	92.7		ug/L		82	53 - 120
2,6-Dinitrotoluene	ND		113	91.9		ug/L		81	43 - 120
Di-n-octyl phthalate	4.3	J	113	115		ug/L		97	35 - 121
1,4-Dioxane	ND		113	60.8		ug/L		54	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		113	87.8		ug/L		78	50 - 150
Hexachlorobenzene	ND		113	107		ug/L		95	38 - 122
Hexachlorocyclopentadiene	ND	*-	113	11.3	J	ug/L		10	10 - 120
Hexachloroethane	ND		113	84.0		ug/L		74	10 - 150
Indene	ND		113	95.9		ug/L		85	50 - 150
Isophorone	ND		113	80.8		ug/L		71	42 - 120
2-Methylphenol	ND		113	93.6		ug/L		83	28 - 120
3 & 4 Methylphenol	ND		113	85.9		ug/L		76	31 - 120
2-Nitroaniline	ND		113	83.4		ug/L		74	45 - 120
3-Nitroaniline	ND		113	82.4		ug/L		73	10 - 130
4-Nitroaniline	ND		113	96.5		ug/L		85	10 - 132
Nitrobenzene	ND		113	78.4		ug/L		69	39 - 120
2-Nitrophenol	ND		113	86.1		ug/L		76	33 - 120
4-Nitrophenol	ND		226	143		ug/L		63	10 - 120
N-Nitrosodimethylamine	ND		113	81.0		ug/L		72	10 - 139
N-Nitrosodi-n-propylamine	ND		113	77.1		ug/L		68	37 - 124
N-Nitrosodiphenylamine	ND		112	88.2		ug/L		79	10 - 150
Pentachlorophenol	ND		226	178		ug/L		79	29 - 130
Phenol	ND		113	92.9		ug/L		82	10 - 150
Pyridine	ND		226	125		ug/L		55	10 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-247369-12 MS
Matrix: Water
Analysis Batch: 652457

Client Sample ID: MW10-ROX-112723
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Quinoline	ND		113	80.2		ug/L		71	51 - 120
2,4,5-Trichlorophenol	ND		113	83.5		ug/L		74	34 - 120
2,4,6-Trichlorophenol	ND		113	84.7		ug/L		75	33 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*69*		*46 - 124*
2-Fluorophenol	*48*		*13 - 113*
Nitrobenzene-d5	*77*		*36 - 126*
Phenol-d5	*72*		*17 - 127*
Terphenyl-d14	*86*		*44 - 149*
2,4,6-Tribromophenol	*80*		*26 - 150*

Lab Sample ID: 400-247369-12 MSD
Matrix: Water
Analysis Batch: 652457

Client Sample ID: MW10-ROX-112723
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	ND		114	70.0		ug/L		62	10 - 120	14	63
Benzoic acid	ND		114	56.7		ug/L		50	10 - 149	11	49
Benzyl alcohol	ND		114	88.7		ug/L		78	33 - 120	3	37
Bis(2-chloroethoxy)methane	ND		114	81.9		ug/L		72	26 - 120	7	70
Bis(2-chloroethyl)ether	ND		114	96.7		ug/L		85	42 - 120	4	42
bis (2-chloroisopropyl) ether	ND		114	78.7		ug/L		69	28 - 120	4	41
Bis(2-ethylhexyl) phthalate	ND		114	112		ug/L		98	39 - 120	1	35
4-Bromophenyl phenyl ether	ND		114	101		ug/L		89	40 - 120	4	30
Butyl benzyl phthalate	2.9	J	114	102		ug/L		87	45 - 120	3	32
4-Chloroaniline	ND		114	69.1		ug/L		61	10 - 120	4	94
4-Chloro-3-methylphenol	ND		114	93.7		ug/L		83	34 - 120	6	40
2-Chloronaphthalene	ND		114	86.8		ug/L		76	39 - 120	4	29
2-Chlorophenol	ND		114	70.7		ug/L		62	25 - 120	14	42
4-Chlorophenyl phenyl ether	ND		114	94.2		ug/L		83	44 - 120	4	27
Dibenz[a,h]acridine	ND		113	132		ug/L		117	50 - 150	11	40
Dibenzofuran	ND		114	87.2		ug/L		77	25 - 130	4	29
3,3'-Dichlorobenzidine	ND		151	178		ug/L		117	10 - 120	4	58
2,4-Dichlorophenol	ND		114	85.3		ug/L		75	31 - 120	2	43
Diethyl phthalate	ND		114	101		ug/L		89	46 - 120	3	40
2,4-Dimethylphenol	ND		114	84.4		ug/L		74	21 - 120	6	47
Dimethyl phthalate	ND		114	92.8		ug/L		82	38 - 120	4	36
Di-n-butyl phthalate	ND		114	123		ug/L		108	49 - 120	3	32
4,6-Dinitro-ortho-cresol	ND		227	235		ug/L		103	25 - 120	1	42
2,4-Dinitrophenol	ND		227	171		ug/L		75	15 - 140	1	36
2,4-Dinitrotoluene	ND		114	95.9		ug/L		84	53 - 120	3	28
2,6-Dinitrotoluene	ND		114	94.6		ug/L		83	43 - 120	3	28
Di-n-octyl phthalate	4.3	J	114	116		ug/L		98	35 - 121	1	35
1,4-Dioxane	ND		114	63.9		ug/L		56	50 - 150	5	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		114	91.3		ug/L		80	50 - 150	4	40
Hexachlorobenzene	ND		114	111		ug/L		98	38 - 122	4	33
Hexachlorocyclopentadiene	ND	*-	114	14.7	J	ug/L		13	10 - 120	26	50

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-247369-12 MSD
Matrix: Water
Analysis Batch: 652457

Client Sample ID: MW10-ROX-112723
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexachloroethane	ND		114	89.2		ug/L		79	10 - 150	6	41
Indene	ND		114	101		ug/L		89	50 - 150	5	40
Isophorone	ND		114	86.1		ug/L		76	42 - 120	6	33
2-Methylphenol	ND		114	94.4		ug/L		83	28 - 120	1	47
3 & 4 Methylphenol	ND		114	87.4		ug/L		77	31 - 120	2	47
2-Nitroaniline	ND		114	83.2		ug/L		73	45 - 120	0	33
3-Nitroaniline	ND		114	83.2		ug/L		73	10 - 130	1	39
4-Nitroaniline	ND		114	97.4		ug/L		86	10 - 132	1	50
Nitrobenzene	ND		114	84.7		ug/L		75	39 - 120	8	35
2-Nitrophenol	ND		114	88.6		ug/L		78	33 - 120	3	43
4-Nitrophenol	ND		227	140		ug/L		62	10 - 120	2	82
N-Nitrosodimethylamine	ND		114	87.5		ug/L		77	10 - 139	8	62
N-Nitrosodi-n-propylamine	ND		114	81.4		ug/L		72	37 - 124	5	36
N-Nitrosodiphenylamine	ND		113	92.3		ug/L		82	10 - 150	4	34
Pentachlorophenol	ND		227	167		ug/L		73	29 - 130	6	42
Phenol	ND		114	87.9		ug/L		77	10 - 150	6	52
Pyridine	ND		227	132		ug/L		58	10 - 120	5	55
Quinoline	ND		113	88.1		ug/L		78	51 - 120	9	40
2,4,5-Trichlorophenol	ND		114	85.6		ug/L		75	34 - 120	3	42
2,4,6-Trichlorophenol	ND		114	86.7		ug/L		76	33 - 120	2	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*72*		*46 - 124*
2-Fluorophenol	*30*		*13 - 113*
Nitrobenzene-d5	*83*		*36 - 126*
Phenol-d5	*67*		*17 - 127*
Terphenyl-d14	*96*		*44 - 149*
2,4,6-Tribromophenol	*84*		*26 - 150*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-652297/1-A
Matrix: Water
Analysis Batch: 652559

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		11/30/23 10:33	12/01/23 18:06	1
Acenaphthylene	ND		0.20	0.044	ug/L		11/30/23 10:33	12/01/23 18:06	1
Anthracene	ND		0.20	0.047	ug/L		11/30/23 10:33	12/01/23 18:06	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		11/30/23 10:33	12/01/23 18:06	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		11/30/23 10:33	12/01/23 18:06	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		11/30/23 10:33	12/01/23 18:06	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		11/30/23 10:33	12/01/23 18:06	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		11/30/23 10:33	12/01/23 18:06	1
Chrysene	ND		0.20	0.033	ug/L		11/30/23 10:33	12/01/23 18:06	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		11/30/23 10:33	12/01/23 18:06	1
Fluoranthene	ND		0.20	0.034	ug/L		11/30/23 10:33	12/01/23 18:06	1
Fluorene	ND		0.20	0.089	ug/L		11/30/23 10:33	12/01/23 18:06	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		11/30/23 10:33	12/01/23 18:06	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 400-652297/1-A
Matrix: Water
Analysis Batch: 652559

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		0.20	0.090	ug/L		11/30/23 10:33	12/01/23 18:06	1
Pyrene	ND		0.20	0.039	ug/L		11/30/23 10:33	12/01/23 18:06	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		11/30/23 10:33	12/01/23 18:06	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		11/30/23 10:33	12/01/23 18:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*117*		*18 - 147*	*11/30/23 10:33*	*12/01/23 18:06*	*1*
2-Fluorobiphenyl	*79*		*15 - 128*	*11/30/23 10:33*	*12/01/23 18:06*	*1*
Nitrobenzene-d5	*71*		*10 - 144*	*11/30/23 10:33*	*12/01/23 18:06*	*1*

Lab Sample ID: LCS 400-652297/2-A
Matrix: Water
Analysis Batch: 652559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	95.9		ug/L		80	40 - 140
Acenaphthylene	120	98.0		ug/L		82	40 - 140
Anthracene	120	92.8		ug/L		77	40 - 140
Benzo[a]anthracene	120	111		ug/L		92	40 - 140
Benzo[a]pyrene	120	88.4		ug/L		74	40 - 140
Benzo[b]fluoranthene	120	103		ug/L		85	40 - 140
Benzo[g,h,i]perylene	120	91.0		ug/L		76	40 - 140
Benzo[k]fluoranthene	120	95.4		ug/L		80	40 - 140
Chrysene	120	91.6		ug/L		76	40 - 140
Dibenz(a,h)anthracene	120	93.8		ug/L		78	40 - 140
Fluoranthene	120	99.7		ug/L		83	40 - 140
Fluorene	120	97.5		ug/L		81	40 - 140
Indeno[1,2,3-cd]pyrene	120	92.7		ug/L		77	40 - 140
Phenanthrene	120	89.7		ug/L		75	40 - 140
Pyrene	120	96.9		ug/L		81	40 - 140
1-Methylnaphthalene	120	82.5		ug/L		69	40 - 140
2-Methylnaphthalene	120	84.5		ug/L		70	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*70*		*18 - 147*
2-Fluorobiphenyl	*71*		*15 - 128*
Nitrobenzene-d5	*75*		*10 - 144*

Lab Sample ID: 400-247369-6 MS
Matrix: Water
Analysis Batch: 652559

Client Sample ID: MW11-ROX-112723
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		125	103		ug/L		82	50 - 150
Acenaphthylene	0.076	J	125	106		ug/L		85	50 - 150
Anthracene	0.072	J	125	104		ug/L		83	50 - 150
Benzo[a]anthracene	0.057	J	125	122		ug/L		97	50 - 150
Benzo[a]pyrene	0.12	J	125	96.9		ug/L		77	50 - 150

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 400-247369-6 MS
Matrix: Water
Analysis Batch: 652559

Client Sample ID: MW11-ROX-112723
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[b]fluoranthene	0.060	J	125	113		ug/L		91	50 - 150
Benzo[g,h,i]perylene	ND		125	98.6		ug/L		79	50 - 150
Benzo[k]fluoranthene	ND		125	107		ug/L		86	50 - 150
Chrysene	ND		125	101		ug/L		81	50 - 150
Dibenz(a,h)anthracene	0.068	J	125	103		ug/L		82	50 - 150
Fluoranthene	ND		125	110		ug/L		88	50 - 150
Fluorene	ND		125	105		ug/L		84	50 - 150
Indeno[1,2,3-cd]pyrene	0.078	J	125	101		ug/L		81	50 - 150
Phenanthrene	ND		125	99.6		ug/L		80	50 - 150
Pyrene	ND		125	109		ug/L		87	50 - 150
1-Methylnaphthalene	ND		125	71.6		ug/L		57	50 - 150
2-Methylnaphthalene	ND		125	73.5		ug/L		59	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*76*		*18 - 147*
2-Fluorobiphenyl	*74*		*15 - 128*
Nitrobenzene-d5	*60*		*10 - 144*

Lab Sample ID: 400-247369-6 MSD
Matrix: Water
Analysis Batch: 652559

Client Sample ID: MW11-ROX-112723
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		122	94.9		ug/L		78	50 - 150	8	40
Acenaphthylene	0.076	J	122	96.9		ug/L		80	50 - 150	9	40
Anthracene	0.072	J	122	92.4		ug/L		76	50 - 150	11	40
Benzo[a]anthracene	0.057	J	122	110		ug/L		91	50 - 150	10	40
Benzo[a]pyrene	0.12	J	122	89.2		ug/L		73	50 - 150	8	40
Benzo[b]fluoranthene	0.060	J	122	111		ug/L		91	50 - 150	2	40
Benzo[g,h,i]perylene	ND		122	92.4		ug/L		76	50 - 150	7	40
Benzo[k]fluoranthene	ND		122	95.6		ug/L		79	50 - 150	11	40
Chrysene	ND		122	90.7		ug/L		75	50 - 150	10	40
Dibenz(a,h)anthracene	0.068	J	122	95.8		ug/L		79	50 - 150	7	40
Fluoranthene	ND		122	98.4		ug/L		81	50 - 150	11	40
Fluorene	ND		122	96.4		ug/L		79	50 - 150	8	40
Indeno[1,2,3-cd]pyrene	0.078	J	122	94.6		ug/L		78	50 - 150	6	40
Phenanthrene	ND		122	89.6		ug/L		74	50 - 150	11	40
Pyrene	ND		122	96.1		ug/L		79	50 - 150	12	40
1-Methylnaphthalene	ND		122	79.7		ug/L		65	50 - 150	11	40
2-Methylnaphthalene	ND		122	81.7		ug/L		67	50 - 150	11	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*69*		*18 - 147*
2-Fluorobiphenyl	*69*		*15 - 128*
Nitrobenzene-d5	*71*		*10 - 144*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 400-247369-12 MS
Matrix: Water
Analysis Batch: 652559

Client Sample ID: MW10-ROX-112723
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		113	96.0		ug/L		85	50 - 150
Acenaphthylene	0.070	J	113	99.0		ug/L		88	50 - 150
Anthracene	0.066	J	113	95.5		ug/L		84	50 - 150
Benzo[a]anthracene	ND		113	114		ug/L		101	50 - 150
Benzo[a]pyrene	0.11	J	113	87.9		ug/L		78	50 - 150
Benzo[b]fluoranthene	0.049	J	113	99.0		ug/L		87	50 - 150
Benzo[g,h,i]perylene	ND		113	87.3		ug/L		77	50 - 150
Benzo[k]fluoranthene	ND		113	94.6		ug/L		84	50 - 150
Chrysene	ND		113	93.5		ug/L		83	50 - 150
Dibenz(a,h)anthracene	ND		113	91.9		ug/L		81	50 - 150
Fluoranthene	ND		113	102		ug/L		91	50 - 150
Fluorene	ND		113	96.9		ug/L		86	50 - 150
Indeno[1,2,3-cd]pyrene	0.065	J	113	90.5		ug/L		80	50 - 150
Phenanthrene	ND		113	91.5		ug/L		81	50 - 150
Pyrene	ND		113	99.8		ug/L		88	50 - 150
1-Methylnaphthalene	ND		113	81.5		ug/L		72	50 - 150
2-Methylnaphthalene	ND		113	83.3		ug/L		74	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*77*		*18 - 147*
2-Fluorobiphenyl	*75*		*15 - 128*
Nitrobenzene-d5	*81*		*10 - 144*

Lab Sample ID: 400-247369-12 MSD
Matrix: Water
Analysis Batch: 652559

Client Sample ID: MW10-ROX-112723
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		114	101		ug/L		89	50 - 150	5	40
Acenaphthylene	0.070	J	114	104		ug/L		92	50 - 150	5	40
Anthracene	0.066	J	114	100		ug/L		88	50 - 150	5	40
Benzo[a]anthracene	ND		114	120		ug/L		105	50 - 150	5	40
Benzo[a]pyrene	0.11	J	114	97.3		ug/L		86	50 - 150	10	40
Benzo[b]fluoranthene	0.049	J	114	112		ug/L		99	50 - 150	13	40
Benzo[g,h,i]perylene	ND		114	101		ug/L		89	50 - 150	15	40
Benzo[k]fluoranthene	ND		114	102		ug/L		90	50 - 150	7	40
Chrysene	ND		114	97.9		ug/L		86	50 - 150	5	40
Dibenz(a,h)anthracene	ND		114	105		ug/L		92	50 - 150	13	40
Fluoranthene	ND		114	109		ug/L		96	50 - 150	6	40
Fluorene	ND		114	102		ug/L		90	50 - 150	5	40
Indeno[1,2,3-cd]pyrene	0.065	J	114	103		ug/L		91	50 - 150	13	40
Phenanthrene	ND		114	96.2		ug/L		85	50 - 150	5	40
Pyrene	ND		114	105		ug/L		92	50 - 150	5	40
1-Methylnaphthalene	ND		114	87.3		ug/L		77	50 - 150	7	40
2-Methylnaphthalene	ND		114	89.3		ug/L		79	50 - 150	7	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*80*		*18 - 147*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 400-247369-12 MSD
Matrix: Water
Analysis Batch: 652559

Client Sample ID: MW10-ROX-112723
Prep Type: Total/NA
Prep Batch: 652297

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*15 - 128*
Nitrobenzene-d5	*86*		*10 - 144*

Lab Sample ID: MB 400-652972/1-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		12/05/23 09:56	12/06/23 15:44	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/05/23 09:56	12/06/23 15:44	1
Anthracene	ND		0.20	0.047	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/05/23 09:56	12/06/23 15:44	1
Chrysene	ND		0.20	0.033	ug/L		12/05/23 09:56	12/06/23 15:44	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/05/23 09:56	12/06/23 15:44	1
Fluoranthene	ND		0.20	0.034	ug/L		12/05/23 09:56	12/06/23 15:44	1
Fluorene	ND		0.20	0.089	ug/L		12/05/23 09:56	12/06/23 15:44	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/05/23 09:56	12/06/23 15:44	1
Phenanthrene	ND		0.20	0.090	ug/L		12/05/23 09:56	12/06/23 15:44	1
Pyrene	ND		0.20	0.039	ug/L		12/05/23 09:56	12/06/23 15:44	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		12/05/23 09:56	12/06/23 15:44	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		12/05/23 09:56	12/06/23 15:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*158*	*S1+*	*18 - 147*	*12/05/23 09:56*	*12/06/23 15:44*	*1*
2-Fluorobiphenyl	*73*		*15 - 128*	*12/05/23 09:56*	*12/06/23 15:44*	*1*
Nitrobenzene-d5	*71*		*10 - 144*	*12/05/23 09:56*	*12/06/23 15:44*	*1*

Lab Sample ID: LCS 400-652972/2-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	88.4		ug/L		74	40 - 140
Acenaphthylene	120	91.3		ug/L		76	40 - 140
Anthracene	120	88.7		ug/L		74	40 - 140
Benzo[a]anthracene	120	105		ug/L		87	40 - 140
Benzo[a]pyrene	120	80.7		ug/L		67	40 - 140
Benzo[b]fluoranthene	120	98.2		ug/L		82	40 - 140
Benzo[g,h,i]perylene	120	94.9		ug/L		79	40 - 140
Benzo[k]fluoranthene	120	97.7		ug/L		81	40 - 140
Chrysene	120	88.1		ug/L		73	40 - 140
Dibenz(a,h)anthracene	120	89.2		ug/L		74	40 - 140
Fluoranthene	120	93.2		ug/L		78	40 - 140
Fluorene	120	90.6		ug/L		75	40 - 140

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 400-652972/2-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Indeno[1,2,3-cd]pyrene			120	89.3		ug/L		74	40 - 140		
Phenanthrene			120	86.7		ug/L		72	40 - 140		
Pyrene			120	121		ug/L		101	40 - 140		
1-Methylnaphthalene			120	70.8		ug/L		59	40 - 140		
2-Methylnaphthalene			120	71.9		ug/L		60	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*93*		*18 - 147*
2-Fluorobiphenyl	*70*		*15 - 128*
Nitrobenzene-d5	*72*		*10 - 144*

Lab Sample ID: LCSD 400-652972/3-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	84.4		ug/L		70	40 - 140	5	40
Acenaphthylene			120	88.3		ug/L		74	40 - 140	3	40
Anthracene			120	81.9		ug/L		68	40 - 140	8	40
Benzo[a]anthracene			120	97.7		ug/L		81	40 - 140	7	40
Benzo[a]pyrene			120	74.5		ug/L		62	40 - 140	8	40
Benzo[b]fluoranthene			120	95.1		ug/L		79	40 - 140	3	40
Benzo[g,h,i]perylene			120	84.2		ug/L		70	40 - 140	12	40
Benzo[k]fluoranthene			120	90.9		ug/L		76	40 - 140	7	40
Chrysene			120	80.6		ug/L		67	40 - 140	9	40
Dibenz(a,h)anthracene			120	80.5		ug/L		67	40 - 140	10	40
Fluoranthene			120	82.9		ug/L		69	40 - 140	12	40
Fluorene			120	84.8		ug/L		71	40 - 140	7	40
Indeno[1,2,3-cd]pyrene			120	80.3		ug/L		67	40 - 140	11	40
Phenanthrene			120	79.3		ug/L		66	40 - 140	9	40
Pyrene			120	117		ug/L		98	40 - 140	3	40
1-Methylnaphthalene			120	71.2		ug/L		59	40 - 140	1	40
2-Methylnaphthalene			120	72.7		ug/L		61	40 - 140	1	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*87*		*18 - 147*
2-Fluorobiphenyl	*67*		*15 - 128*
Nitrobenzene-d5	*76*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-652100/1-A
Matrix: Water
Analysis Batch: 652129

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652100

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		11/29/23 09:31	11/29/23 12:22	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		11/29/23 09:31	11/29/23 12:22	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-652100/1-A
Matrix: Water
Analysis Batch: 652129

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652100

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	125		51 - 149	11/29/23 09:31	11/29/23 12:22	1

Lab Sample ID: LCS 400-652100/2-A
Matrix: Water
Analysis Batch: 652129

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652100

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.127		ug/L		126	60 - 140		
1,2-Dibromoethane			0.100	0.115		ug/L		114	60 - 140		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	101		51 - 149

Lab Sample ID: LCSD 400-652100/3-A
Matrix: Water
Analysis Batch: 652129

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652100

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.132	*1	ug/L		131	60 - 140	42	30
1,2-Dibromoethane			0.100	0.117		ug/L		116	60 - 140	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	109		51 - 149

Lab Sample ID: 400-247369-6 MS
Matrix: Water
Analysis Batch: 652129

Client Sample ID: MW11-ROX-112723
Prep Type: Total/NA
Prep Batch: 652100

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane	ND	*1 F2	0.100	0.131		ug/L		131	10 - 150		
1,2-Dibromoethane	ND		0.0997	0.117		ug/L		117	39 - 150		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	108		51 - 149

Lab Sample ID: 400-247369-6 MSD
Matrix: Water
Analysis Batch: 652129

Client Sample ID: MW11-ROX-112723
Prep Type: Total/NA
Prep Batch: 652100

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	*1 F2	0.0998	0.136	F2	ug/L		136	10 - 150	47	20
1,2-Dibromoethane	ND		0.0994	0.119		ug/L		120	39 - 150	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	98		51 - 149

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: 400-247369-12 MS
Matrix: Water
Analysis Batch: 652129

Client Sample ID: MW10-ROX-112723
Prep Type: Total/NA
Prep Batch: 652100

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	ND	*1	0.0992	0.130		ug/L		131	10 - 150
1,2-Dibromoethane	ND		0.0988	0.117		ug/L		118	39 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*112*		*51 - 149*

Lab Sample ID: 400-247369-12 MSD
Matrix: Water
Analysis Batch: 652129

Client Sample ID: MW10-ROX-112723
Prep Type: Total/NA
Prep Batch: 652100

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	*1	0.0981	0.131		ug/L		134	10 - 150	1	20
1,2-Dibromoethane	ND		0.0977	0.119		ug/L		121	39 - 150	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*111*		*51 - 149*

Lab Sample ID: MB 400-652288/1-A
Matrix: Water
Analysis Batch: 652266

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652288

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		11/30/23 09:36	11/30/23 13:00	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		11/30/23 09:36	11/30/23 13:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*51 149*	*11/30/23 09:36*	*11/30/23 13:00*	*1*

Lab Sample ID: LCS 400-652288/2-A
Matrix: Water
Analysis Batch: 652266

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652288

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	0.101	0.0985		ug/L		98	60 - 140
1,2-Dibromoethane	0.100	0.0901		ug/L		90	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*75*		*51 - 149*

Lab Sample ID: LCSD 400-652288/3-A
Matrix: Water
Analysis Batch: 652266

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652288

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.100		ug/L		99	60 - 140	2	30
1,2-Dibromoethane	0.100	0.0898		ug/L		90	60 - 140	0	30

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-652288/3-A
Matrix: Water
Analysis Batch: 652266

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652288

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	75		51 - 149

Shell Oil Products US Chain Of Custody Recor

400-247369 COC

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	CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 11/27/2023
PO #	**GSAP Project ID**	PAGE: 1 of 2
60697537 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS: Street and City	State	AECOM Project / Task Number:
AECOM		900 South Central Ave; ROXANA	IL	Roxana Monthly GW 60697537 – 3.4.2

ADDRESS:	EDF DELIVERABLE TO (Name, Company, Office Location):	PHONE NO.:	E-MAIL:	AECOM Other ID:
100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA	Melissa Remiger - please see special instructions	314-802-1207	melissa.remiger@aecom.com	

PROJECT CONTACT (Hardcopy or PDF Report to):	SAMPLER NAME(S) (Print):	LAB USE ONLY
Melissa Remiger, Mary Massa, Brett Howell	C. McDavid, J. Mayer	

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

*** Please include "J" values on Reports.**
*** Please provide sample receipt upon login.**
*** Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com**

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.4.2

FIELD NOTES:
0.0°C
0.0°C IR10

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 8270 SIMS
	TB-ROX-112723-8260-A	11/27/2023	0000	Water	2					2	X			
	TB-ROX-112723-8011-A	11/27/2023	0000	Water	2					2		X		
	MW1-ROX-112723-EB	11/27/2023	0845	Water	6			2		8	X	X	X	X
	MW1-ROX-112723	11/27/2023	1010	Water	6			2		8	X	X	X	X
	MW26-ROX-112723	11/27/2023	1120	Water	6			2		8	X	X	X	X
	MW11-ROX-112723	11/27/2023	1245	Water	6			2		8	X	X	X	X
	MW11-ROX-112723-MS	11/27/2023	1245	Water	6			2		8	X	X	X	X
	MW11-ROX-112723-MSD	11/27/2023	1245	Water	6			2		8	X	X	X	X
	MW27-ROX-112723	11/27/2023	1345	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 6339 6597 5448, 6339 6597 5459	11/27/2023	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
		11/28/23	915
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: 2463001, 2463000, 2463002, 2463003

12/31/2023 (Rev. 1)

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
Melissa Remiger	25278	DATE: 11/27/2023
PO #	**GSAP Project ID**	PAGE: 2 of 2
60697537 – 3.4.2	USPG/00114/R/02	

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS: Street and City	State:	AECOM Project / Task Number:
AECOM		900 South Central Ave; ROXANA	IL	Roxana Monthly GW 60697537 – 3.4.2

ADDRESS:	EDF DELIVERABLE TO (Name, Company, Office Location):	PHONE NO.:	E-MAIL:	AECOM Other ID:
100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA	Melissa Remiger - please see special instructions	314-802-1207	melissa.remiger@aecom.com	

PROJECT CONTACT (Hardcopy or PDF Report to):	SAMPLER NAME(S) (Print):	LAB USE ONLY
Melissa Remiger, Mary Massa, Brett Howell	M. Massa, T. Jones	

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

Please include "J" values on Reports.
Please provide sample receipt upon login.
Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.4.2

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 8270 SIMS
	TB-ROX-112723-8260-B	11/27/2023	0000	Water	2					2	X			
	TB-ROX-112723-8011-B	11/27/2023	0000	Water	2					2		X		
	MW9-ROX-112723-EB	11/27/2023	0930	Water	6			2		8	X	X	X	X
	MW9-ROX-112723	11/27/2023	1025	Water	6			2		8	X	X	X	X
	MW10-ROX-112723	11/27/2023	1145	Water	6			2		8	X	X	X	X
	MW10-ROX-112723-MS	11/27/2023	1145	Water	6			2		8	X	X	X	X
	MW10-ROX-112723-MSD	11/27/2023	1145	Water	6			2		8	X	X	X	X
	MW28-ROX-112723	11/27/2023	1330	Water	6			2		8	X	X	X	X

11-27-23

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
MARY MASSA	FEDEX: See page 1	11/27/2023	1600
Relinquished by: (Signature)	Received by: (Signature) EES	Date: 11/28/23	Time: 915
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: See page 1

Page 06 of 08

12/31/2023 (Rev. 1)

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-247369-1

Login Number: 247369
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins 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, 0.0°C IR-10
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").	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: 400-247369-1
Project/Site: ROXANA MONTHLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	FLGNV23001	01-08-26
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Roxana Groundwater Monthly – November/December 2023 Data Review

Laboratory SDG: 400-247408-1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 1/3/2024

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

Sample Identification	Sample Identification
TB-ROX-112823-8260-A	TB-ROX-112823-8011-A
ROST3MW-ROX-112823	P54-ROX-112823
MW24-ROX-112823	MW5-ROX-112823
MW5-ROX-112823-DUP	--

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 case narrative stated that PAHs in samples ROST3MW-ROX-112823, P54-ROX-112823, MW24-ROX-112823, and MW5-ROX-112823 were re-extracted outside extraction time criteria. SVOC and VOCs LCS/LCSD recoveries were outside evaluation criteria. Several VOC MS/MSD recoveries were outside evaluation criteria in sample P54-ROX-112823. The continuing calibration verification (CCV) for 1,1,2,2-tetrachloroethane and chloroethane were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (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, PAHs in samples ROST3MW-ROX-112823, P54-ROX-112823, MW24-ROX-112823, and MW5-ROX-112823 were re-extracted 7 days outside of extraction time criteria (7 days) and then re-analyzed for confirmation. Holding time exceedances were not greater than two times (2X) criteria; both sets of data are reported.

With regard to initial ROST3MW-ROX-112823, MW24-ROX-112823, MW5-ROX-112823, and P54-ROX-112823 PAH data, the laboratory previously issued a Corrective Action Report (CAR) stating that through confirmation analyses, many previous detections were not confirmed and were therefore deemed laboratory contamination. Based on professional judgement, the results from the re-analysis were used for the

purposes of this report. Data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
ROST3MW-ROX-112823-RERA	PAHs	All non-detects	**UJ**
ROST3MW-ROX-112823-RERA	PAHs	1-Methylnaphthalene	**J**
P54-ROX-112823-RERA	PAHs	All non-detects	**UJ**
P54-ROX-112823-RERA	PAHs	Fluoranthene	**J**
MW24-ROX-112823-RERA	PAHs	All non-detects	**UJ**
MW5-ROX-112823-RERA	PAHs	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 400-652468/1001	VOCs	Acetone	**219**	NA	43-160
LCS 400-652468/1001	VOCs	Bromodichloromethane	**137**	NA	67-133
LCS 400-652468/1001	VOCs	2-Butanone (MEK)	**167**	NA	61-145
LCS 400-652468/1001	VOCs	1,2-Dichloropropane	**135**	NA	70-130
LCS 400-652468/1001	VOCs	Methylene bromide	**136**	NA	70-130
LCS 400-652468/1001	VOCs	Tetrachloroethene	**159**	NA	65-130
LCS 400-652468/1001	VOCs	Trichloroethene	**138**	NA	70-130
LCS 400-652297/2-A	SVOCs	Hexachlorocyclopentadiene	**7**	NA	10-134
LCS/LCSD 400-652297/3-A/4-A	SVOCs	Benzenethiol	**5/5**	1	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 and hexachlorocyclopentadiene below evaluation criteria; benzenethiol and hexachlorocyclopentadiene have been identified as a poor performing analytes under Method 8270.

Sample ID	Parameter	Analyte	Qualification
ROST3MW-ROX-112823	SVOCs	Benzenethiol	**UJ**
ROST3MW-ROX-112823	SVOCs	Hexachlorocyclopentadiene	**UJ**
P54-ROX-112823	SVOCs	Benzenethiol	**UJ**
P54-ROX-112823	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW24-ROX-112823	SVOCs	Benzenethiol	**UJ**
MW24-ROX-112823	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW5-ROX-112823	SVOCs	Benzenethiol	**UJ**
MW5-ROX-112823	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW5-ROX-112823-DUP	SVOCs	Benzenethiol	**UJ**
MW5-ROX-112823-DUP	SVOCs	Hexachlorocyclopentadiene	**UJ**

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?

Yes, sample P54-ROX-112823 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-112823 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
P54-ROX-112823 MS/MSD	VOCs	Tetrachloroethene	**147/141**	4	52-133/30
P54-ROX-112823 MS/MSD	VOCs	Trichloroethene	**137**/130	6	64-136/30

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. 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-112823	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
MW5-ROX-112823	MW5-ROX-112823-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; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification (CCV) for 1,1,2,2-tetrachloroethane and chloroethane were outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
ROST3MW-ROX-112823	VOCs	1,1,2,2-Tetrachloroethane	**UJ**
ROST3MW-ROX-112823	VOCs	Chloroethane	**UJ**
P54-ROX-112823	VOCs	1,1,2,2-Tetrachloroethane	**UJ**
P54-ROX-112823	VOCs	Chloroethane	**UJ**
MW24-ROX-112823	VOCs	1,1,2,2-Tetrachloroethane	**UJ**
MW24-ROX-112823	VOCs	Chloroethane	**UJ**
MW5-ROX-112823	VOCs	1,1,2,2-Tetrachloroethane	**UJ**
MW5-ROX-112823	VOCs	Chloroethane	**UJ**
MW5-ROX-112823-DUP	VOCs	1,1,2,2-Tetrachloroethane	**UJ**
MW5-ROX-112823-DUP	VOCs	Chloroethane	**UJ**

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 12/15/2023 2:31:41 PM

JOB DESCRIPTION

ROXANA MONTHLY GW

JOB NUMBER

400-247408-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

Job Notes

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Authorization



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Job ID: 400-247408-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-247408-1

Receipt
The samples were received on 11/29/2023 9:32 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 0.2º C and 1.1º C.

Receipt Exceptions

COC states Roxana Monthly GW, unable to find a AECOM project with that description. Put under Roxana Quarterly GW

GC/MS VOA
Method 8260D: The laboratory control sample (LCS) for analytical batch 400-652468 recovered outside control limits for the following analytes: 1,2-Dichloropropane, 2-Butanone (MEK), Acetone, Dibromomethane, Dichlorobromomethane, Tetrachloroethene and Trichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-652468 recovered above the upper control limit for 1,2-Dichloroethane, 1,2-Dichloropropane, 2-Butanone (MEK), Acetone, Carbon tetrachloride, cis-1,3-Dichloropropene, Dibromomethane, Dichlorobromomethane, Hexachlorobutadiene, Tetrachloroethene and Trichloroethene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-652468 recovered outside acceptance criteria, low biased, for 1,1,2,2-Tetrachloroethane and Chloroethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-652468 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-652468 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260D: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-652468 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: 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-112823-8260-A (400-247408-1), ROST3MW-ROX-112823 (400-247408-3), P54-ROX-112823 (400-247408-4), MW24-ROX-112823 (400-247408-5), MW5-ROX-112823 (400-247408-6) and MW5-ROX-112823-DUP (400-247408-7). 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 8260D: The initial calibration verification (ICV) analyzed in batch 400-627009 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

GC/MS Semi VOA
Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-650079 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-652297 and analytical batch 400-652457 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: 400-247408-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-652297 and analytical batch 400-652457 recovered outside control limits for the following analyte(s): Hexachlorocyclopentadiene. Hexachlorocyclopentadiene 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 8270E: The initial calibration verification (ICV) analyzed in batch 400-652774 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E SIM: The continuing calibration verification (CCV) associated with batch 400-654224 recovered above the upper control limit for Benzo[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene and Dibenz(a,h)anthracene. The samples associated with this CCV were below the reporting limit for the affected analytes; therefore, the data have been reported.

Method 8270E SIM: The following samples were re-prepared outside of preparation holding time to confirm sample results: ROST3MW-ROX-112823 (400-247408-3), P54-ROX-112823 (400-247408-4), MW24-ROX-112823 (400-247408-5) and MW5-ROX-112823 (400-247408-6). Both sets of data are 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 400-652266 recovered above the upper control limit for 1,2-Dibromoethane. 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.

Sample Summary

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

Job ID: 400-247408-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-247408-1	TB-ROX-112823-8260-A	Water	11/28/23 12:00	11/29/23 09:32
400-247408-2	TB-ROX-112823-8011-A	Water	11/28/23 12:00	11/29/23 09:32
400-247408-3	ROST3MW-ROX-112823	Water	11/28/23 09:15	11/29/23 09:32
400-247408-4	P54-ROX-112823	Water	11/28/23 10:15	11/29/23 09:32
400-247408-5	MW24-ROX-112823	Water	11/28/23 11:50	11/29/23 09:32
400-247408-6	MW5-ROX-112823	Water	11/28/23 12:45	11/29/23 09:32
400-247408-7	MW5-ROX-112823-DUP	Water	11/28/23 12:45	11/29/23 09:32

Detection Summary

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

Job ID: 400-247408-1

Client Sample ID: TB-ROX-112823-8260-A — Lab Sample ID: 400-247408-1

No Detections.

Client Sample ID: TB-ROX-112823-8011-A — Lab Sample ID: 400-247408-2

No Detections.

Client Sample ID: ROST3MW-ROX-112823 — Lab Sample ID: 400-247408-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.10	J	0.20	0.10	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.057	J	0.20	0.035	ug/L	1		8270E SIM	Total/NA
Benzo[g,h,i]perylene	0.033	J	0.20	0.028	ug/L	1		8270E SIM	Total/NA
Dibenz(a,h)anthracene	0.061	J	0.20	0.049	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.058	J	0.20	0.035	ug/L	1		8270E SIM	Total/NA
Fluorene	0.11	J	0.20	0.091	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.062	J	0.20	0.035	ug/L	1		8270E SIM	Total/NA
Pyrene	0.041	J	0.20	0.040	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	0.48		0.20	0.082	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene - RERA	0.31	H	0.21	0.083	ug/L	1		8270E SIM	Total/NA

Client Sample ID: P54-ROX-112823 — Lab Sample ID: 400-247408-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.047	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Dibenz(a,h)anthracene	0.060	J	0.20	0.048	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.035	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.050	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Fluoranthene - RERA	0.040	J H	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Dibenz[a,h]acridine	1.9	J	10	1.0	ug/L	1		8270E	Total/NA
Diethyl phthalate	0.32	J	10	0.24	ug/L	1		8270E	Total/NA
Di-n-octyl phthalate	0.85	J	10	0.17	ug/L	1		8270E	Total/NA

Client Sample ID: MW24-ROX-112823 — Lab Sample ID: 400-247408-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dibenz(a,h)anthracene	0.052	J	0.21	0.051	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.047	J	0.21	0.036	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW5-ROX-112823 — Lab Sample ID: 400-247408-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	2.9		1.0	0.22	ug/L	1		8260D	Total/NA
tert-Butylbenzene	1.8		1.0	0.63	ug/L	1		8260D	Total/NA
Acenaphthylene	0.048	J	0.20	0.044	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.041	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW5-ROX-112823-DUP — Lab Sample ID: 400-247408-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	2.9		1.0	0.22	ug/L	1		8260D	Total/NA
tert-Butylbenzene	2.0		1.0	0.63	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-247408-1

Client Sample ID: TB-ROX-112823-8260-A
Date Collected: 11/28/23 12:00
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247408-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			12/01/23 14:23	1
Acrolein	ND		20	3.3	ug/L			12/01/23 14:23	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 14:23	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 14:23	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 14:23	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 14:23	1
Bromodichloromethane	ND	*+	1.0	0.50	ug/L			12/01/23 14:23	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 14:23	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 14:23	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			12/01/23 14:23	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 14:23	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 14:23	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 14:23	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 14:23	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 14:23	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 14:23	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 14:23	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 14:23	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 14:23	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 14:23	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 14:23	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 14:23	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 14:23	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 14:23	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 14:23	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 14:23	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 14:23	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 14:23	1
1,2-Dichloropropane	ND	*+	1.0	0.50	ug/L			12/01/23 14:23	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 14:23	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 14:23	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 14:23	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 14:23	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 14:23	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 14:23	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 14:23	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 14:23	1
Methylene bromide	ND	*+	5.0	0.22	ug/L			12/01/23 14:23	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 14:23	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 14:23	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/01/23 14:23	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 14:23	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 14:23	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 14:23	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 14:23	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 14:23	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 14:23	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 14:23	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/01/23 14:23	1

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

Job ID: 400-247408-1

Client Sample ID: TB-ROX-112823-8260-A
Date Collected: 11/28/23 12:00
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247408-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 14:23	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 14:23	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/01/23 14:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 14:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 14:23	1
Tetrachloroethene	ND	*+	1.0	0.90	ug/L			12/01/23 14:23	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 14:23	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 14:23	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 14:23	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 14:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 14:23	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 14:23	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 14:23	1
Trichloroethene	ND	*+	1.0	0.15	ug/L			12/01/23 14:23	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 14:23	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 14:23	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 14:23	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 14:23	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 14:23	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 14:23	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*12/01/23 14:23*	*1*
Dibromofluoromethane	*92*		*75 - 126*		*12/01/23 14:23*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*12/01/23 14:23*	*1*

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

Job ID: 400-247408-1

Client Sample ID: TB-ROX-112823-8011-A
Date Collected: 11/28/23 12:00
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247408-2
Matrix: Water

Method: EPA 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		11/30/23 09:36	11/30/23 14:24	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		11/30/23 09:36	11/30/23 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*51 - 149*	*11/30/23 09:36*	*11/30/23 14:24*	*1*

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

Job ID: 400-247408-1

Client Sample ID: ROST3MW-ROX-112823
Date Collected: 11/28/23 09:15
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247408-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			12/01/23 15:13	1
Acrolein	ND		20	3.3	ug/L			12/01/23 15:13	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 15:13	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 15:13	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 15:13	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 15:13	1
Bromodichloromethane	ND	*+	1.0	0.50	ug/L			12/01/23 15:13	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 15:13	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 15:13	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			12/01/23 15:13	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 15:13	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 15:13	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 15:13	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 15:13	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 15:13	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 15:13	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 15:13	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 15:13	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 15:13	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 15:13	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 15:13	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 15:13	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 15:13	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 15:13	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 15:13	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 15:13	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 15:13	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 15:13	1
1,2-Dichloropropane	ND	*+	1.0	0.50	ug/L			12/01/23 15:13	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 15:13	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 15:13	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 15:13	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 15:13	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 15:13	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 15:13	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 15:13	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 15:13	1
Methylene bromide	ND	*+	5.0	0.22	ug/L			12/01/23 15:13	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 15:13	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 15:13	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/01/23 15:13	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 15:13	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 15:13	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 15:13	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 15:13	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 15:13	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 15:13	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 15:13	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/01/23 15:13	1

Client Sample ID: ROST3MW-ROX-112823

Lab Sample ID: 400-247408-3

Date Collected: 11/28/23 09:15

Matrix: Water

Date Received: 11/29/23 09:32

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 15:13	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 15:13	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/01/23 15:13	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 15:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 15:13	1
Tetrachloroethene	ND	*+	1.0	0.90	ug/L			12/01/23 15:13	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 15:13	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 15:13	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 15:13	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 15:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 15:13	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 15:13	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 15:13	1
Trichloroethene	ND	*+	1.0	0.15	ug/L			12/01/23 15:13	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 15:13	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 15:13	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 15:13	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 15:13	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 15:13	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 15:13	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*72 - 130*		*12/01/23 15:13*	*1*
Dibromofluoromethane	*90*		*75 - 126*		*12/01/23 15:13*	*1*
Toluene-d8 (Surr)	*104*		*64 - 132*		*12/01/23 15:13*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.10**	**J**	0.20	0.10	ug/L		11/30/23 14:11	12/05/23 20:47	1
Acenaphthylene	ND		0.20	0.045	ug/L		11/30/23 14:11	12/05/23 20:47	1
Anthracene	ND		0.20	0.048	ug/L		11/30/23 14:11	12/05/23 20:47	1
Benzo[a]anthracene	**0.057**	**J**	0.20	0.035	ug/L		11/30/23 14:11	12/05/23 20:47	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		11/30/23 14:11	12/05/23 20:47	1
Benzo[b]fluoranthene	ND		0.20	0.038	ug/L		11/30/23 14:11	12/05/23 20:47	1
Benzo[g,h,i]perylene	**0.033**	**J**	0.20	0.028	ug/L		11/30/23 14:11	12/05/23 20:47	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		11/30/23 14:11	12/05/23 20:47	1
Chrysene	ND		0.20	0.034	ug/L		11/30/23 14:11	12/05/23 20:47	1
Dibenz(a,h)anthracene	**0.061**	**J**	0.20	0.049	ug/L		11/30/23 14:11	12/05/23 20:47	1
Fluoranthene	**0.058**	**J**	0.20	0.035	ug/L		11/30/23 14:11	12/05/23 20:47	1
Fluorene	**0.11**	**J**	0.20	0.091	ug/L		11/30/23 14:11	12/05/23 20:47	1
Indeno[1,2,3-cd]pyrene	**0.062**	**J**	0.20	0.035	ug/L		11/30/23 14:11	12/05/23 20:47	1
Phenanthrene	ND		0.20	0.092	ug/L		11/30/23 14:11	12/05/23 20:47	1
Pyrene	**0.041**	**J**	0.20	0.040	ug/L		11/30/23 14:11	12/05/23 20:47	1
1-Methylnaphthalene	**0.48**		0.20	0.082	ug/L		11/30/23 14:11	12/05/23 20:47	1
2-Methylnaphthalene	ND		0.20	0.068	ug/L		11/30/23 14:11	12/05/23 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*79*		*18 - 147*	*11/30/23 14:11*	*12/05/23 20:47*	*1*
2-Fluorobiphenyl	*69*		*15 - 128*	*11/30/23 14:11*	*12/05/23 20:47*	*1*

Client Sample ID: ROST3MW-ROX-112823
Date Collected: 11/28/23 09:15
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247408-3
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	67		10 - 144	11/30/23 14:11	12/05/23 20:47	1

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.21	0.10	ug/L		12/12/23 10:44	12/13/23 19:26	1
Acenaphthylene	ND	H	0.21	0.046	ug/L		12/12/23 10:44	12/13/23 19:26	1
Anthracene	ND	H	0.21	0.049	ug/L		12/12/23 10:44	12/13/23 19:26	1
Benzo[a]anthracene	ND	H	0.21	0.035	ug/L		12/12/23 10:44	12/13/23 19:26	1
Benzo[a]pyrene	ND	H	0.21	0.067	ug/L		12/12/23 10:44	12/13/23 19:26	1
Benzo[b]fluoranthene	ND	H	0.21	0.039	ug/L		12/12/23 10:44	12/13/23 19:26	1
Benzo[g,h,i]perylene	ND	H	0.21	0.028	ug/L		12/12/23 10:44	12/13/23 19:26	1
Benzo[k]fluoranthene	ND	H	0.21	0.065	ug/L		12/12/23 10:44	12/13/23 19:26	1
Chrysene	ND	H	0.21	0.034	ug/L		12/12/23 10:44	12/13/23 19:26	1
Dibenz(a,h)anthracene	ND	H	0.21	0.050	ug/L		12/12/23 10:44	12/13/23 19:26	1
Fluoranthene	ND	H	0.21	0.035	ug/L		12/12/23 10:44	12/13/23 19:26	1
Fluorene	ND	H	0.21	0.093	ug/L		12/12/23 10:44	12/13/23 19:26	1
Indeno[1,2,3-cd]pyrene	ND	H	0.21	0.035	ug/L		12/12/23 10:44	12/13/23 19:26	1
Phenanthrene	ND	H	0.21	0.094	ug/L		12/12/23 10:44	12/13/23 19:26	1
Pyrene	ND	H	0.21	0.041	ug/L		12/12/23 10:44	12/13/23 19:26	1
1-Methylnaphthalene	**0.31**	**H**	0.21	0.083	ug/L		12/12/23 10:44	12/13/23 19:26	1
2-Methylnaphthalene	ND	H	0.21	0.069	ug/L		12/12/23 10:44	12/13/23 19:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	73		18 - 147	12/12/23 10:44	12/13/23 19:26	1
2-Fluorobiphenyl	67		15 - 128	12/12/23 10:44	12/13/23 19:26	1
Nitrobenzene-d5	66		10 - 144	12/12/23 10:44	12/13/23 19:26	1

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		11/30/23 14:11	12/05/23 18:06	1
Benzenethiol	ND	*-	10	1.7	ug/L		11/30/23 14:11	12/05/23 18:06	1
Benzoic acid	ND		31	7.5	ug/L		11/30/23 14:11	12/05/23 18:06	1
Benzyl alcohol	ND		10	2.0	ug/L		11/30/23 14:11	12/05/23 18:06	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		11/30/23 14:11	12/05/23 18:06	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		11/30/23 14:11	12/05/23 18:06	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		11/30/23 14:11	12/05/23 18:06	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		11/30/23 14:11	12/05/23 18:06	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		11/30/23 14:11	12/05/23 18:06	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		11/30/23 14:11	12/05/23 18:06	1
4-Chloroaniline	ND		10	3.5	ug/L		11/30/23 14:11	12/05/23 18:06	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		11/30/23 14:11	12/05/23 18:06	1
2-Chloronaphthalene	ND		10	0.14	ug/L		11/30/23 14:11	12/05/23 18:06	1
2-Chlorophenol	ND		10	2.3	ug/L		11/30/23 14:11	12/05/23 18:06	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		11/30/23 14:11	12/05/23 18:06	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		11/30/23 14:11	12/05/23 18:06	1
Dibenzofuran	ND		10	0.17	ug/L		11/30/23 14:11	12/05/23 18:06	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		11/30/23 14:11	12/05/23 18:06	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		11/30/23 14:11	12/05/23 18:06	1
Diethyl phthalate	ND		10	0.25	ug/L		11/30/23 14:11	12/05/23 18:06	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		11/30/23 14:11	12/05/23 18:06	1

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

Job ID: 400-247408-1

Client Sample ID: ROST3MW-ROX-112823

Lab Sample ID: 400-247408-3

Date Collected: 11/28/23 09:15

Matrix: Water

Date Received: 11/29/23 09:32

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		10	0.17	ug/L		11/30/23 14:11	12/05/23 18:06	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		11/30/23 14:11	12/05/23 18:06	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		11/30/23 14:11	12/05/23 18:06	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		11/30/23 14:11	12/05/23 18:06	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 14:11	12/05/23 18:06	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 14:11	12/05/23 18:06	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		11/30/23 14:11	12/05/23 18:06	1
1,4-Dioxane	ND		10	1.0	ug/L		11/30/23 14:11	12/05/23 18:06	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		11/30/23 14:11	12/05/23 18:06	1
Hexachlorobenzene	ND		10	0.17	ug/L		11/30/23 14:11	12/05/23 18:06	1
Hexachlorocyclopentadiene	ND	*-	20	2.7	ug/L		11/30/23 14:11	12/05/23 18:06	1
Hexachloroethane	ND		10	4.3	ug/L		11/30/23 14:11	12/05/23 18:06	1
Indene	ND		10	1.0	ug/L		11/30/23 14:11	12/05/23 18:06	1
Isophorone	ND		10	0.14	ug/L		11/30/23 14:11	12/05/23 18:06	1
2-Methylphenol	ND		10	1.8	ug/L		11/30/23 14:11	12/05/23 18:06	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		11/30/23 14:11	12/05/23 18:06	1
2-Nitroaniline	ND		10	2.3	ug/L		11/30/23 14:11	12/05/23 18:06	1
3-Nitroaniline	ND		10	1.8	ug/L		11/30/23 14:11	12/05/23 18:06	1
4-Nitroaniline	ND		10	1.5	ug/L		11/30/23 14:11	12/05/23 18:06	1
Nitrobenzene	ND		10	0.13	ug/L		11/30/23 14:11	12/05/23 18:06	1
2-Nitrophenol	ND		10	5.3	ug/L		11/30/23 14:11	12/05/23 18:06	1
4-Nitrophenol	ND		10	2.1	ug/L		11/30/23 14:11	12/05/23 18:06	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		11/30/23 14:11	12/05/23 18:06	1
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		11/30/23 14:11	12/05/23 18:06	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		11/30/23 14:11	12/05/23 18:06	1
Pentachlorophenol	ND		20	1.4	ug/L		11/30/23 14:11	12/05/23 18:06	1
Phenol	ND		10	2.7	ug/L		11/30/23 14:11	12/05/23 18:06	1
Pyridine	ND		10	3.3	ug/L		11/30/23 14:11	12/05/23 18:06	1
Quinoline	ND		10	4.6	ug/L		11/30/23 14:11	12/05/23 18:06	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		11/30/23 14:11	12/05/23 18:06	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		11/30/23 14:11	12/05/23 18:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*46 - 124*	*11/30/23 14:11*	*12/05/23 18:06*	*1*
2-Fluorophenol	*55*		*13 - 113*	*11/30/23 14:11*	*12/05/23 18:06*	*1*
Nitrobenzene-d5	*72*		*36 - 126*	*11/30/23 14:11*	*12/05/23 18:06*	*1*
Phenol-d5	*68*		*17 - 127*	*11/30/23 14:11*	*12/05/23 18:06*	*1*
Terphenyl-d14	*85*		*44 - 149*	*11/30/23 14:11*	*12/05/23 18:06*	*1*
2,4,6-Tribromophenol	*67*		*26 - 150*	*11/30/23 14:11*	*12/05/23 18:06*	*1*

Method: EPA 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		11/30/23 09:36	11/30/23 14:45	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		11/30/23 09:36	11/30/23 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*11/30/23 09:36*	*11/30/23 14:45*	*1*

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

Job ID: 400-247408-1

Client Sample ID: P54-ROX-112823
Date Collected: 11/28/23 10:15
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247408-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			12/01/23 12:43	1
Acrolein	ND		20	3.3	ug/L			12/01/23 12:43	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 12:43	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 12:43	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 12:43	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 12:43	1
Bromodichloromethane	ND	*+	1.0	0.50	ug/L			12/01/23 12:43	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 12:43	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 12:43	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			12/01/23 12:43	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 12:43	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 12:43	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 12:43	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 12:43	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			12/01/23 12:43	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 12:43	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 12:43	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 12:43	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 12:43	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 12:43	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 12:43	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 12:43	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 12:43	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 12:43	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 12:43	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 12:43	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 12:43	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 12:43	1
1,2-Dichloropropane	ND	*+	1.0	0.50	ug/L			12/01/23 12:43	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 12:43	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 12:43	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 12:43	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 12:43	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 12:43	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 12:43	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 12:43	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 12:43	1
Methylene bromide	ND	*+	5.0	0.22	ug/L			12/01/23 12:43	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 12:43	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 12:43	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/01/23 12:43	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 12:43	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 12:43	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 12:43	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 12:43	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 12:43	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 12:43	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 12:43	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/01/23 12:43	1

Client Sample ID: P54-ROX-112823
Date Collected: 11/28/23 10:15
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247408-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 12:43	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 12:43	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/01/23 12:43	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 12:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 12:43	1
Tetrachloroethene	ND	*+ F1	1.0	0.90	ug/L			12/01/23 12:43	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 12:43	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 12:43	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 12:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 12:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 12:43	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 12:43	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 12:43	1
Trichloroethene	ND	*+ F1	1.0	0.15	ug/L			12/01/23 12:43	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 12:43	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 12:43	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 12:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 12:43	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 12:43	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 12:43	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 12:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*12/01/23 12:43*	*1*
Dibromofluoromethane	*91*		*75 - 126*		*12/01/23 12:43*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*12/01/23 12:43*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		11/30/23 14:11	12/05/23 20:26	1
Acenaphthylene	ND		0.20	0.044	ug/L		11/30/23 14:11	12/05/23 20:26	1
Anthracene	ND		0.20	0.047	ug/L		11/30/23 14:11	12/05/23 20:26	1
Benzo[a]anthracene	**0.047**	**J**	0.20	0.034	ug/L		11/30/23 14:11	12/05/23 20:26	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		11/30/23 14:11	12/05/23 20:26	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		11/30/23 14:11	12/05/23 20:26	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		11/30/23 14:11	12/05/23 20:26	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		11/30/23 14:11	12/05/23 20:26	1
Chrysene	ND		0.20	0.033	ug/L		11/30/23 14:11	12/05/23 20:26	1
Dibenz(a,h)anthracene	**0.060**	**J**	0.20	0.048	ug/L		11/30/23 14:11	12/05/23 20:26	1
Fluoranthene	**0.035**	**J**	0.20	0.034	ug/L		11/30/23 14:11	12/05/23 20:26	1
Fluorene	ND		0.20	0.089	ug/L		11/30/23 14:11	12/05/23 20:26	1
Indeno[1,2,3-cd]pyrene	**0.050**	**J**	0.20	0.034	ug/L		11/30/23 14:11	12/05/23 20:26	1
Phenanthrene	ND		0.20	0.090	ug/L		11/30/23 14:11	12/05/23 20:26	1
Pyrene	ND		0.20	0.039	ug/L		11/30/23 14:11	12/05/23 20:26	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		11/30/23 14:11	12/05/23 20:26	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		11/30/23 14:11	12/05/23 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*86*		*18 - 147*	*11/30/23 14:11*	*12/05/23 20:26*	*1*
2-Fluorobiphenyl	*77*		*15 - 128*	*11/30/23 14:11*	*12/05/23 20:26*	*1*

Client Sample ID: P54-ROX-112823
Date Collected: 11/28/23 10:15
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247408-4
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*75*		*10 - 144*	*11/30/23 14:11*	*12/05/23 20:26*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.20	0.098	ug/L		12/12/23 10:44	12/13/23 19:46	1
Acenaphthylene	ND	H	0.20	0.044	ug/L		12/12/23 10:44	12/13/23 19:46	1
Anthracene	ND	H	0.20	0.047	ug/L		12/12/23 10:44	12/13/23 19:46	1
Benzo[a]anthracene	ND	H	0.20	0.034	ug/L		12/12/23 10:44	12/13/23 19:46	1
Benzo[a]pyrene	ND	H	0.20	0.063	ug/L		12/12/23 10:44	12/13/23 19:46	1
Benzo[b]fluoranthene	ND	H	0.20	0.037	ug/L		12/12/23 10:44	12/13/23 19:46	1
Benzo[g,h,i]perylene	ND	H	0.20	0.027	ug/L		12/12/23 10:44	12/13/23 19:46	1
Benzo[k]fluoranthene	ND	H	0.20	0.062	ug/L		12/12/23 10:44	12/13/23 19:46	1
Chrysene	ND	H	0.20	0.033	ug/L		12/12/23 10:44	12/13/23 19:46	1
Dibenz(a,h)anthracene	ND	H	0.20	0.048	ug/L		12/12/23 10:44	12/13/23 19:46	1
Fluoranthene	**0.040**	**J H**	0.20	0.034	ug/L		12/12/23 10:44	12/13/23 19:46	1
Fluorene	ND	H	0.20	0.088	ug/L		12/12/23 10:44	12/13/23 19:46	1
Indeno[1,2,3-cd]pyrene	ND	H	0.20	0.034	ug/L		12/12/23 10:44	12/13/23 19:46	1
Phenanthrene	ND	H	0.20	0.089	ug/L		12/12/23 10:44	12/13/23 19:46	1
Pyrene	ND	H	0.20	0.039	ug/L		12/12/23 10:44	12/13/23 19:46	1
1-Methylnaphthalene	ND	H	0.20	0.079	ug/L		12/12/23 10:44	12/13/23 19:46	1
2-Methylnaphthalene	ND	H	0.20	0.065	ug/L		12/12/23 10:44	12/13/23 19:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*67*		*18 - 147*	*12/12/23 10:44*	*12/13/23 19:46*	*1*
2-Fluorobiphenyl	*63*		*15 - 128*	*12/12/23 10:44*	*12/13/23 19:46*	*1*
Nitrobenzene-d5	*60*		*10 - 144*	*12/12/23 10:44*	*12/13/23 19:46*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		11/30/23 14:11	12/05/23 17:45	1
Benzenethiol	ND	*-	10	1.7	ug/L		11/30/23 14:11	12/05/23 17:45	1
Benzoic acid	ND		30	7.3	ug/L		11/30/23 14:11	12/05/23 17:45	1
Benzyl alcohol	ND		10	2.0	ug/L		11/30/23 14:11	12/05/23 17:45	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		11/30/23 14:11	12/05/23 17:45	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		11/30/23 14:11	12/05/23 17:45	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		11/30/23 14:11	12/05/23 17:45	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		11/30/23 14:11	12/05/23 17:45	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		11/30/23 14:11	12/05/23 17:45	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		11/30/23 14:11	12/05/23 17:45	1
4-Chloroaniline	ND		10	3.4	ug/L		11/30/23 14:11	12/05/23 17:45	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		11/30/23 14:11	12/05/23 17:45	1
2-Chloronaphthalene	ND		10	0.14	ug/L		11/30/23 14:11	12/05/23 17:45	1
2-Chlorophenol	ND		10	2.2	ug/L		11/30/23 14:11	12/05/23 17:45	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		11/30/23 14:11	12/05/23 17:45	1
Dibenz[a,h]acridine	**1.9**	**J**	10	1.0	ug/L		11/30/23 14:11	12/05/23 17:45	1
Dibenzofuran	ND		10	0.17	ug/L		11/30/23 14:11	12/05/23 17:45	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		11/30/23 14:11	12/05/23 17:45	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		11/30/23 14:11	12/05/23 17:45	1
Diethyl phthalate	**0.32**	**J**	10	0.24	ug/L		11/30/23 14:11	12/05/23 17:45	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		11/30/23 14:11	12/05/23 17:45	1

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

Job ID: 400-247408-1

Client Sample ID: P54-ROX-112823
Date Collected: 11/28/23 10:15
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247408-4
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		10	0.17	ug/L		11/30/23 14:11	12/05/23 17:45	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		11/30/23 14:11	12/05/23 17:45	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		11/30/23 14:11	12/05/23 17:45	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		11/30/23 14:11	12/05/23 17:45	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 14:11	12/05/23 17:45	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 14:11	12/05/23 17:45	1
Di-n-octyl phthalate	**0.85**	**J**	10	0.17	ug/L		11/30/23 14:11	12/05/23 17:45	1
1,4-Dioxane	ND		10	1.0	ug/L		11/30/23 14:11	12/05/23 17:45	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		11/30/23 14:11	12/05/23 17:45	1
Hexachlorobenzene	ND		10	0.17	ug/L		11/30/23 14:11	12/05/23 17:45	1
Hexachlorocyclopentadiene	ND	*-	20	2.6	ug/L		11/30/23 14:11	12/05/23 17:45	1
Hexachloroethane	ND		10	4.2	ug/L		11/30/23 14:11	12/05/23 17:45	1
Indene	ND		10	1.0	ug/L		11/30/23 14:11	12/05/23 17:45	1
Isophorone	ND		10	0.14	ug/L		11/30/23 14:11	12/05/23 17:45	1
2-Methylphenol	ND		10	1.8	ug/L		11/30/23 14:11	12/05/23 17:45	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		11/30/23 14:11	12/05/23 17:45	1
2-Nitroaniline	ND		10	2.2	ug/L		11/30/23 14:11	12/05/23 17:45	1
3-Nitroaniline	ND		10	1.8	ug/L		11/30/23 14:11	12/05/23 17:45	1
4-Nitroaniline	ND		10	1.5	ug/L		11/30/23 14:11	12/05/23 17:45	1
Nitrobenzene	ND		10	0.13	ug/L		11/30/23 14:11	12/05/23 17:45	1
2-Nitrophenol	ND		10	5.2	ug/L		11/30/23 14:11	12/05/23 17:45	1
4-Nitrophenol	ND		10	2.1	ug/L		11/30/23 14:11	12/05/23 17:45	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		11/30/23 14:11	12/05/23 17:45	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		11/30/23 14:11	12/05/23 17:45	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		11/30/23 14:11	12/05/23 17:45	1
Pentachlorophenol	ND		20	1.4	ug/L		11/30/23 14:11	12/05/23 17:45	1
Phenol	ND		10	2.6	ug/L		11/30/23 14:11	12/05/23 17:45	1
Pyridine	ND		10	3.2	ug/L		11/30/23 14:11	12/05/23 17:45	1
Quinoline	ND		10	4.5	ug/L		11/30/23 14:11	12/05/23 17:45	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		11/30/23 14:11	12/05/23 17:45	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		11/30/23 14:11	12/05/23 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*89*		*46 - 124*	*11/30/23 14:11*	*12/05/23 17:45*	*1*
2-Fluorophenol	*52*		*13 - 113*	*11/30/23 14:11*	*12/05/23 17:45*	*1*
Nitrobenzene-d5	*79*		*36 - 126*	*11/30/23 14:11*	*12/05/23 17:45*	*1*
Phenol-d5	*61*		*17 - 127*	*11/30/23 14:11*	*12/05/23 17:45*	*1*
Terphenyl-d14	*90*		*44 - 149*	*11/30/23 14:11*	*12/05/23 17:45*	*1*
2,4,6-Tribromophenol	*58*		*26 - 150*	*11/30/23 14:11*	*12/05/23 17:45*	*1*

Method: EPA 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		11/30/23 09:36	11/30/23 15:05	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		11/30/23 09:36	11/30/23 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*51 - 149*	*11/30/23 09:36*	*11/30/23 15:05*	*1*

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

Job ID: 400-247408-1

Client Sample ID: MW24-ROX-112823
Date Collected: 11/28/23 11:50
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247408-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			12/01/23 15:38	1
Acrolein	ND		20	3.3	ug/L			12/01/23 15:38	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 15:38	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 15:38	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 15:38	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 15:38	1
Bromodichloromethane	ND	*+	1.0	0.50	ug/L			12/01/23 15:38	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 15:38	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 15:38	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			12/01/23 15:38	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 15:38	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 15:38	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 15:38	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 15:38	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 15:38	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 15:38	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 15:38	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 15:38	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 15:38	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 15:38	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 15:38	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 15:38	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 15:38	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 15:38	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 15:38	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 15:38	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 15:38	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 15:38	1
1,2-Dichloropropane	ND	*+	1.0	0.50	ug/L			12/01/23 15:38	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 15:38	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 15:38	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 15:38	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 15:38	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 15:38	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 15:38	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 15:38	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 15:38	1
Methylene bromide	ND	*+	5.0	0.22	ug/L			12/01/23 15:38	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 15:38	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 15:38	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/01/23 15:38	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 15:38	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 15:38	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 15:38	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 15:38	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 15:38	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 15:38	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 15:38	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/01/23 15:38	1

Client Sample ID: MW24-ROX-112823
Date Collected: 11/28/23 11:50
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247408-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 15:38	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 15:38	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/01/23 15:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 15:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 15:38	1
Tetrachloroethene	ND	*+	1.0	0.90	ug/L			12/01/23 15:38	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 15:38	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 15:38	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 15:38	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 15:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 15:38	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 15:38	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 15:38	1
Trichloroethene	ND	*+	1.0	0.15	ug/L			12/01/23 15:38	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 15:38	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 15:38	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 15:38	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 15:38	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 15:38	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 15:38	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*12/01/23 15:38*	*1*
Dibromofluoromethane	*92*		*75 - 126*		*12/01/23 15:38*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*12/01/23 15:38*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.11	ug/L		11/30/23 14:11	12/05/23 21:07	1
Acenaphthylene	ND		0.21	0.047	ug/L		11/30/23 14:11	12/05/23 21:07	1
Anthracene	ND		0.21	0.050	ug/L		11/30/23 14:11	12/05/23 21:07	1
Benzo[a]anthracene	ND		0.21	0.036	ug/L		11/30/23 14:11	12/05/23 21:07	1
Benzo[a]pyrene	ND		0.21	0.068	ug/L		11/30/23 14:11	12/05/23 21:07	1
Benzo[b]fluoranthene	ND		0.21	0.039	ug/L		11/30/23 14:11	12/05/23 21:07	1
Benzo[g,h,i]perylene	ND		0.21	0.029	ug/L		11/30/23 14:11	12/05/23 21:07	1
Benzo[k]fluoranthene	ND		0.21	0.066	ug/L		11/30/23 14:11	12/05/23 21:07	1
Chrysene	ND		0.21	0.035	ug/L		11/30/23 14:11	12/05/23 21:07	1
Dibenz(a,h)anthracene	**0.052**	**J**	0.21	0.051	ug/L		11/30/23 14:11	12/05/23 21:07	1
Fluoranthene	ND		0.21	0.036	ug/L		11/30/23 14:11	12/05/23 21:07	1
Fluorene	ND		0.21	0.095	ug/L		11/30/23 14:11	12/05/23 21:07	1
Indeno[1,2,3-cd]pyrene	**0.047**	**J**	0.21	0.036	ug/L		11/30/23 14:11	12/05/23 21:07	1
Phenanthrene	ND		0.21	0.096	ug/L		11/30/23 14:11	12/05/23 21:07	1
Pyrene	ND		0.21	0.042	ug/L		11/30/23 14:11	12/05/23 21:07	1
1-Methylnaphthalene	ND		0.21	0.085	ug/L		11/30/23 14:11	12/05/23 21:07	1
2-Methylnaphthalene	ND		0.21	0.070	ug/L		11/30/23 14:11	12/05/23 21:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*70*		*18 - 147*	*11/30/23 14:11*	*12/05/23 21:07*	*1*
2-Fluorobiphenyl	*74*		*15 - 128*	*11/30/23 14:11*	*12/05/23 21:07*	*1*

Client Sample ID: MW24-ROX-112823

Date Collected: 11/28/23 11:50
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247408-5
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*73*		*10 - 144*	*11/30/23 14:11*	*12/05/23 21:07*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.20	0.10	ug/L		12/12/23 10:44	12/13/23 20:06	1
Acenaphthylene	ND	H	0.20	0.044	ug/L		12/12/23 10:44	12/13/23 20:06	1
Anthracene	ND	H	0.20	0.047	ug/L		12/12/23 10:44	12/13/23 20:06	1
Benzo[a]anthracene	ND	H	0.20	0.034	ug/L		12/12/23 10:44	12/13/23 20:06	1
Benzo[a]pyrene	ND	H	0.20	0.065	ug/L		12/12/23 10:44	12/13/23 20:06	1
Benzo[b]fluoranthene	ND	H	0.20	0.037	ug/L		12/12/23 10:44	12/13/23 20:06	1
Benzo[g,h,i]perylene	ND	H	0.20	0.027	ug/L		12/12/23 10:44	12/13/23 20:06	1
Benzo[k]fluoranthene	ND	H	0.20	0.063	ug/L		12/12/23 10:44	12/13/23 20:06	1
Chrysene	ND	H	0.20	0.033	ug/L		12/12/23 10:44	12/13/23 20:06	1
Dibenz(a,h)anthracene	ND	H	0.20	0.049	ug/L		12/12/23 10:44	12/13/23 20:06	1
Fluoranthene	ND	H	0.20	0.034	ug/L		12/12/23 10:44	12/13/23 20:06	1
Fluorene	ND	H	0.20	0.090	ug/L		12/12/23 10:44	12/13/23 20:06	1
Indeno[1,2,3-cd]pyrene	ND	H	0.20	0.034	ug/L		12/12/23 10:44	12/13/23 20:06	1
Phenanthrene	ND	H	0.20	0.091	ug/L		12/12/23 10:44	12/13/23 20:06	1
Pyrene	ND	H	0.20	0.039	ug/L		12/12/23 10:44	12/13/23 20:06	1
1-Methylnaphthalene	ND	H	0.20	0.081	ug/L		12/12/23 10:44	12/13/23 20:06	1
2-Methylnaphthalene	ND	H	0.20	0.067	ug/L		12/12/23 10:44	12/13/23 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*58*		*18 - 147*	*12/12/23 10:44*	*12/13/23 20:06*	*1*
2-Fluorobiphenyl	*59*		*15 - 128*	*12/12/23 10:44*	*12/13/23 20:06*	*1*
Nitrobenzene-d5	*56*		*10 - 144*	*12/12/23 10:44*	*12/13/23 20:06*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	4.1	ug/L		11/30/23 14:11	12/05/23 18:27	1
Benzenethiol	ND	*-	11	1.8	ug/L		11/30/23 14:11	12/05/23 18:27	1
Benzoic acid	ND		32	7.8	ug/L		11/30/23 14:11	12/05/23 18:27	1
Benzyl alcohol	ND		11	2.1	ug/L		11/30/23 14:11	12/05/23 18:27	1
Bis(2-chloroethoxy)methane	ND		11	0.17	ug/L		11/30/23 14:11	12/05/23 18:27	1
Bis(2-chloroethyl)ether	ND		11	2.9	ug/L		11/30/23 14:11	12/05/23 18:27	1
bis (2-chloroisopropyl) ether	ND		11	0.17	ug/L		11/30/23 14:11	12/05/23 18:27	1
Bis(2-ethylhexyl) phthalate	ND		11	5.3	ug/L		11/30/23 14:11	12/05/23 18:27	1
4-Bromophenyl phenyl ether	ND		11	0.21	ug/L		11/30/23 14:11	12/05/23 18:27	1
Butyl benzyl phthalate	ND		11	0.20	ug/L		11/30/23 14:11	12/05/23 18:27	1
4-Chloroaniline	ND		11	3.6	ug/L		11/30/23 14:11	12/05/23 18:27	1
4-Chloro-3-methylphenol	ND		11	4.1	ug/L		11/30/23 14:11	12/05/23 18:27	1
2-Chloronaphthalene	ND		11	0.15	ug/L		11/30/23 14:11	12/05/23 18:27	1
2-Chlorophenol	ND		11	2.3	ug/L		11/30/23 14:11	12/05/23 18:27	1
4-Chlorophenyl phenyl ether	ND		11	2.1	ug/L		11/30/23 14:11	12/05/23 18:27	1
Dibenz[a,h]acridine	ND		11	1.1	ug/L		11/30/23 14:11	12/05/23 18:27	1
Dibenzofuran	ND		11	0.18	ug/L		11/30/23 14:11	12/05/23 18:27	1
3,3'-Dichlorobenzidine	ND		11	2.8	ug/L		11/30/23 14:11	12/05/23 18:27	1
2,4-Dichlorophenol	ND		11	3.2	ug/L		11/30/23 14:11	12/05/23 18:27	1
Diethyl phthalate	ND		11	0.26	ug/L		11/30/23 14:11	12/05/23 18:27	1
2,4-Dimethylphenol	ND		11	3.7	ug/L		11/30/23 14:11	12/05/23 18:27	1

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

Job ID: 400-247408-1

Client Sample ID: MW24-ROX-112823
Date Collected: 11/28/23 11:50
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247408-5
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		11	0.18	ug/L		11/30/23 14:11	12/05/23 18:27	1
Di-n-butyl phthalate	ND		11	2.9	ug/L		11/30/23 14:11	12/05/23 18:27	1
4,6-Dinitro-ortho-cresol	ND		11	1.7	ug/L		11/30/23 14:11	12/05/23 18:27	1
2,4-Dinitrophenol	ND		32	3.6	ug/L		11/30/23 14:11	12/05/23 18:27	1
2,4-Dinitrotoluene	ND		11	2.0	ug/L		11/30/23 14:11	12/05/23 18:27	1
2,6-Dinitrotoluene	ND		11	2.0	ug/L		11/30/23 14:11	12/05/23 18:27	1
Di-n-octyl phthalate	ND		11	0.18	ug/L		11/30/23 14:11	12/05/23 18:27	1
1,4-Dioxane	ND		11	1.1	ug/L		11/30/23 14:11	12/05/23 18:27	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	1.1	ug/L		11/30/23 14:11	12/05/23 18:27	1
Hexachlorobenzene	ND		11	0.18	ug/L		11/30/23 14:11	12/05/23 18:27	1
Hexachlorocyclopentadiene	ND	*-	21	2.8	ug/L		11/30/23 14:11	12/05/23 18:27	1
Hexachloroethane	ND		11	4.5	ug/L		11/30/23 14:11	12/05/23 18:27	1
Indene	ND		11	1.1	ug/L		11/30/23 14:11	12/05/23 18:27	1
Isophorone	ND		11	0.15	ug/L		11/30/23 14:11	12/05/23 18:27	1
2-Methylphenol	ND		11	1.9	ug/L		11/30/23 14:11	12/05/23 18:27	1
3 & 4 Methylphenol	ND		21	0.42	ug/L		11/30/23 14:11	12/05/23 18:27	1
2-Nitroaniline	ND		11	2.3	ug/L		11/30/23 14:11	12/05/23 18:27	1
3-Nitroaniline	ND		11	1.9	ug/L		11/30/23 14:11	12/05/23 18:27	1
4-Nitroaniline	ND		11	1.6	ug/L		11/30/23 14:11	12/05/23 18:27	1
Nitrobenzene	ND		11	0.14	ug/L		11/30/23 14:11	12/05/23 18:27	1
2-Nitrophenol	ND		11	5.6	ug/L		11/30/23 14:11	12/05/23 18:27	1
4-Nitrophenol	ND		11	2.2	ug/L		11/30/23 14:11	12/05/23 18:27	1
N-Nitrosodimethylamine	ND		11	3.7	ug/L		11/30/23 14:11	12/05/23 18:27	1
N-Nitrosodi-n-propylamine	ND		11	3.5	ug/L		11/30/23 14:11	12/05/23 18:27	1
N-Nitrosodiphenylamine	ND		11	0.19	ug/L		11/30/23 14:11	12/05/23 18:27	1
Pentachlorophenol	ND		21	1.5	ug/L		11/30/23 14:11	12/05/23 18:27	1
Phenol	ND		11	2.8	ug/L		11/30/23 14:11	12/05/23 18:27	1
Pyridine	ND		11	3.4	ug/L		11/30/23 14:11	12/05/23 18:27	1
Quinoline	ND		11	4.8	ug/L		11/30/23 14:11	12/05/23 18:27	1
2,4,5-Trichlorophenol	ND		11	3.9	ug/L		11/30/23 14:11	12/05/23 18:27	1
2,4,6-Trichlorophenol	ND		11	3.7	ug/L		11/30/23 14:11	12/05/23 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*46 - 124*	*11/30/23 14:11*	*12/05/23 18:27*	*1*
2-Fluorophenol	*53*		*13 - 113*	*11/30/23 14:11*	*12/05/23 18:27*	*1*
Nitrobenzene-d5	*77*		*36 - 126*	*11/30/23 14:11*	*12/05/23 18:27*	*1*
Phenol-d5	*56*		*17 - 127*	*11/30/23 14:11*	*12/05/23 18:27*	*1*
Terphenyl-d14	*76*		*44 - 149*	*11/30/23 14:11*	*12/05/23 18:27*	*1*
2,4,6-Tribromophenol	*46*		*26 - 150*	*11/30/23 14:11*	*12/05/23 18:27*	*1*

Method: EPA 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		11/30/23 09:36	11/30/23 16:08	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		11/30/23 09:36	11/30/23 16:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*	*p*	*51 - 149*	*11/30/23 09:36*	*11/30/23 16:08*	*1*

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

Job ID: 400-247408-1

Client Sample ID: MW5-ROX-112823
Date Collected: 11/28/23 12:45
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247408-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			12/01/23 16:03	1
Acrolein	ND		20	3.3	ug/L			12/01/23 16:03	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 16:03	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 16:03	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 16:03	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 16:03	1
Bromodichloromethane	ND	*+	1.0	0.50	ug/L			12/01/23 16:03	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 16:03	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 16:03	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			12/01/23 16:03	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 16:03	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 16:03	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 16:03	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 16:03	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 16:03	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 16:03	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 16:03	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 16:03	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 16:03	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 16:03	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 16:03	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 16:03	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 16:03	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 16:03	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 16:03	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 16:03	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 16:03	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 16:03	1
1,2-Dichloropropane	ND	*+	1.0	0.50	ug/L			12/01/23 16:03	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 16:03	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 16:03	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 16:03	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 16:03	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 16:03	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 16:03	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 16:03	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 16:03	1
Methylene bromide	ND	*+	5.0	0.22	ug/L			12/01/23 16:03	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 16:03	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 16:03	1
Methyl tert-butyl ether	**2.9**		1.0	0.22	ug/L			12/01/23 16:03	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 16:03	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 16:03	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 16:03	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 16:03	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 16:03	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 16:03	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 16:03	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/01/23 16:03	1

Client Sample ID: MW5-ROX-112823
Date Collected: 11/28/23 12:45
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247408-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 16:03	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 16:03	1
tert-Butylbenzene	**1.8**		1.0	0.63	ug/L			12/01/23 16:03	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 16:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 16:03	1
Tetrachloroethene	ND	*+	1.0	0.90	ug/L			12/01/23 16:03	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 16:03	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 16:03	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 16:03	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 16:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 16:03	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 16:03	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 16:03	1
Trichloroethene	ND	*+	1.0	0.15	ug/L			12/01/23 16:03	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 16:03	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 16:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 16:03	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 16:03	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 16:03	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 16:03	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 130*		*12/01/23 16:03*	*1*
Dibromofluoromethane	*89*		*75 - 126*		*12/01/23 16:03*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*12/01/23 16:03*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		11/30/23 14:11	12/05/23 21:28	1
Acenaphthylene	**0.048**	**J**	0.20	0.044	ug/L		11/30/23 14:11	12/05/23 21:28	1
Anthracene	ND		0.20	0.047	ug/L		11/30/23 14:11	12/05/23 21:28	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		11/30/23 14:11	12/05/23 21:28	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		11/30/23 14:11	12/05/23 21:28	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		11/30/23 14:11	12/05/23 21:28	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		11/30/23 14:11	12/05/23 21:28	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		11/30/23 14:11	12/05/23 21:28	1
Chrysene	ND		0.20	0.033	ug/L		11/30/23 14:11	12/05/23 21:28	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		11/30/23 14:11	12/05/23 21:28	1
Fluoranthene	ND		0.20	0.034	ug/L		11/30/23 14:11	12/05/23 21:28	1
Fluorene	ND		0.20	0.089	ug/L		11/30/23 14:11	12/05/23 21:28	1
Indeno[1,2,3-cd]pyrene	**0.041**	**J**	0.20	0.034	ug/L		11/30/23 14:11	12/05/23 21:28	1
Phenanthrene	ND		0.20	0.090	ug/L		11/30/23 14:11	12/05/23 21:28	1
Pyrene	ND		0.20	0.039	ug/L		11/30/23 14:11	12/05/23 21:28	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		11/30/23 14:11	12/05/23 21:28	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		11/30/23 14:11	12/05/23 21:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*49*		*18 - 147*	*11/30/23 14:11*	*12/05/23 21:28*	*1*
2-Fluorobiphenyl	*70*		*15 - 128*	*11/30/23 14:11*	*12/05/23 21:28*	*1*

Client Sample ID: MW5-ROX-112823
Date Collected: 11/28/23 12:45
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Lab Sample ID: 400-247408-6
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*70*		*10 - 144*	*11/30/23 14:11*	*12/05/23 21:28*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.22	0.11	ug/L		12/12/23 10:44	12/13/23 20:26	1
Acenaphthylene	ND	H	0.22	0.048	ug/L		12/12/23 10:44	12/13/23 20:26	1
Anthracene	ND	H	0.22	0.051	ug/L		12/12/23 10:44	12/13/23 20:26	1
Benzo[a]anthracene	ND	H	0.22	0.037	ug/L		12/12/23 10:44	12/13/23 20:26	1
Benzo[a]pyrene	ND	H	0.22	0.070	ug/L		12/12/23 10:44	12/13/23 20:26	1
Benzo[b]fluoranthene	ND	H	0.22	0.041	ug/L		12/12/23 10:44	12/13/23 20:26	1
Benzo[g,h,i]perylene	ND	H	0.22	0.030	ug/L		12/12/23 10:44	12/13/23 20:26	1
Benzo[k]fluoranthene	ND	H	0.22	0.068	ug/L		12/12/23 10:44	12/13/23 20:26	1
Chrysene	ND	H	0.22	0.036	ug/L		12/12/23 10:44	12/13/23 20:26	1
Dibenz(a,h)anthracene	ND	H	0.22	0.053	ug/L		12/12/23 10:44	12/13/23 20:26	1
Fluoranthene	ND	H	0.22	0.037	ug/L		12/12/23 10:44	12/13/23 20:26	1
Fluorene	ND	H	0.22	0.098	ug/L		12/12/23 10:44	12/13/23 20:26	1
Indeno[1,2,3-cd]pyrene	ND	H	0.22	0.037	ug/L		12/12/23 10:44	12/13/23 20:26	1
Phenanthrene	ND	H	0.22	0.099	ug/L		12/12/23 10:44	12/13/23 20:26	1
Pyrene	ND	H	0.22	0.043	ug/L		12/12/23 10:44	12/13/23 20:26	1
1-Methylnaphthalene	ND	H	0.22	0.088	ug/L		12/12/23 10:44	12/13/23 20:26	1
2-Methylnaphthalene	ND	H	0.22	0.072	ug/L		12/12/23 10:44	12/13/23 20:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*61*		*18 - 147*	*12/12/23 10:44*	*12/13/23 20:26*	*1*
2-Fluorobiphenyl	*66*		*15 - 128*	*12/12/23 10:44*	*12/13/23 20:26*	*1*
Nitrobenzene-d5	*64*		*10 - 144*	*12/12/23 10:44*	*12/13/23 20:26*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		11/30/23 14:11	12/05/23 18:48	1
Benzenethiol	ND	*-	10	1.7	ug/L		11/30/23 14:11	12/05/23 18:48	1
Benzoic acid	ND		30	7.3	ug/L		11/30/23 14:11	12/05/23 18:48	1
Benzyl alcohol	ND		10	2.0	ug/L		11/30/23 14:11	12/05/23 18:48	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		11/30/23 14:11	12/05/23 18:48	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		11/30/23 14:11	12/05/23 18:48	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		11/30/23 14:11	12/05/23 18:48	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		11/30/23 14:11	12/05/23 18:48	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		11/30/23 14:11	12/05/23 18:48	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		11/30/23 14:11	12/05/23 18:48	1
4-Chloroaniline	ND		10	3.4	ug/L		11/30/23 14:11	12/05/23 18:48	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		11/30/23 14:11	12/05/23 18:48	1
2-Chloronaphthalene	ND		10	0.14	ug/L		11/30/23 14:11	12/05/23 18:48	1
2-Chlorophenol	ND		10	2.2	ug/L		11/30/23 14:11	12/05/23 18:48	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		11/30/23 14:11	12/05/23 18:48	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		11/30/23 14:11	12/05/23 18:48	1
Dibenzofuran	ND		10	0.17	ug/L		11/30/23 14:11	12/05/23 18:48	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		11/30/23 14:11	12/05/23 18:48	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		11/30/23 14:11	12/05/23 18:48	1
Diethyl phthalate	ND		10	0.24	ug/L		11/30/23 14:11	12/05/23 18:48	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		11/30/23 14:11	12/05/23 18:48	1

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

Job ID: 400-247408-1

Client Sample ID: MW5-ROX-112823

Date Collected: 11/28/23 12:45
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247408-6

Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		10	0.17	ug/L		11/30/23 14:11	12/05/23 18:48	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		11/30/23 14:11	12/05/23 18:48	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		11/30/23 14:11	12/05/23 18:48	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		11/30/23 14:11	12/05/23 18:48	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 14:11	12/05/23 18:48	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 14:11	12/05/23 18:48	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		11/30/23 14:11	12/05/23 18:48	1
1,4-Dioxane	ND		10	1.0	ug/L		11/30/23 14:11	12/05/23 18:48	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		11/30/23 14:11	12/05/23 18:48	1
Hexachlorobenzene	ND		10	0.17	ug/L		11/30/23 14:11	12/05/23 18:48	1
Hexachlorocyclopentadiene	ND	*-	20	2.6	ug/L		11/30/23 14:11	12/05/23 18:48	1
Hexachloroethane	ND		10	4.2	ug/L		11/30/23 14:11	12/05/23 18:48	1
Indene	ND		10	1.0	ug/L		11/30/23 14:11	12/05/23 18:48	1
Isophorone	ND		10	0.14	ug/L		11/30/23 14:11	12/05/23 18:48	1
2-Methylphenol	ND		10	1.8	ug/L		11/30/23 14:11	12/05/23 18:48	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		11/30/23 14:11	12/05/23 18:48	1
2-Nitroaniline	ND		10	2.2	ug/L		11/30/23 14:11	12/05/23 18:48	1
3-Nitroaniline	ND		10	1.8	ug/L		11/30/23 14:11	12/05/23 18:48	1
4-Nitroaniline	ND		10	1.5	ug/L		11/30/23 14:11	12/05/23 18:48	1
Nitrobenzene	ND		10	0.13	ug/L		11/30/23 14:11	12/05/23 18:48	1
2-Nitrophenol	ND		10	5.2	ug/L		11/30/23 14:11	12/05/23 18:48	1
4-Nitrophenol	ND		10	2.1	ug/L		11/30/23 14:11	12/05/23 18:48	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		11/30/23 14:11	12/05/23 18:48	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		11/30/23 14:11	12/05/23 18:48	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		11/30/23 14:11	12/05/23 18:48	1
Pentachlorophenol	ND		20	1.4	ug/L		11/30/23 14:11	12/05/23 18:48	1
Phenol	ND		10	2.6	ug/L		11/30/23 14:11	12/05/23 18:48	1
Pyridine	ND		10	3.2	ug/L		11/30/23 14:11	12/05/23 18:48	1
Quinoline	ND		10	4.5	ug/L		11/30/23 14:11	12/05/23 18:48	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		11/30/23 14:11	12/05/23 18:48	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		11/30/23 14:11	12/05/23 18:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*46 - 124*	*11/30/23 14:11*	*12/05/23 18:48*	*1*
2-Fluorophenol	*62*		*13 - 113*	*11/30/23 14:11*	*12/05/23 18:48*	*1*
Nitrobenzene-d5	*75*		*36 - 126*	*11/30/23 14:11*	*12/05/23 18:48*	*1*
Phenol-d5	*73*		*17 - 127*	*11/30/23 14:11*	*12/05/23 18:48*	*1*
Terphenyl-d14	*53*		*44 - 149*	*11/30/23 14:11*	*12/05/23 18:48*	*1*
2,4,6-Tribromophenol	*74*		*26 - 150*	*11/30/23 14:11*	*12/05/23 18:48*	*1*

Method: EPA 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		11/30/23 09:36	11/30/23 16:50	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		11/30/23 09:36	11/30/23 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*51 - 149*	*11/30/23 09:36*	*11/30/23 16:50*	*1*

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

Job ID: 400-247408-1

Client Sample ID: MW5-ROX-112823-DUP

Lab Sample ID: 400-247408-7

Date Collected: 11/28/23 12:45

Matrix: Water

Date Received: 11/29/23 09:32

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			12/01/23 16:28	1
Acrolein	ND		20	3.3	ug/L			12/01/23 16:28	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 16:28	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 16:28	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 16:28	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 16:28	1
Bromodichloromethane	ND	*+	1.0	0.50	ug/L			12/01/23 16:28	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 16:28	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 16:28	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			12/01/23 16:28	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 16:28	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 16:28	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 16:28	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 16:28	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 16:28	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 16:28	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 16:28	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 16:28	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 16:28	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 16:28	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 16:28	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 16:28	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 16:28	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 16:28	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 16:28	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 16:28	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 16:28	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 16:28	1
1,2-Dichloropropane	ND	*+	1.0	0.50	ug/L			12/01/23 16:28	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 16:28	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 16:28	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 16:28	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 16:28	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 16:28	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 16:28	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 16:28	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 16:28	1
Methylene bromide	ND	*+	5.0	0.22	ug/L			12/01/23 16:28	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 16:28	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 16:28	1
Methyl tert-butyl ether	**2.9**		1.0	0.22	ug/L			12/01/23 16:28	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 16:28	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 16:28	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 16:28	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 16:28	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 16:28	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 16:28	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 16:28	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/01/23 16:28	1

Client Sample ID: MW5-ROX-112823-DUP

Lab Sample ID: 400-247408-7

Date Collected: 11/28/23 12:45

Matrix: Water

Date Received: 11/29/23 09:32

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 16:28	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 16:28	1
tert-Butylbenzene	**2.0**		1.0	0.63	ug/L			12/01/23 16:28	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 16:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 16:28	1
Tetrachloroethene	ND	*+	1.0	0.90	ug/L			12/01/23 16:28	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 16:28	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 16:28	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 16:28	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 16:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 16:28	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 16:28	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 16:28	1
Trichloroethene	ND	*+	1.0	0.15	ug/L			12/01/23 16:28	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 16:28	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 16:28	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 16:28	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 16:28	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 16:28	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 16:28	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 130*		*12/01/23 16:28*	*1*
Dibromofluoromethane	*89*		*75 - 126*		*12/01/23 16:28*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*12/01/23 16:28*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		11/30/23 14:11	12/05/23 21:48	1
Acenaphthylene	ND		0.20	0.045	ug/L		11/30/23 14:11	12/05/23 21:48	1
Anthracene	ND		0.20	0.048	ug/L		11/30/23 14:11	12/05/23 21:48	1
Benzo[a]anthracene	ND		0.20	0.035	ug/L		11/30/23 14:11	12/05/23 21:48	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		11/30/23 14:11	12/05/23 21:48	1
Benzo[b]fluoranthene	ND		0.20	0.038	ug/L		11/30/23 14:11	12/05/23 21:48	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		11/30/23 14:11	12/05/23 21:48	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		11/30/23 14:11	12/05/23 21:48	1
Chrysene	ND		0.20	0.034	ug/L		11/30/23 14:11	12/05/23 21:48	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		11/30/23 14:11	12/05/23 21:48	1
Fluoranthene	ND		0.20	0.035	ug/L		11/30/23 14:11	12/05/23 21:48	1
Fluorene	ND		0.20	0.090	ug/L		11/30/23 14:11	12/05/23 21:48	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.035	ug/L		11/30/23 14:11	12/05/23 21:48	1
Phenanthrene	ND		0.20	0.091	ug/L		11/30/23 14:11	12/05/23 21:48	1
Pyrene	ND		0.20	0.040	ug/L		11/30/23 14:11	12/05/23 21:48	1
1-Methylnaphthalene	ND		0.20	0.081	ug/L		11/30/23 14:11	12/05/23 21:48	1
2-Methylnaphthalene	ND		0.20	0.067	ug/L		11/30/23 14:11	12/05/23 21:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*68*		*18 - 147*	*11/30/23 14:11*	*12/05/23 21:48*	*1*
2-Fluorobiphenyl	*67*		*15 - 128*	*11/30/23 14:11*	*12/05/23 21:48*	*1*

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

Job ID: 400-247408-1

Client Sample ID: MW5-ROX-112823-DUP
Date Collected: 11/28/23 12:45
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247408-7
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*69*		*10 - 144*	*11/30/23 14:11*	*12/05/23 21:48*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		11/30/23 14:11	12/05/23 19:09	1
Benzenethiol	ND	*-	10	1.7	ug/L		11/30/23 14:11	12/05/23 19:09	1
Benzoic acid	ND		30	7.4	ug/L		11/30/23 14:11	12/05/23 19:09	1
Benzyl alcohol	ND		10	2.0	ug/L		11/30/23 14:11	12/05/23 19:09	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		11/30/23 14:11	12/05/23 19:09	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		11/30/23 14:11	12/05/23 19:09	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		11/30/23 14:11	12/05/23 19:09	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		11/30/23 14:11	12/05/23 19:09	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		11/30/23 14:11	12/05/23 19:09	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		11/30/23 14:11	12/05/23 19:09	1
4-Chloroaniline	ND		10	3.5	ug/L		11/30/23 14:11	12/05/23 19:09	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		11/30/23 14:11	12/05/23 19:09	1
2-Chloronaphthalene	ND		10	0.14	ug/L		11/30/23 14:11	12/05/23 19:09	1
2-Chlorophenol	ND		10	2.2	ug/L		11/30/23 14:11	12/05/23 19:09	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		11/30/23 14:11	12/05/23 19:09	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		11/30/23 14:11	12/05/23 19:09	1
Dibenzofuran	ND		10	0.17	ug/L		11/30/23 14:11	12/05/23 19:09	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		11/30/23 14:11	12/05/23 19:09	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		11/30/23 14:11	12/05/23 19:09	1
Diethyl phthalate	ND		10	0.24	ug/L		11/30/23 14:11	12/05/23 19:09	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		11/30/23 14:11	12/05/23 19:09	1
Dimethyl phthalate	ND		10	0.17	ug/L		11/30/23 14:11	12/05/23 19:09	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		11/30/23 14:11	12/05/23 19:09	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		11/30/23 14:11	12/05/23 19:09	1
2,4-Dinitrophenol	ND		30	3.5	ug/L		11/30/23 14:11	12/05/23 19:09	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 14:11	12/05/23 19:09	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 14:11	12/05/23 19:09	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		11/30/23 14:11	12/05/23 19:09	1
1,4-Dioxane	ND		10	1.0	ug/L		11/30/23 14:11	12/05/23 19:09	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		11/30/23 14:11	12/05/23 19:09	1
Hexachlorobenzene	ND		10	0.17	ug/L		11/30/23 14:11	12/05/23 19:09	1
Hexachlorocyclopentadiene	ND	*-	20	2.6	ug/L		11/30/23 14:11	12/05/23 19:09	1
Hexachloroethane	ND		10	4.3	ug/L		11/30/23 14:11	12/05/23 19:09	1
Indene	ND		10	1.0	ug/L		11/30/23 14:11	12/05/23 19:09	1
Isophorone	ND		10	0.14	ug/L		11/30/23 14:11	12/05/23 19:09	1
2-Methylphenol	ND		10	1.8	ug/L		11/30/23 14:11	12/05/23 19:09	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		11/30/23 14:11	12/05/23 19:09	1
2-Nitroaniline	ND		10	2.2	ug/L		11/30/23 14:11	12/05/23 19:09	1
3-Nitroaniline	ND		10	1.8	ug/L		11/30/23 14:11	12/05/23 19:09	1
4-Nitroaniline	ND		10	1.5	ug/L		11/30/23 14:11	12/05/23 19:09	1
Nitrobenzene	ND		10	0.13	ug/L		11/30/23 14:11	12/05/23 19:09	1
2-Nitrophenol	ND		10	5.3	ug/L		11/30/23 14:11	12/05/23 19:09	1
4-Nitrophenol	ND		10	2.1	ug/L		11/30/23 14:11	12/05/23 19:09	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		11/30/23 14:11	12/05/23 19:09	1

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

Job ID: 400-247408-1

Client Sample ID: MW5-ROX-112823-DUP

Lab Sample ID: 400-247408-7

Date Collected: 11/28/23 12:45

Matrix: Water

Date Received: 11/29/23 09:32

Method: SW846 8270E - 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		11/30/23 14:11	12/05/23 19:09	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		11/30/23 14:11	12/05/23 19:09	1
Pentachlorophenol	ND		20	1.4	ug/L		11/30/23 14:11	12/05/23 19:09	1
Phenol	ND		10	2.6	ug/L		11/30/23 14:11	12/05/23 19:09	1
Pyridine	ND		10	3.3	ug/L		11/30/23 14:11	12/05/23 19:09	1
Quinoline	ND		10	4.6	ug/L		11/30/23 14:11	12/05/23 19:09	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		11/30/23 14:11	12/05/23 19:09	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		11/30/23 14:11	12/05/23 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*46 - 124*	*11/30/23 14:11*	*12/05/23 19:09*	*1*
2-Fluorophenol	*61*		*13 - 113*	*11/30/23 14:11*	*12/05/23 19:09*	*1*
Nitrobenzene-d5	*77*		*36 - 126*	*11/30/23 14:11*	*12/05/23 19:09*	*1*
Phenol-d5	*77*		*17 - 127*	*11/30/23 14:11*	*12/05/23 19:09*	*1*
Terphenyl-d14	*86*		*44 - 149*	*11/30/23 14:11*	*12/05/23 19:09*	*1*
2,4,6-Tribromophenol	*81*		*26 - 150*	*11/30/23 14:11*	*12/05/23 19:09*	*1*

Method: EPA 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		11/30/23 09:36	11/30/23 17:11	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		11/30/23 09:36	11/30/23 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*51 - 149*	*11/30/23 09:36*	*11/30/23 17:11*	*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.
E	Result exceeded calibration range.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
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 MONTHLY GW

Job ID: 400-247408-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-130)	(75-126)	(64-132)
400-247408-1	TB-ROX-112823-8260-A	103	92	102
400-247408-3	ROST3MW-ROX-112823	111	90	104
400-247408-4	P54-ROX-112823	103	91	101
400-247408-4 MS	P54-ROX-112823	106	84	100
400-247408-4 MSD	P54-ROX-112823	106	86	101
400-247408-5	MW24-ROX-112823	104	92	101
400-247408-6	MW5-ROX-112823	107	89	100
400-247408-7	MW5-ROX-112823-DUP	107	89	101
LCS 400-652468/1001	Lab Control Sample	105	100	101
MB 400-652468/3	Method Blank	104	89	101

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - 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)
400-247408-3	ROST3MW-ROX-112823	81	55	72	68	85	67
400-247408-4	P54-ROX-112823	89	52	79	61	90	58
400-247408-4 MS	P54-ROX-112823	87	64	81	80	90	78
400-247408-4 MSD	P54-ROX-112823	86	72	80	80	87	77
400-247408-5	MW24-ROX-112823	86	53	77	56	76	46
400-247408-6	MW5-ROX-112823	82	62	75	73	53	74
400-247408-7	MW5-ROX-112823-DUP	86	61	77	77	86	81
LCS 400-652297/2-A	Lab Control Sample	64	35	76	63	80	77
LCS 400-652297/3-A	Lab Control Sample	73	26	72	58	89	68
LCSD 400-652297/4-A	Lab Control Sample Dup	71	41	70	66	88	66
MB 400-652297/1-A	Method Blank	76	20	79	60	92	72

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-247408-3	ROST3MW-ROX-112823	79	69	67
400-247408-3 - RERA	ROST3MW-ROX-112823	73	67	66
400-247408-4	P54-ROX-112823	86	77	75

Surrogate Summary

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

Job ID: 400-247408-1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-247408-4 - RERA	P54-ROX-112823	67	63	60
400-247408-4 MS	P54-ROX-112823	76	81	67
400-247408-4 MSD	P54-ROX-112823	75	81	84
400-247408-5	MW24-ROX-112823	70	74	73
400-247408-5 - RERA	MW24-ROX-112823	58	59	56
400-247408-6	MW5-ROX-112823	49	70	70
400-247408-6 - RERA	MW5-ROX-112823	61	66	64
400-247408-7	MW5-ROX-112823-DUP	68	67	69
LCS 400-652297/2-A	Lab Control Sample	70	71	75
LCS 400-653912/2-A	Lab Control Sample	70	74	73
LCSD 400-653912/3-A	Lab Control Sample Dup	64	71	68
MB 400-652297/1-A	Method Blank	117	79	71
MB 400-653912/1-A	Method Blank	75	73	68

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-247408-2	TB-ROX-112823-8011-A	97
400-247408-3	ROST3MW-ROX-112823	99
400-247408-4	P54-ROX-112823	108
400-247408-4 MS	P54-ROX-112823	74
400-247408-4 MSD	P54-ROX-112823	97
400-247408-5	MW24-ROX-112823	98 p
400-247408-6	MW5-ROX-112823	81
400-247408-7	MW5-ROX-112823-DUP	85
LCS 400-652288/2-A	Lab Control Sample	75
LCSD 400-652288/3-A	Lab Control Sample Dup	75
MB 400-652288/1-A	Method Blank	79

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-247408-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

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

Job ID: 400-247408-1

Client Sample ID: TB-ROX-112823-8260-A
Lab Sample ID: 400-247408-1
Date Collected: 11/28/23 12:00
Matrix: Water
Date Received: 11/29/23 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652468	12/01/23 14:23	BPO	EET PEN

Client Sample ID: TB-ROX-112823-8011-A
Lab Sample ID: 400-247408-2
Date Collected: 11/28/23 12:00
Matrix: Water
Date Received: 11/29/23 09:32

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	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 14:24	PG	EET PEN

Client Sample ID: ROST3MW-ROX-112823
Lab Sample ID: 400-247408-3
Date Collected: 11/28/23 09:15
Matrix: Water
Date Received: 11/29/23 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652468	12/01/23 15:13	BPO	EET PEN
Total/NA	Prep	3520C			244.4 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653033	12/05/23 18:06	VC1	EET PEN
Total/NA	Prep	3520C			244.4 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653064	12/05/23 20:47	S1B	EET PEN
Total/NA	Prep	3520C	RERA		240 mL	1 mL	653912	12/12/23 10:44	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	654224	12/13/23 19:26	KJA	EET PEN
Total/NA	Prep	8011			35.9 mL	35 mL	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 14:45	PG	EET PEN

Client Sample ID: P54-ROX-112823
Lab Sample ID: 400-247408-4
Date Collected: 11/28/23 10:15
Matrix: Water
Date Received: 11/29/23 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652468	12/01/23 12:43	BPO	EET PEN
Total/NA	Prep	3520C			250.4 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653033	12/05/23 17:45	VC1	EET PEN
Total/NA	Prep	3520C			250.4 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653064	12/05/23 20:26	S1B	EET PEN
Total/NA	Prep	3520C	RERA		252 mL	1 mL	653912	12/12/23 10:44	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	654224	12/13/23 19:46	KJA	EET PEN
Total/NA	Prep	8011			34.8 mL	35 mL	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 15:05	PG	EET PEN

Client Sample ID: MW24-ROX-112823

Lab Sample ID: 400-247408-5

Date Collected: 11/28/23 11:50

Matrix: Water

Date Received: 11/29/23 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652468	12/01/23 15:38	BPO	EET PEN
Total/NA	Prep	3520C			234.2 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653033	12/05/23 18:27	VC1	EET PEN
Total/NA	Prep	3520C			234.2 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653064	12/05/23 21:07	S1B	EET PEN
Total/NA	Prep	3520C	RERA		247.4 mL	1 mL	653912	12/12/23 10:44	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	654224	12/13/23 20:06	KJA	EET PEN
Total/NA	Prep	8011			35.1 mL	35 mL	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 16:08	PG	EET PEN

Client Sample ID: MW5-ROX-112823

Lab Sample ID: 400-247408-6

Date Collected: 11/28/23 12:45

Matrix: Water

Date Received: 11/29/23 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652468	12/01/23 16:03	BPO	EET PEN
Total/NA	Prep	3520C			249.8 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653033	12/05/23 18:48	VC1	EET PEN
Total/NA	Prep	3520C			249.8 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653064	12/05/23 21:28	S1B	EET PEN
Total/NA	Prep	3520C	RERA		228.2 mL	1 mL	653912	12/12/23 10:44	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	654224	12/13/23 20:26	KJA	EET PEN
Total/NA	Prep	8011			35.7 mL	35 mL	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 16:50	PG	EET PEN

Client Sample ID: MW5-ROX-112823-DUP

Lab Sample ID: 400-247408-7

Date Collected: 11/28/23 12:45

Matrix: Water

Date Received: 11/29/23 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652468	12/01/23 16:28	BPO	EET PEN
Total/NA	Prep	3520C			246 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653033	12/05/23 19:09	VC1	EET PEN
Total/NA	Prep	3520C			246 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653064	12/05/23 21:48	S1B	EET PEN
Total/NA	Prep	8011			35.8 mL	35 mL	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 17:11	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-652288/1-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	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 13:00	PG	EET PEN

Lab Chronicle

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

Job ID: 400-247408-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-652297/1-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	652297	11/30/23 10:33	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 15:36	VC1	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	652297	11/30/23 10:33	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	652559	12/01/23 18:06	KJA	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-652468/3
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	8260D		1	5 mL	5 mL	652468	12/01/23 11:53	BPO	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-653912/1-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	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	654224	12/13/23 18:25	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652288/2-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	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 13:20	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652297/2-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	652297	11/30/23 10:33	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 16:44	VC1	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	652297	11/30/23 10:33	AR	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	652559	12/01/23 18:27	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652297/3-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	652297	11/30/23 10:33	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 15:59	VC1	EET PEN

Lab Chronicle

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

Job ID: 400-247408-1

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-652468/1001
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	8260D		1	5 mL	5 mL	652468	12/01/23 10:42	BPO	EET PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-653912/2-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	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	654224	12/13/23 18:45	KJA	EET PEN

Client Sample ID: Lab Control Sample Dup
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-652288/3-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	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 13:41	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-652297/4-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	652297	11/30/23 10:33	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 16:21	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-653912/3-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	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	654224	12/13/23 19:06	KJA	EET PEN

Client Sample ID: P54-ROX-112823
Date Collected: 11/28/23 10:15
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247408-4 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	8260D		1	5 mL	5 mL	652468	12/01/23 13:08	BPO	EET PEN
Total/NA	Prep	3520C			242.2 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653033	12/05/23 17:03	VC1	EET PEN
Total/NA	Prep	3520C			242.2 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	653064	12/05/23 19:45	S1B	EET PEN
Total/NA	Prep	8011			35.2 mL	35 mL	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 15:26	PG	EET PEN

Lab Chronicle

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

Job ID: 400-247408-1

Client Sample ID: P54-ROX-112823

Date Collected: 11/28/23 10:15
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247408-4 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	8260D		1	5 mL	5 mL	652468	12/01/23 13:33	BPO	EET PEN
Total/NA	Prep	3520C			244.4 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653033	12/05/23 17:24	VC1	EET PEN
Total/NA	Prep	3520C			244.4 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	653064	12/05/23 20:06	S1B	EET PEN
Total/NA	Prep	8011			35.4 mL	35 mL	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 15:47	PG	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 652468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247408-1	TB-ROX-112823-8260-A	Total/NA	Water	8260D	
400-247408-3	ROST3MW-ROX-112823	Total/NA	Water	8260D	
400-247408-4	P54-ROX-112823	Total/NA	Water	8260D	
400-247408-5	MW24-ROX-112823	Total/NA	Water	8260D	
400-247408-6	MW5-ROX-112823	Total/NA	Water	8260D	
400-247408-7	MW5-ROX-112823-DUP	Total/NA	Water	8260D	
MB 400-652468/3	Method Blank	Total/NA	Water	8260D	
LCS 400-652468/1001	Lab Control Sample	Total/NA	Water	8260D	
400-247408-4 MS	P54-ROX-112823	Total/NA	Water	8260D	
400-247408-4 MSD	P54-ROX-112823	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 652297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247408-3	ROST3MW-ROX-112823	Total/NA	Water	3520C	
400-247408-4	P54-ROX-112823	Total/NA	Water	3520C	
400-247408-5	MW24-ROX-112823	Total/NA	Water	3520C	
400-247408-6	MW5-ROX-112823	Total/NA	Water	3520C	
400-247408-7	MW5-ROX-112823-DUP	Total/NA	Water	3520C	
MB 400-652297/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-652297/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-652297/3-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-652297/4-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-247408-4 MS	P54-ROX-112823	Total/NA	Water	3520C	
400-247408-4 MSD	P54-ROX-112823	Total/NA	Water	3520C	

Analysis Batch: 652457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-652297/1-A	Method Blank	Total/NA	Water	8270E	652297
LCS 400-652297/2-A	Lab Control Sample	Total/NA	Water	8270E	652297
LCS 400-652297/3-A	Lab Control Sample	Total/NA	Water	8270E	652297
LCSD 400-652297/4-A	Lab Control Sample Dup	Total/NA	Water	8270E	652297

Analysis Batch: 652559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-652297/1-A	Method Blank	Total/NA	Water	8270E SIM	652297
LCS 400-652297/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	652297

Analysis Batch: 653033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247408-3	ROST3MW-ROX-112823	Total/NA	Water	8270E	652297
400-247408-4	P54-ROX-112823	Total/NA	Water	8270E	652297
400-247408-5	MW24-ROX-112823	Total/NA	Water	8270E	652297
400-247408-6	MW5-ROX-112823	Total/NA	Water	8270E	652297
400-247408-7	MW5-ROX-112823-DUP	Total/NA	Water	8270E	652297
400-247408-4 MS	P54-ROX-112823	Total/NA	Water	8270E	652297
400-247408-4 MSD	P54-ROX-112823	Total/NA	Water	8270E	652297

GC/MS Semi VOA

Analysis Batch: 653064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247408-3	ROST3MW-ROX-112823	Total/NA	Water	8270E SIM	652297
400-247408-4	P54-ROX-112823	Total/NA	Water	8270E SIM	652297
400-247408-5	MW24-ROX-112823	Total/NA	Water	8270E SIM	652297
400-247408-6	MW5-ROX-112823	Total/NA	Water	8270E SIM	652297
400-247408-7	MW5-ROX-112823-DUP	Total/NA	Water	8270E SIM	652297
400-247408-4 MS	P54-ROX-112823	Total/NA	Water	8270E SIM	652297
400-247408-4 MSD	P54-ROX-112823	Total/NA	Water	8270E SIM	652297

Prep Batch: 653912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247408-3 - RERA	ROST3MW-ROX-112823	Total/NA	Water	3520C	
400-247408-4 - RERA	P54-ROX-112823	Total/NA	Water	3520C	
400-247408-5 - RERA	MW24-ROX-112823	Total/NA	Water	3520C	
400-247408-6 - RERA	MW5-ROX-112823	Total/NA	Water	3520C	
MB 400-653912/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-653912/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-653912/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 654224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247408-3 - RERA	ROST3MW-ROX-112823	Total/NA	Water	8270E SIM	653912
400-247408-4 - RERA	P54-ROX-112823	Total/NA	Water	8270E SIM	653912
400-247408-5 - RERA	MW24-ROX-112823	Total/NA	Water	8270E SIM	653912
400-247408-6 - RERA	MW5-ROX-112823	Total/NA	Water	8270E SIM	653912
MB 400-653912/1-A	Method Blank	Total/NA	Water	8270E SIM	653912
LCS 400-653912/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	653912
LCSD 400-653912/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	653912

GC Semi VOA

Analysis Batch: 652266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247408-2	TB-ROX-112823-8011-A	Total/NA	Water	8011	652288
400-247408-3	ROST3MW-ROX-112823	Total/NA	Water	8011	652288
400-247408-4	P54-ROX-112823	Total/NA	Water	8011	652288
400-247408-5	MW24-ROX-112823	Total/NA	Water	8011	652288
400-247408-6	MW5-ROX-112823	Total/NA	Water	8011	652288
400-247408-7	MW5-ROX-112823-DUP	Total/NA	Water	8011	652288
MB 400-652288/1-A	Method Blank	Total/NA	Water	8011	652288
LCS 400-652288/2-A	Lab Control Sample	Total/NA	Water	8011	652288
LCSD 400-652288/3-A	Lab Control Sample Dup	Total/NA	Water	8011	652288
400-247408-4 MS	P54-ROX-112823	Total/NA	Water	8011	652288
400-247408-4 MSD	P54-ROX-112823	Total/NA	Water	8011	652288

Prep Batch: 652288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247408-2	TB-ROX-112823-8011-A	Total/NA	Water	8011	
400-247408-3	ROST3MW-ROX-112823	Total/NA	Water	8011	
400-247408-4	P54-ROX-112823	Total/NA	Water	8011	
400-247408-5	MW24-ROX-112823	Total/NA	Water	8011	
400-247408-6	MW5-ROX-112823	Total/NA	Water	8011	

GC Semi VOA (Continued)

Prep Batch: 652288 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247408-7	MW5-ROX-112823-DUP	Total/NA	Water	8011	
MB 400-652288/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-652288/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-652288/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-247408-4 MS	P54-ROX-112823	Total/NA	Water	8011	
400-247408-4 MSD	P54-ROX-112823	Total/NA	Water	8011	

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

Job ID: 400-247408-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-652468/3
Matrix: Water
Analysis Batch: 652468

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			12/01/23 11:53	1
Acrolein	ND		20	3.3	ug/L			12/01/23 11:53	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 11:53	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 11:53	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 11:53	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 11:53	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/01/23 11:53	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 11:53	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 11:53	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/01/23 11:53	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 11:53	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 11:53	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 11:53	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 11:53	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 11:53	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 11:53	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 11:53	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 11:53	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 11:53	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 11:53	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 11:53	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 11:53	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 11:53	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 11:53	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 11:53	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 11:53	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 11:53	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 11:53	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 11:53	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 11:53	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 11:53	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 11:53	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 11:53	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 11:53	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 11:53	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 11:53	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 11:53	1
Methylene bromide	ND		5.0	0.22	ug/L			12/01/23 11:53	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 11:53	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 11:53	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/01/23 11:53	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 11:53	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 11:53	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 11:53	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 11:53	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 11:53	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 11:53	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 11:53	1

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

Lab Sample ID: MB 400-652468/3
Matrix: Water
Analysis Batch: 652468

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			12/01/23 11:53	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 11:53	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 11:53	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/01/23 11:53	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 11:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 11:53	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/01/23 11:53	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 11:53	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 11:53	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 11:53	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 11:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 11:53	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 11:53	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 11:53	1
Trichloroethene	ND		1.0	0.15	ug/L			12/01/23 11:53	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 11:53	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 11:53	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 11:53	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 11:53	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 11:53	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 11:53	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 11:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*12/01/23 11:53*	*1*
Dibromofluoromethane	*89*		*75 - 126*		*12/01/23 11:53*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*12/01/23 11:53*	*1*

Lab Sample ID: LCS 400-652468/1001
Matrix: Water
Analysis Batch: 652468

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	439	*+	ug/L		219	43 - 160
Acrolein	500	420		ug/L		84	38 - 160
Acrylonitrile	500	499		ug/L		100	64 - 142
Benzene	50.0	54.5		ug/L		109	70 - 130
Bromobenzene	50.0	50.0		ug/L		100	70 - 132
Bromochloromethane	50.0	46.1		ug/L		92	70 - 130
Bromodichloromethane	50.0	68.7	*+	ug/L		137	67 - 133
Bromoform	50.0	47.6		ug/L		95	57 - 140
Bromomethane	50.0	49.3		ug/L		99	10 - 160
2-Butanone (MEK)	200	334	*+	ug/L		167	61 - 145
Carbon disulfide	50.0	42.4		ug/L		85	61 - 137
Carbon tetrachloride	50.0	62.3		ug/L		125	61 - 137
Chlorobenzene	50.0	55.3		ug/L		111	70 - 130
Chloroethane	50.0	39.1		ug/L		78	55 - 141
2-Chloroethyl vinyl ether	50.0	66.3		ug/L		133	10 - 160

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

Lab Sample ID: LCS 400-652468/1001
Matrix: Water
Analysis Batch: 652468

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	55.5		ug/L		111	69 - 130
1-Chlorohexane	50.0	54.4		ug/L		109	69 - 130
Chloromethane	50.0	46.2		ug/L		92	58 - 137
cis-1,2-Dichloroethene	50.0	54.5		ug/L		109	68 - 130
cis-1,3-Dichloropropene	50.0	63.3		ug/L		127	69 - 132
Dibromochloromethane	50.0	55.1		ug/L		110	67 - 135
1,2-Dichlorobenzene	50.0	52.0		ug/L		104	67 - 130
1,3-Dichlorobenzene	50.0	52.8		ug/L		106	70 - 130
1,4-Dichlorobenzene	50.0	52.9		ug/L		106	70 - 130
Dichlorodifluoromethane	50.0	48.5		ug/L		97	41 - 146
1,1-Dichloroethane	50.0	51.7		ug/L		103	70 - 130
1,2-Dichloroethane	50.0	62.6		ug/L		125	69 - 130
1,1-Dichloroethene	50.0	48.1		ug/L		96	63 - 134
1,2-Dichloropropane	50.0	67.6	*+	ug/L		135	70 - 130
1,3-Dichloropropane	50.0	54.8		ug/L		110	70 - 130
2,2-Dichloropropane	50.0	53.1		ug/L		106	52 - 135
1,1-Dichloropropene	50.0	55.5		ug/L		111	70 - 130
Ethylbenzene	50.0	57.4		ug/L		115	70 - 130
Ethyl methacrylate	50.0	54.6		ug/L		109	68 - 130
Hexachlorobutadiene	50.0	67.9		ug/L		136	53 - 140
2-Hexanone	200	274		ug/L		137	65 - 137
Isopropylbenzene	50.0	58.1		ug/L		116	70 - 130
Methylene bromide	50.0	68.1	*+	ug/L		136	70 - 130
Methylene Chloride	50.0	47.5		ug/L		95	66 - 135
4-Methyl-2-pentanone (MIBK)	200	271		ug/L		136	69 - 138
Methyl tert-butyl ether	50.0	51.2		ug/L		102	66 - 130
m-Xylene & p-Xylene	50.0	58.3		ug/L		117	70 - 130
Naphthalene	50.0	53.5		ug/L		107	47 - 149
n-Butylbenzene	50.0	56.9		ug/L		114	67 - 130
N-Propylbenzene	50.0	54.1		ug/L		108	70 - 130
o-Chlorotoluene	50.0	54.9		ug/L		110	70 - 130
o-Xylene	50.0	55.7		ug/L		111	70 - 130
p-Chlorotoluene	50.0	56.9		ug/L		114	70 - 130
p-Isopropyltoluene	50.0	55.2		ug/L		110	65 - 130
sec-Butylbenzene	50.0	55.1		ug/L		110	66 - 130
Styrene	50.0	53.1		ug/L		106	70 - 130
tert-Butylbenzene	50.0	57.9		ug/L		116	64 - 139
1,1,1,2-Tetrachloroethane	50.0	54.1		ug/L		108	67 - 131
1,1,2,2-Tetrachloroethane	50.0	35.3		ug/L		71	70 - 131
Tetrachloroethene	50.0	79.6	*+	ug/L		159	65 - 130
Toluene	50.0	55.1		ug/L		110	70 - 130
trans-1,2-Dichloroethene	50.0	47.7		ug/L		95	70 - 130
trans-1,3-Dichloropropene	50.0	53.5		ug/L		107	63 - 130
1,2,3-Trichlorobenzene	50.0	54.4		ug/L		109	60 - 138
1,2,4-Trichlorobenzene	50.0	54.5		ug/L		109	60 - 140
1,1,1-Trichloroethane	50.0	59.4		ug/L		119	68 - 130
1,1,2-Trichloroethane	50.0	54.8		ug/L		110	70 - 130
Trichloroethene	50.0	69.2	*+	ug/L		138	70 - 130
Trichlorofluoromethane	50.0	43.4		ug/L		87	65 - 138

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

Lab Sample ID: LCS 400-652468/1001
Matrix: Water
Analysis Batch: 652468

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	51.7		ug/L		103	70 - 130
1,2,4-Trimethylbenzene	50.0	55.1		ug/L		110	70 - 130
1,3,5-Trimethylbenzene	50.0	55.4		ug/L		111	69 - 130
Vinyl acetate	100	94.7		ug/L		95	26 - 160
Vinyl chloride	50.0	44.3		ug/L		89	59 - 136
Xylenes, Total	100	114		ug/L		114	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*72 - 130*
Dibromofluoromethane	*100*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

Lab Sample ID: 400-247408-4 MS
Matrix: Water
Analysis Batch: 652468

Client Sample ID: P54-ROX-112823
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND	*+	200	172		ug/L		86	43 - 150
Acrolein	ND		500	393		ug/L		79	38 - 150
Acrylonitrile	ND		500	438		ug/L		88	62 - 149
Benzene	ND		50.0	57.5		ug/L		115	56 - 142
Bromobenzene	ND		50.0	50.7		ug/L		101	59 - 136
Bromochloromethane	ND		50.0	42.4		ug/L		85	64 - 140
Bromodichloromethane	ND	*+	50.0	64.5		ug/L		129	59 - 143
Bromoform	ND		50.0	49.9		ug/L		100	50 - 140
Bromomethane	ND		50.0	48.5		ug/L		97	10 - 150
2-Butanone (MEK)	ND	*+	200	184		ug/L		92	55 - 150
Carbon disulfide	ND		50.0	36.1		ug/L		72	48 - 150
Carbon tetrachloride	ND		50.0	61.2		ug/L		122	55 - 145
Chlorobenzene	ND		50.0	55.6		ug/L		111	64 - 130
Chloroethane	ND		50.0	35.9		ug/L		72	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	51.5		ug/L		103	60 - 141
1-Chlorohexane	ND		50.0	52.3		ug/L		105	56 - 136
Chloromethane	ND		50.0	41.2		ug/L		82	49 - 148
cis-1,2-Dichloroethene	ND		50.0	49.1		ug/L		98	59 - 143
cis-1,3-Dichloropropene	ND		50.0	56.3		ug/L		113	57 - 140
Dibromochloromethane	ND		50.0	57.9		ug/L		116	56 - 143
1,2-Dichlorobenzene	ND		50.0	51.2		ug/L		102	52 - 137
1,3-Dichlorobenzene	ND		50.0	51.4		ug/L		103	54 - 135
1,4-Dichlorobenzene	ND		50.0	51.4		ug/L		103	53 - 135
Dichlorodifluoromethane	ND		50.0	44.3		ug/L		89	16 - 150
1,1-Dichloroethane	ND		50.0	47.0		ug/L		94	61 - 144
1,2-Dichloroethane	ND		50.0	60.0		ug/L		120	60 - 141
1,1-Dichloroethene	ND		50.0	42.2		ug/L		84	54 - 147
1,2-Dichloropropane	ND	*+	50.0	63.2		ug/L		126	66 - 137
1,3-Dichloropropane	ND		50.0	57.4		ug/L		115	66 - 133
2,2-Dichloropropane	ND		50.0	47.8		ug/L		96	42 - 144

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

Lab Sample ID: 400-247408-4 MS
Matrix: Water
Analysis Batch: 652468

Client Sample ID: P54-ROX-112823
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	55.4		ug/L		111	65 - 136
Ethylbenzene	ND		50.0	56.1		ug/L		112	58 - 131
Ethyl methacrylate	ND		50.0	54.7		ug/L		109	64 - 130
Hexachlorobutadiene	ND		50.0	58.5		ug/L		117	31 - 149
2-Hexanone	ND		200	200		ug/L		100	65 - 140
Isopropylbenzene	ND		50.0	55.2		ug/L		110	56 - 133
Methylene bromide	ND	*+	50.0	63.5		ug/L		127	63 - 138
Methylene Chloride	ND		50.0	42.2		ug/L		84	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	225		ug/L		112	63 - 146
Methyl tert-butyl ether	ND		50.0	45.7		ug/L		91	59 - 137
m-Xylene & p-Xylene	ND		50.0	57.2		ug/L		114	57 - 130
Naphthalene	ND		50.0	47.6		ug/L		95	25 - 150
n-Butylbenzene	ND		50.0	50.4		ug/L		101	41 - 142
N-Propylbenzene	ND		50.0	51.8		ug/L		104	51 - 138
o-Chlorotoluene	ND		50.0	52.6		ug/L		105	53 - 134
o-Xylene	ND		50.0	55.0		ug/L		110	61 - 130
p-Chlorotoluene	ND		50.0	55.1		ug/L		110	54 - 133
p-Isopropyltoluene	ND		50.0	51.4		ug/L		103	48 - 139
sec-Butylbenzene	ND		50.0	51.6		ug/L		103	50 - 138
Styrene	ND		50.0	52.6		ug/L		105	58 - 131
tert-Butylbenzene	ND		50.0	55.3		ug/L		111	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	56.2		ug/L		112	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	40.0		ug/L		80	66 - 135
Tetrachloroethene	ND	*+ F1	50.0	73.4	F1	ug/L		147	52 - 133
Toluene	ND		50.0	56.0		ug/L		112	65 - 130
trans-1,2-Dichloroethene	ND		50.0	42.9		ug/L		86	61 - 143
trans-1,3-Dichloropropene	ND		50.0	55.4		ug/L		111	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	48.5		ug/L		97	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	47.7		ug/L		95	39 - 148
1,1,1-Trichloroethane	ND		50.0	54.1		ug/L		108	57 - 142
1,1,2-Trichloroethane	ND		50.0	57.7		ug/L		115	66 - 131
Trichloroethene	ND	*+ F1	50.0	68.7	F1	ug/L		137	64 - 136
Trichlorofluoromethane	ND		50.0	38.5		ug/L		77	54 - 150
1,2,3-Trichloropropane	ND		50.0	54.6		ug/L		109	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	53.0		ug/L		106	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	53.8		ug/L		108	52 - 135
Vinyl acetate	ND		100	91.3		ug/L		91	26 - 150
Vinyl chloride	ND		50.0	40.0		ug/L		80	46 - 150
Xylenes, Total	ND		100	112		ug/L		112	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*72 - 130*
Dibromofluoromethane	*84*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

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

Lab Sample ID: 400-247408-4 MSD
Matrix: Water
Analysis Batch: 652468

Client Sample ID: P54-ROX-112823
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	160		ug/L		80	43 - 150	8	30
Acrolein	ND		500	368		ug/L		74	38 - 150	7	31
Acrylonitrile	ND		500	410		ug/L		82	62 - 149	7	30
Benzene	ND		50.0	54.4		ug/L		109	56 - 142	6	30
Bromobenzene	ND		50.0	49.7		ug/L		99	59 - 136	2	30
Bromochloromethane	ND		50.0	40.5		ug/L		81	64 - 140	5	30
Bromodichloromethane	ND	*+	50.0	61.1		ug/L		122	59 - 143	5	30
Bromoform	ND		50.0	47.3		ug/L		95	50 - 140	5	30
Bromomethane	ND		50.0	46.1		ug/L		92	10 - 150	5	50
2-Butanone (MEK)	ND	*+	200	172		ug/L		86	55 - 150	7	30
Carbon disulfide	ND		50.0	35.7		ug/L		71	48 - 150	1	30
Carbon tetrachloride	ND		50.0	58.5		ug/L		117	55 - 145	5	30
Chlorobenzene	ND		50.0	54.3		ug/L		109	64 - 130	2	30
Chloroethane	ND		50.0	36.0		ug/L		72	50 - 150	0	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	49.8		ug/L		100	60 - 141	3	30
1-Chlorohexane	ND		50.0	52.6		ug/L		105	56 - 136	0	30
Chloromethane	ND		50.0	42.3		ug/L		85	49 - 148	3	31
cis-1,2-Dichloroethene	ND		50.0	47.4		ug/L		95	59 - 143	3	30
cis-1,3-Dichloropropene	ND		50.0	54.2		ug/L		108	57 - 140	4	30
Dibromochloromethane	ND		50.0	55.0		ug/L		110	56 - 143	5	30
1,2-Dichlorobenzene	ND		50.0	49.9		ug/L		100	52 - 137	3	30
1,3-Dichlorobenzene	ND		50.0	50.6		ug/L		101	54 - 135	2	30
1,4-Dichlorobenzene	ND		50.0	50.5		ug/L		101	53 - 135	2	30
Dichlorodifluoromethane	ND		50.0	43.6		ug/L		87	16 - 150	2	31
1,1-Dichloroethane	ND		50.0	45.3		ug/L		91	61 - 144	4	30
1,2-Dichloroethane	ND		50.0	56.4		ug/L		113	60 - 141	6	30
1,1-Dichloroethene	ND		50.0	41.6		ug/L		83	54 - 147	1	30
1,2-Dichloropropane	ND	*+	50.0	59.6		ug/L		119	66 - 137	6	30
1,3-Dichloropropane	ND		50.0	53.9		ug/L		108	66 - 133	6	30
2,2-Dichloropropane	ND		50.0	46.2		ug/L		92	42 - 144	3	31
1,1-Dichloropropene	ND		50.0	53.6		ug/L		107	65 - 136	3	30
Ethylbenzene	ND		50.0	55.4		ug/L		111	58 - 131	1	30
Ethyl methacrylate	ND		50.0	52.2		ug/L		104	64 - 130	5	30
Hexachlorobutadiene	ND		50.0	59.9		ug/L		120	31 - 149	2	36
2-Hexanone	ND		200	185		ug/L		92	65 - 140	8	30
Isopropylbenzene	ND		50.0	55.3		ug/L		111	56 - 133	0	30
Methylene bromide	ND	*+	50.0	59.6		ug/L		119	63 - 138	6	30
Methylene Chloride	ND		50.0	42.2		ug/L		84	60 - 146	0	32
4-Methyl-2-pentanone (MIBK)	ND		200	208		ug/L		104	63 - 146	8	30
Methyl tert-butyl ether	ND		50.0	43.7		ug/L		87	59 - 137	4	30
m-Xylene & p-Xylene	ND		50.0	56.8		ug/L		114	57 - 130	1	30
Naphthalene	ND		50.0	48.8		ug/L		98	25 - 150	2	30
n-Butylbenzene	ND		50.0	53.9		ug/L		108	41 - 142	7	31
N-Propylbenzene	ND		50.0	52.3		ug/L		105	51 - 138	1	30
o-Chlorotoluene	ND		50.0	54.9		ug/L		110	53 - 134	4	30
o-Xylene	ND		50.0	54.2		ug/L		108	61 - 130	1	30
p-Chlorotoluene	ND		50.0	55.3		ug/L		111	54 - 133	0	30

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

Lab Sample ID: 400-247408-4 MSD
Matrix: Water
Analysis Batch: 652468

Client Sample ID: P54-ROX-112823
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	52.3		ug/L		105	48 - 139	2	30
sec-Butylbenzene	ND		50.0	52.6		ug/L		105	50 - 138	2	30
Styrene	ND		50.0	51.7		ug/L		103	58 - 131	2	30
tert-Butylbenzene	ND		50.0	56.0		ug/L		112	54 - 146	1	30
1,1,1,2-Tetrachloroethane	ND		50.0	54.2		ug/L		108	59 - 137	4	30
1,1,2,2-Tetrachloroethane	ND		50.0	38.0		ug/L		76	66 - 135	5	30
Tetrachloroethene	ND	*+ F1	50.0	70.7	F1	ug/L		141	52 - 133	4	30
Toluene	ND		50.0	54.1		ug/L		108	65 - 130	3	30
trans-1,2-Dichloroethene	ND		50.0	40.8		ug/L		82	61 - 143	5	30
trans-1,3-Dichloropropene	ND		50.0	53.1		ug/L		106	53 - 133	4	30
1,2,3-Trichlorobenzene	ND		50.0	49.4		ug/L		99	43 - 145	2	30
1,2,4-Trichlorobenzene	ND		50.0	48.8		ug/L		98	39 - 148	2	30
1,1,1-Trichloroethane	ND		50.0	52.0		ug/L		104	57 - 142	4	30
1,1,2-Trichloroethane	ND		50.0	54.0		ug/L		108	66 - 131	7	30
Trichloroethene	ND	*+ F1	50.0	64.9		ug/L		130	64 - 136	6	30
Trichlorofluoromethane	ND		50.0	38.5		ug/L		77	54 - 150	0	30
1,2,3-Trichloropropane	ND		50.0	50.2		ug/L		100	65 - 133	8	30
1,2,4-Trimethylbenzene	ND		50.0	53.0		ug/L		106	50 - 139	0	30
1,3,5-Trimethylbenzene	ND		50.0	53.6		ug/L		107	52 - 135	0	30
Vinyl acetate	ND		100	86.9		ug/L		87	26 - 150	5	33
Vinyl chloride	ND		50.0	39.9		ug/L		80	46 - 150	0	30
Xylenes, Total	ND		100	111		ug/L		111	59 - 130	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*72 - 130*
Dibromofluoromethane	*86*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-652297/1-A
Matrix: Water
Analysis Batch: 652457

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		11/30/23 10:33	12/01/23 15:36	1
Benzenethiol	ND		10	1.7	ug/L		11/30/23 10:33	12/01/23 15:36	1
Benzoic acid	ND		30	7.3	ug/L		11/30/23 10:33	12/01/23 15:36	1
Benzyl alcohol	ND		10	2.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		11/30/23 10:33	12/01/23 15:36	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		11/30/23 10:33	12/01/23 15:36	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		11/30/23 10:33	12/01/23 15:36	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		11/30/23 10:33	12/01/23 15:36	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		11/30/23 10:33	12/01/23 15:36	1
4-Chloroaniline	ND		10	3.4	ug/L		11/30/23 10:33	12/01/23 15:36	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		11/30/23 10:33	12/01/23 15:36	1
2-Chloronaphthalene	ND		10	0.14	ug/L		11/30/23 10:33	12/01/23 15:36	1
2-Chlorophenol	ND		10	2.2	ug/L		11/30/23 10:33	12/01/23 15:36	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-652297/1-A
Matrix: Water
Analysis Batch: 652457

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
Dibenzofuran	ND		10	0.17	ug/L		11/30/23 10:33	12/01/23 15:36	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
Diethyl phthalate	ND		10	0.24	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		11/30/23 10:33	12/01/23 15:36	1
Dimethyl phthalate	ND		10	0.17	ug/L		11/30/23 10:33	12/01/23 15:36	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		11/30/23 10:33	12/01/23 15:36	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 10:33	12/01/23 15:36	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		11/30/23 10:33	12/01/23 15:36	1
1,4-Dioxane	ND		10	1.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
Hexachlorobenzene	ND		10	0.17	ug/L		11/30/23 10:33	12/01/23 15:36	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		11/30/23 10:33	12/01/23 15:36	1
Hexachloroethane	ND		10	4.2	ug/L		11/30/23 10:33	12/01/23 15:36	1
Indene	ND		10	1.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
Isophorone	ND		10	0.14	ug/L		11/30/23 10:33	12/01/23 15:36	1
2-Methylphenol	ND		10	1.8	ug/L		11/30/23 10:33	12/01/23 15:36	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		11/30/23 10:33	12/01/23 15:36	1
2-Nitroaniline	ND		10	2.2	ug/L		11/30/23 10:33	12/01/23 15:36	1
3-Nitroaniline	ND		10	1.8	ug/L		11/30/23 10:33	12/01/23 15:36	1
4-Nitroaniline	ND		10	1.5	ug/L		11/30/23 10:33	12/01/23 15:36	1
Nitrobenzene	ND		10	0.13	ug/L		11/30/23 10:33	12/01/23 15:36	1
2-Nitrophenol	ND		10	5.2	ug/L		11/30/23 10:33	12/01/23 15:36	1
4-Nitrophenol	ND		10	2.1	ug/L		11/30/23 10:33	12/01/23 15:36	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		11/30/23 10:33	12/01/23 15:36	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		11/30/23 10:33	12/01/23 15:36	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		11/30/23 10:33	12/01/23 15:36	1
Pentachlorophenol	ND		20	1.4	ug/L		11/30/23 10:33	12/01/23 15:36	1
Phenol	ND		10	2.6	ug/L		11/30/23 10:33	12/01/23 15:36	1
Pyridine	ND		10	3.2	ug/L		11/30/23 10:33	12/01/23 15:36	1
Quinoline	ND		10	4.5	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		11/30/23 10:33	12/01/23 15:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*46 - 124*	*11/30/23 10:33*	*12/01/23 15:36*	*1*
2-Fluorophenol	*20*		*13 - 113*	*11/30/23 10:33*	*12/01/23 15:36*	*1*
Nitrobenzene-d5	*79*		*36 - 126*	*11/30/23 10:33*	*12/01/23 15:36*	*1*
Phenol-d5	*60*		*17 - 127*	*11/30/23 10:33*	*12/01/23 15:36*	*1*
Terphenyl-d14	*92*		*44 - 149*	*11/30/23 10:33*	*12/01/23 15:36*	*1*
2,4,6-Tribromophenol	*72*		*26 - 150*	*11/30/23 10:33*	*12/01/23 15:36*	*1*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-652297/2-A
Matrix: Water
Analysis Batch: 652457

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	61.1		ug/L		51	21 - 120
Benzoic acid	120	51.3		ug/L		43	10 - 144
Benzyl alcohol	120	85.5		ug/L		71	28 - 120
Bis(2-chloroethoxy)methane	120	78.9		ug/L		66	47 - 120
Bis(2-chloroethyl)ether	120	93.7		ug/L		78	44 - 120
bis (2-chloroisopropyl) ether	120	74.2		ug/L		62	33 - 121
Bis(2-ethylhexyl) phthalate	120	108		ug/L		90	52 - 147
4-Bromophenyl phenyl ether	120	94.9		ug/L		79	54 - 122
Butyl benzyl phthalate	120	97.5		ug/L		81	54 - 133
4-Chloroaniline	120	66.1		ug/L		55	26 - 120
4-Chloro-3-methylphenol	120	90.5		ug/L		75	48 - 131
2-Chloronaphthalene	120	82.6		ug/L		69	52 - 121
2-Chlorophenol	120	72.6		ug/L		60	40 - 120
4-Chlorophenyl phenyl ether	120	89.3		ug/L		74	56 - 125
Dibenz[a,h]acridine	120	134		ug/L		112	31 - 150
Dibenzofuran	120	83.3		ug/L		69	56 - 122
3,3'-Dichlorobenzidine	160	178		ug/L		111	36 - 132
2,4-Dichlorophenol	120	83.7		ug/L		70	49 - 120
Diethyl phthalate	120	95.6		ug/L		80	50 - 137
2,4-Dimethylphenol	120	83.5		ug/L		70	48 - 120
Dimethyl phthalate	120	87.2		ug/L		73	57 - 124
Di-n-butyl phthalate	120	118		ug/L		98	58 - 126
4,6-Dinitro-ortho-cresol	240	227		ug/L		95	23 - 148
2,4-Dinitrophenol	240	169		ug/L		71	10 - 150
2,4-Dinitrotoluene	120	90.5		ug/L		75	54 - 142
2,6-Dinitrotoluene	120	89.9		ug/L		75	55 - 130
Di-n-octyl phthalate	120	110		ug/L		91	57 - 138
1,4-Dioxane	120	62.2		ug/L		52	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	86.9		ug/L		72	45 - 124
Hexachlorobenzene	120	105		ug/L		87	52 - 129
Hexachlorocyclopentadiene	120	8.76	J *-	ug/L		7	10 - 134
Hexachloroethane	120	84.7		ug/L		71	20 - 120
Indene	120	96.1		ug/L		80	49 - 120
Isophorone	120	83.7		ug/L		70	48 - 120
2-Methylphenol	120	88.8		ug/L		74	46 - 124
3 & 4 Methylphenol	120	82.0		ug/L		68	45 - 120
2-Nitroaniline	120	88.4		ug/L		74	51 - 145
3-Nitroaniline	120	79.8		ug/L		66	37 - 127
4-Nitroaniline	120	101		ug/L		84	36 - 137
Nitrobenzene	120	81.4		ug/L		68	45 - 120
2-Nitrophenol	120	86.4		ug/L		72	40 - 124
4-Nitrophenol	240	150		ug/L		63	23 - 146
N-Nitrosodimethylamine	120	75.9		ug/L		63	29 - 137
N-Nitrosodi-n-propylamine	120	77.4		ug/L		65	45 - 120
N-Nitrosodiphenylamine	119	88.1		ug/L		74	54 - 120
Pentachlorophenol	240	178		ug/L		74	31 - 130
Phenol	120	83.1		ug/L		69	11 - 120
Pyridine	240	129		ug/L		54	16 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-652297/2-A
Matrix: Water
Analysis Batch: 652457

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Quinoline	120	85.1		ug/L		71	49 - 130
2,4,5-Trichlorophenol	120	81.5		ug/L		68	51 - 136
2,4,6-Trichlorophenol	120	82.8		ug/L		69	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*64*		*46 - 124*
2-Fluorophenol	*35*		*13 - 113*
Nitrobenzene-d5	*76*		*36 - 126*
Phenol-d5	*63*		*17 - 127*
Terphenyl-d14	*80*		*44 - 149*
2,4,6-Tribromophenol	*77*		*26 - 150*

Lab Sample ID: LCS 400-652297/3-A
Matrix: Water
Analysis Batch: 652457

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	5.96	J *-	ug/L		5	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*46 - 124*
2-Fluorophenol	*26*		*13 - 113*
Nitrobenzene-d5	*72*		*36 - 126*
Phenol-d5	*58*		*17 - 127*
Terphenyl-d14	*89*		*44 - 149*
2,4,6-Tribromophenol	*68*		*26 - 150*

Lab Sample ID: LCSD 400-652297/4-A
Matrix: Water
Analysis Batch: 652457

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol	120	5.87	J *-	ug/L		5	10 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*71*		*46 - 124*
2-Fluorophenol	*41*		*13 - 113*
Nitrobenzene-d5	*70*		*36 - 126*
Phenol-d5	*66*		*17 - 127*
Terphenyl-d14	*88*		*44 - 149*
2,4,6-Tribromophenol	*66*		*26 - 150*

Lab Sample ID: 400-247408-4 MS
Matrix: Water
Analysis Batch: 653033

Client Sample ID: P54-ROX-112823
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	ND		124	86.2		ug/L		70	10 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-247408-4 MS
Matrix: Water
Analysis Batch: 653033

Client Sample ID: P54-ROX-112823
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzoic acid	ND		124	55.6		ug/L		45	10 - 149
Benzyl alcohol	ND		124	105		ug/L		85	33 - 120
Bis(2-chloroethoxy)methane	ND		124	91.5		ug/L		74	26 - 120
Bis(2-chloroethyl)ether	ND		124	98.8		ug/L		80	42 - 120
bis (2-chloroisopropyl) ether	ND		124	92.9		ug/L		75	28 - 120
Bis(2-ethylhexyl) phthalate	ND		124	108		ug/L		87	39 - 120
4-Bromophenyl phenyl ether	ND		124	109		ug/L		88	40 - 120
Butyl benzyl phthalate	ND		124	110		ug/L		89	45 - 120
4-Chloroaniline	ND		124	84.3		ug/L		68	10 - 120
4-Chloro-3-methylphenol	ND		124	102		ug/L		82	34 - 120
2-Chloronaphthalene	ND		124	106		ug/L		85	39 - 120
2-Chlorophenol	ND		124	98.2		ug/L		79	25 - 120
4-Chlorophenyl phenyl ether	ND		124	110		ug/L		89	44 - 120
Dibenz[a,h]acridine	1.9	J	124	114		ug/L		90	50 - 150
Dibenzofuran	ND		124	109		ug/L		88	25 - 130
3,3'-Dichlorobenzidine	ND		165	129		ug/L		78	10 - 120
2,4-Dichlorophenol	ND		124	98.7		ug/L		80	31 - 120
Diethyl phthalate	0.32	J	124	108		ug/L		87	46 - 120
2,4-Dimethylphenol	ND		124	89.9		ug/L		73	21 - 120
Dimethyl phthalate	ND		124	103		ug/L		83	38 - 120
Di-n-butyl phthalate	ND		124	119		ug/L		96	49 - 120
4,6-Dinitro-ortho-cresol	ND		248	188		ug/L		76	25 - 120
2,4-Dinitrophenol	ND		248	169		ug/L		68	15 - 140
2,4-Dinitrotoluene	ND		124	109		ug/L		88	53 - 120
2,6-Dinitrotoluene	ND		124	104		ug/L		84	43 - 120
Di-n-octyl phthalate	0.85	J	124	113		ug/L		91	35 - 121
1,4-Dioxane	ND		124	75.9		ug/L		61	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		124	101		ug/L		81	50 - 150
Hexachlorobenzene	ND		124	124		ug/L		100	38 - 122
Hexachlorocyclopentadiene	ND	*-	124	67.9		ug/L		55	10 - 120
Hexachloroethane	ND		124	94.6		ug/L		76	10 - 150
Indene	ND		124	110		ug/L		89	50 - 150
Isophorone	ND		124	89.6		ug/L		72	42 - 120
2-Methylphenol	ND		124	100		ug/L		81	28 - 120
3 & 4 Methylphenol	ND		124	98.8		ug/L		80	31 - 120
2-Nitroaniline	ND		124	104		ug/L		84	45 - 120
3-Nitroaniline	ND		124	92.0		ug/L		74	10 - 130
4-Nitroaniline	ND		124	107		ug/L		86	10 - 132
Nitrobenzene	ND		124	92.2		ug/L		74	39 - 120
2-Nitrophenol	ND		124	94.9		ug/L		77	33 - 120
4-Nitrophenol	ND		248	229		ug/L		92	10 - 120
N-Nitrosodimethylamine	ND		124	98.5		ug/L		80	10 - 139
N-Nitrosodi-n-propylamine	ND		124	96.3		ug/L		78	37 - 124
N-Nitrosodiphenylamine	ND		123	97.1		ug/L		79	10 - 150
Pentachlorophenol	ND		248	244		ug/L		99	29 - 130
Phenol	ND		124	98.4		ug/L		79	10 - 150
Pyridine	ND		248	144		ug/L		58	10 - 120
Quinoline	ND		124	109		ug/L		88	51 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-247408-4 MS
Matrix: Water
Analysis Batch: 653033

Client Sample ID: P54-ROX-112823
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	ND		124	111		ug/L		89	34 - 120
2,4,6-Trichlorophenol	ND		124	109		ug/L		88	33 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*87*		*46 - 124*
2-Fluorophenol	*64*		*13 - 113*
Nitrobenzene-d5	*81*		*36 - 126*
Phenol-d5	*80*		*17 - 127*
Terphenyl-d14	*90*		*44 - 149*
2,4,6-Tribromophenol	*78*		*26 - 150*

Lab Sample ID: 400-247408-4 MSD
Matrix: Water
Analysis Batch: 653033

Client Sample ID: P54-ROX-112823
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	ND		123	83.6		ug/L		68	10 - 120	3	63
Benzoic acid	ND		123	52.7		ug/L		43	10 - 149	5	49
Benzyl alcohol	ND		123	103		ug/L		84	33 - 120	2	37
Bis(2-chloroethoxy)methane	ND		123	88.4		ug/L		72	26 - 120	3	70
Bis(2-chloroethyl)ether	ND		123	92.9		ug/L		76	42 - 120	6	42
bis (2-chloroisopropyl) ether	ND		123	85.4		ug/L		70	28 - 120	8	41
Bis(2-ethylhexyl) phthalate	ND		123	101		ug/L		82	39 - 120	7	35
4-Bromophenyl phenyl ether	ND		123	105		ug/L		85	40 - 120	4	30
Butyl benzyl phthalate	ND		123	104		ug/L		85	45 - 120	5	32
4-Chloroaniline	ND		123	80.0		ug/L		65	10 - 120	5	94
4-Chloro-3-methylphenol	ND		123	98.2		ug/L		80	34 - 120	4	40
2-Chloronaphthalene	ND		123	103		ug/L		84	39 - 120	3	29
2-Chlorophenol	ND		123	99.5		ug/L		81	25 - 120	1	42
4-Chlorophenyl phenyl ether	ND		123	107		ug/L		87	44 - 120	3	27
Dibenz[a,h]acridine	1.9	J	122	116		ug/L		93	50 - 150	2	40
Dibenzofuran	ND		123	105		ug/L		86	25 - 130	4	29
3,3'-Dichlorobenzidine	ND		164	120		ug/L		73	10 - 120	7	58
2,4-Dichlorophenol	ND		123	97.6		ug/L		80	31 - 120	1	43
Diethyl phthalate	0.32	J	123	104		ug/L		84	46 - 120	4	40
2,4-Dimethylphenol	ND		123	86.6		ug/L		71	21 - 120	4	47
Dimethyl phthalate	ND		123	99.9		ug/L		81	38 - 120	3	36
Di-n-butyl phthalate	ND		123	112		ug/L		92	49 - 120	6	32
4,6-Dinitro-ortho-cresol	ND		245	183		ug/L		75	25 - 120	3	42
2,4-Dinitrophenol	ND		245	167		ug/L		68	15 - 140	1	36
2,4-Dinitrotoluene	ND		123	106		ug/L		87	53 - 120	3	28
2,6-Dinitrotoluene	ND		123	101		ug/L		82	43 - 120	3	28
Di-n-octyl phthalate	0.85	J	123	106		ug/L		85	35 - 121	7	35
1,4-Dioxane	ND		123	73.0		ug/L		59	50 - 150	4	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		123	94.5		ug/L		77	50 - 150	6	40
Hexachlorobenzene	ND		123	118		ug/L		97	38 - 122	5	33
Hexachlorocyclopentadiene	ND	*-	123	76.7		ug/L		62	10 - 120	12	50
Hexachloroethane	ND		123	92.5		ug/L		75	10 - 150	2	41

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-247408-4 MSD
Matrix: Water
Analysis Batch: 653033

Client Sample ID: P54-ROX-112823
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Indene	ND		123	108		ug/L		88	50 - 150	2	40
Isophorone	ND		123	85.9		ug/L		70	42 - 120	4	33
2-Methylphenol	ND		123	95.3		ug/L		78	28 - 120	5	47
3 & 4 Methylphenol	ND		123	94.6		ug/L		77	31 - 120	4	47
2-Nitroaniline	ND		123	101		ug/L		83	45 - 120	2	33
3-Nitroaniline	ND		123	86.9		ug/L		71	10 - 130	6	39
4-Nitroaniline	ND		123	103		ug/L		84	10 - 132	3	50
Nitrobenzene	ND		123	89.5		ug/L		73	39 - 120	3	35
2-Nitrophenol	ND		123	97.5		ug/L		79	33 - 120	3	43
4-Nitrophenol	ND		245	228		ug/L		93	10 - 120	0	82
N-Nitrosodimethylamine	ND		123	96.7		ug/L		79	10 - 139	2	62
N-Nitrosodi-n-propylamine	ND		123	93.1		ug/L		76	37 - 124	3	36
N-Nitrosodiphenylamine	ND		122	87.6		ug/L		72	10 - 150	10	34
Pentachlorophenol	ND		245	230		ug/L		94	29 - 130	6	42
Phenol	ND		123	97.5		ug/L		79	10 - 150	1	52
Pyridine	ND		245	144		ug/L		59	10 - 120	0	55
Quinoline	ND		122	97.9		ug/L		80	51 - 120	11	40
2,4,5-Trichlorophenol	ND		123	109		ug/L		89	34 - 120	1	42
2,4,6-Trichlorophenol	ND		123	106		ug/L		87	33 - 120	3	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*86*		*46 - 124*
2-Fluorophenol	*72*		*13 - 113*
Nitrobenzene-d5	*80*		*36 - 126*
Phenol-d5	*80*		*17 - 127*
Terphenyl-d14	*87*		*44 - 149*
2,4,6-Tribromophenol	*77*		*26 - 150*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-652297/1-A
Matrix: Water
Analysis Batch: 652559

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		11/30/23 10:33	12/01/23 18:06	1
Acenaphthylene	ND		0.20	0.044	ug/L		11/30/23 10:33	12/01/23 18:06	1
Anthracene	ND		0.20	0.047	ug/L		11/30/23 10:33	12/01/23 18:06	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		11/30/23 10:33	12/01/23 18:06	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		11/30/23 10:33	12/01/23 18:06	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		11/30/23 10:33	12/01/23 18:06	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		11/30/23 10:33	12/01/23 18:06	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		11/30/23 10:33	12/01/23 18:06	1
Chrysene	ND		0.20	0.033	ug/L		11/30/23 10:33	12/01/23 18:06	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		11/30/23 10:33	12/01/23 18:06	1
Fluoranthene	ND		0.20	0.034	ug/L		11/30/23 10:33	12/01/23 18:06	1
Fluorene	ND		0.20	0.089	ug/L		11/30/23 10:33	12/01/23 18:06	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		11/30/23 10:33	12/01/23 18:06	1
Phenanthrene	ND		0.20	0.090	ug/L		11/30/23 10:33	12/01/23 18:06	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 400-652297/1-A
Matrix: Water
Analysis Batch: 652559

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		0.20	0.039	ug/L		11/30/23 10:33	12/01/23 18:06	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		11/30/23 10:33	12/01/23 18:06	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		11/30/23 10:33	12/01/23 18:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*117*		*18 - 147*	*11/30/23 10:33*	*12/01/23 18:06*	*1*
2-Fluorobiphenyl	*79*		*15 - 128*	*11/30/23 10:33*	*12/01/23 18:06*	*1*
Nitrobenzene-d5	*71*		*10 - 144*	*11/30/23 10:33*	*12/01/23 18:06*	*1*

Lab Sample ID: LCS 400-652297/2-A
Matrix: Water
Analysis Batch: 652559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	95.9		ug/L		80	40 - 140
Acenaphthylene	120	98.0		ug/L		82	40 - 140
Anthracene	120	92.8		ug/L		77	40 - 140
Benzo[a]anthracene	120	111		ug/L		92	40 - 140
Benzo[a]pyrene	120	88.4		ug/L		74	40 - 140
Benzo[b]fluoranthene	120	103		ug/L		85	40 - 140
Benzo[g,h,i]perylene	120	91.0		ug/L		76	40 - 140
Benzo[k]fluoranthene	120	95.4		ug/L		80	40 - 140
Chrysene	120	91.6		ug/L		76	40 - 140
Dibenz(a,h)anthracene	120	93.8		ug/L		78	40 - 140
Fluoranthene	120	99.7		ug/L		83	40 - 140
Fluorene	120	97.5		ug/L		81	40 - 140
Indeno[1,2,3-cd]pyrene	120	92.7		ug/L		77	40 - 140
Phenanthrene	120	89.7		ug/L		75	40 - 140
Pyrene	120	96.9		ug/L		81	40 - 140
1-Methylnaphthalene	120	82.5		ug/L		69	40 - 140
2-Methylnaphthalene	120	84.5		ug/L		70	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*70*		*18 - 147*
2-Fluorobiphenyl	*71*		*15 - 128*
Nitrobenzene-d5	*75*		*10 - 144*

Lab Sample ID: 400-247408-4 MS
Matrix: Water
Analysis Batch: 653064

Client Sample ID: P54-ROX-112823
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		124	109		ug/L		88	50 - 150
Acenaphthylene	ND		124	110		ug/L		89	50 - 150
Anthracene	ND		124	112		ug/L		91	50 - 150
Benzo[a]anthracene	0.047	J	124	116		ug/L		93	50 - 150
Benzo[a]pyrene	ND		124	110		ug/L		89	50 - 150
Benzo[b]fluoranthene	ND		124	113		ug/L		92	50 - 150

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 400-247408-4 MS
Matrix: Water
Analysis Batch: 653064

Client Sample ID: P54-ROX-112823
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[g,h,i]perylene	ND		124	113		ug/L		91	50 - 150
Benzo[k]fluoranthene	ND		124	110		ug/L		89	50 - 150
Chrysene	ND		124	114		ug/L		92	50 - 150
Dibenz(a,h)anthracene	0.060	J	124	116		ug/L		93	50 - 150
Fluoranthene	0.035	J	124	112		ug/L		90	50 - 150
Fluorene	ND		124	108		ug/L		87	50 - 150
Indeno[1,2,3-cd]pyrene	0.050	J	124	115		ug/L		93	50 - 150
Phenanthrene	ND		124	112		ug/L		90	50 - 150
Pyrene	ND		124	106		ug/L		85	50 - 150
1-Methylnaphthalene	ND		124	76.1		ug/L		61	50 - 150
2-Methylnaphthalene	ND		124	76.1		ug/L		61	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*76*		*18 - 147*
2-Fluorobiphenyl	*81*		*15 - 128*
Nitrobenzene-d5	*67*		*10 - 144*

Lab Sample ID: 400-247408-4 MSD
Matrix: Water
Analysis Batch: 653064

Client Sample ID: P54-ROX-112823
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		123	108		ug/L		88	50 - 150	0	40
Acenaphthylene	ND		123	109		ug/L		88	50 - 150	1	40
Anthracene	ND		123	113		ug/L		92	50 - 150	0	40
Benzo[a]anthracene	0.047	J	123	117		ug/L		95	50 - 150	1	40
Benzo[a]pyrene	ND		123	111		ug/L		91	50 - 150	1	40
Benzo[b]fluoranthene	ND		123	118		ug/L		96	50 - 150	4	40
Benzo[g,h,i]perylene	ND		123	116		ug/L		95	50 - 150	3	40
Benzo[k]fluoranthene	ND		123	110		ug/L		89	50 - 150	0	40
Chrysene	ND		123	116		ug/L		94	50 - 150	2	40
Dibenz(a,h)anthracene	0.060	J	123	122		ug/L		99	50 - 150	5	40
Fluoranthene	0.035	J	123	114		ug/L		93	50 - 150	2	40
Fluorene	ND		123	109		ug/L		89	50 - 150	1	40
Indeno[1,2,3-cd]pyrene	0.050	J	123	120		ug/L		98	50 - 150	4	40
Phenanthrene	ND		123	114		ug/L		93	50 - 150	2	40
Pyrene	ND		123	102		ug/L		83	50 - 150	3	40
1-Methylnaphthalene	ND		123	96.9		ug/L		79	50 - 150	24	40
2-Methylnaphthalene	ND		123	97.3		ug/L		79	50 - 150	24	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*75*		*18 - 147*
2-Fluorobiphenyl	*81*		*15 - 128*
Nitrobenzene-d5	*84*		*10 - 144*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 400-653912/1-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		12/12/23 10:43	12/13/23 18:25	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/12/23 10:43	12/13/23 18:25	1
Anthracene	ND		0.20	0.047	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/12/23 10:43	12/13/23 18:25	1
Chrysene	ND		0.20	0.033	ug/L		12/12/23 10:43	12/13/23 18:25	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/12/23 10:43	12/13/23 18:25	1
Fluoranthene	ND		0.20	0.034	ug/L		12/12/23 10:43	12/13/23 18:25	1
Fluorene	ND		0.20	0.089	ug/L		12/12/23 10:43	12/13/23 18:25	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/12/23 10:43	12/13/23 18:25	1
Phenanthrene	ND		0.20	0.090	ug/L		12/12/23 10:43	12/13/23 18:25	1
Pyrene	ND		0.20	0.039	ug/L		12/12/23 10:43	12/13/23 18:25	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		12/12/23 10:43	12/13/23 18:25	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		12/12/23 10:43	12/13/23 18:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*75*		*18 - 147*	*12/12/23 10:43*	*12/13/23 18:25*	*1*
2-Fluorobiphenyl	*73*		*15 - 128*	*12/12/23 10:43*	*12/13/23 18:25*	*1*
Nitrobenzene-d5	*68*		*10 - 144*	*12/12/23 10:43*	*12/13/23 18:25*	*1*

Lab Sample ID: LCS 400-653912/2-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653912

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	105		ug/L		87	40 - 140
Acenaphthylene	120	120		ug/L		100	40 - 140
Anthracene	120	121		ug/L		101	40 - 140
Benzo[a]anthracene	120	149	E	ug/L		124	40 - 140
Benzo[a]pyrene	120	118		ug/L		98	40 - 140
Benzo[b]fluoranthene	120	119		ug/L		99	40 - 140
Benzo[g,h,i]perylene	120	92.6		ug/L		77	40 - 140
Benzo[k]fluoranthene	120	104		ug/L		86	40 - 140
Chrysene	120	104		ug/L		87	40 - 140
Dibenz(a,h)anthracene	120	108		ug/L		90	40 - 140
Fluoranthene	120	118		ug/L		98	40 - 140
Fluorene	120	109		ug/L		91	40 - 140
Indeno[1,2,3-cd]pyrene	120	106		ug/L		88	40 - 140
Phenanthrene	120	103		ug/L		86	40 - 140
Pyrene	120	97.0		ug/L		81	40 - 140
1-Methylnaphthalene	120	86.9		ug/L		72	40 - 140
2-Methylnaphthalene	120	90.7		ug/L		76	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*70*		*18 - 147*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 400-653912/2-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653912

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	74		15 - 128
Nitrobenzene-d5	73		10 - 144

Lab Sample ID: LCSD 400-653912/3-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653912

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	99.9		ug/L		83	40 - 140	5	40
Acenaphthylene			120	114		ug/L		95	40 - 140	6	40
Anthracene			120	115		ug/L		96	40 - 140	5	40
Benzo[a]anthracene			120	139	E	ug/L		115	40 - 140	7	40
Benzo[a]pyrene			120	114		ug/L		95	40 - 140	3	40
Benzo[b]fluoranthene			120	120		ug/L		100	40 - 140	1	40
Benzo[g,h,i]perylene			120	89.1		ug/L		74	40 - 140	4	40
Benzo[k]fluoranthene			120	105		ug/L		87	40 - 140	1	40
Chrysene			120	99.1		ug/L		83	40 - 140	5	40
Dibenz(a,h)anthracene			120	103		ug/L		86	40 - 140	5	40
Fluoranthene			120	113		ug/L		94	40 - 140	4	40
Fluorene			120	105		ug/L		87	40 - 140	5	40
Indeno[1,2,3-cd]pyrene			120	101		ug/L		84	40 - 140	4	40
Phenanthrene			120	99.0		ug/L		82	40 - 140	4	40
Pyrene			120	90.5		ug/L		75	40 - 140	7	40
1-Methylnaphthalene			120	81.5		ug/L		68	40 - 140	6	40
2-Methylnaphthalene			120	84.3		ug/L		70	40 - 140	7	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	64		18 - 147
2-Fluorobiphenyl	71		15 - 128
Nitrobenzene-d5	68		10 - 144

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-652288/1-A
Matrix: Water
Analysis Batch: 652266

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652288

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		11/30/23 09:36	11/30/23 13:00	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		11/30/23 09:36	11/30/23 13:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	79		51 - 149	11/30/23 09:36	11/30/23 13:00	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCS 400-652288/2-A
Matrix: Water
Analysis Batch: 652266

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652288

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0985		ug/L		98	60 - 140		
1,2-Dibromoethane			0.100	0.0901		ug/L		90	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*75*		*51 - 149*

Lab Sample ID: LCSD 400-652288/3-A
Matrix: Water
Analysis Batch: 652266

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652288

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.100		ug/L		99	60 - 140	2	30
1,2-Dibromoethane			0.100	0.0898		ug/L		90	60 - 140	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*75*		*51 - 149*

Lab Sample ID: 400-247408-4 MS
Matrix: Water
Analysis Batch: 652266

Client Sample ID: P54-ROX-112823
Prep Type: Total/NA
Prep Batch: 652288

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane	ND		0.100	0.0949		ug/L		95	10 - 150		
1,2-Dibromoethane	ND		0.0997	0.0847		ug/L		85	39 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*74*		*51 149*

Lab Sample ID: 400-247408-4 MSD
Matrix: Water
Analysis Batch: 652266

Client Sample ID: P54-ROX-112823
Prep Type: Total/NA
Prep Batch: 652288

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		0.0995	0.108		ug/L		108	10 - 150	13	20
1,2-Dibromoethane	ND		0.0991	0.0987		ug/L		100	39 - 150	15	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*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
Melissa Remiger	25278	DATE: 11/28/2023
PO #	**GSAP Project ID**	PAGE: 1 of 2
60697537 – 3.4.2	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 Monthly GW 60697537 – 3.4.2
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions
PHONE NO.: 314-802-1207
E-MAIL: melissa.remiger@aecom.com
AECOM Other ID:
PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell
SAMPLER NAME(S) (Print): C. McDavid, J. Mayer
LAB USE ONLY
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C° | Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

- **Please include "J" values on Reports.**
- **Please provide sample receipt upon login.**
- **Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com**

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

400-247408 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 8270 SIMS
	TB-ROX-112823-A	11/28/2023	0000	Water	2					2	X			
	TB-ROX-112823-A	11/28/2023	0000	Water	2					2		X		
	ROST3MW-ROX-112823	11/28/2023	0915	Water	6			2		8	X	X	X	X
	P54-ROX-112823	11/28/2023	1015	Water	6			2		8	X	X	X	X
	P54-ROX-112823-MS	11/28/2023	1015	Water	6			2		8	X	X	X	X
	P54-ROX-112823-MSD	11/28/2023	1015	Water	6			2		8	X	X	X	X
	MW24-ROX-112823	11/28/2023	1150	Water	6			2		8	X	X	X	X
	MW5-ROX-112823	11/28/2023	1245	Water	6			2		8	X	X	X	X
	MW5-ROX-112823-DUP	11/28/2023	1245	Water	6			2		8	X	X	X	X

Courtney 11-28-23

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 6339 6597 5460, 6339 6597 5470	11/28/2023	1600
Relinquished by: (Signature)	Received by: (Signature) BP	Date: 11/29/23	Time: 932
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: 1599790, 1599791, 1599792, 1599793

1.1°C 0.2°C FRID

Page 61 of 65

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
Melissa Remiger	25278	DATE: 11/28/2023
PO #	**GSAP Project ID**	PAGE: __1__ of __2__
60697537 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS: Street and City	State	AECOM Project / Task Number:
AECOM		900 South Central Ave; ROXANA	IL	Roxana Monthly GW 60697537 – 3.4.2

ADDRESS:	EDF DELIVERABLE TO (Name, Company, Office Location)	PHONE NO.	E-MAIL:	AECOM Other ID:
100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA	Melissa Remiger - please see special instructions	314-802-1207	melissa.remiger@aecom.com	

PROJECT CONTACT (Hardcopy or PDF Report to):	SAMPLER NAME(S) (Print):	LAB USE ONLY
Melissa Remiger, Mary Massa, Brett Howell	C. McDavid, J. Mayer	

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

* Please include "J" values on Reports.
* Please provide sample receipt upon login.
* Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.4.2

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 8270 SIMS
	TB-ROX-112823-8260-A	11/28/2023	0000	Water	2					2	X			
	TB-ROX-112823-8011-A	11/28/2023	0000	Water	2					2		X		
	ROST3MW-ROX-112823	11/28/2023	0915	Water	6			2		8	X	X	X	X
	P54-ROX-112823	11/28/2023	1015	Water	6			2		8	X	X	X	X
	P54-ROX-112823-MS	11/28/2023	1015	Water	6			2		8	X	X	X	X
	P54-ROX-112823-MSD	11/28/2023	1015	Water	6			2		8	X	X	X	X
	MW24-ROX-112823	11/28/2023	1150	Water	6			2		8	X	X	X	X
	MW5-ROX-112823	11/28/2023	1245	Water	6			2		8	X	X	X	X
	MW5-ROX-112823-DUP	11/28/2023	1245	Water	6			2		8	X	X	X	X

11-28-23

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 6339 6597 5460, 6339 6597 5470	11/28/2023	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: 1599790, 1599791, 1599792, 1599793

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- [ ] ACCUTEST (_____)
- [ ] CALSCIENCE (_____)
- [x] 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	[x] OTHER _ENV. SERVICES		

Print Bill To Contact Name:	PlaNet Site or Project ID	[ ] CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 11/28/2023
PO #	**GSAP Project ID**	PAGE: 2 of 2
60697537 – 3.4.2	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 Monthly GW 60697537 – 3.4.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO.: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

SAMPLER NAME(S) (Print): M. Massa, T. Jones

LAB USE ONLY

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS): [ ] STANDARD (14 DAY) [x] 5 DAYS [ ] 3 DAYS [ ] 2 DAYS [ ] 24 HOURS [ ] RESULTS NEEDED ON WEEKEND

[ ] LA - RWQCB REPORT FORMAT

DELIVERABLES: [ ] LEVEL 1 [x] LEVEL 2 [ ] LEVEL 3 [x] LEVEL 4 [x] OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

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* Please include "J" values on Reports.
* Please provide sample receipt upon login.
* Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

- [x] SHELL CONTRACT RATE APPLIES
- [ ] STATE REIMBURSEMENT RATE APPLIES
- [ ] EDD NOT NEEDED
- [x] RECEIPT VERIFICATION REQUESTED
- [ ] PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.4.2

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 8270 SIMS
	TB-ROX-112823-8260-B	11/28/2023	0000	Water	2					2	X			
	TB-ROX-112823-8011-B	11/28/2023	0000	Water	2					2		X		
	ROST4PZG-ROX-112823	11/28/2023	0950	Water	6			2		8	X	X	X	X
	ROST4PZC-ROX-112823	11/28/2023	1035	Water	6			2		8	X	X	X	X
	MW16-ROX-112823	11/28/2023	1200	Water	6			2		8	X	X	X	X
	MW3-ROX-112823	11/28/2023	1255	Water	6			2		8	X	X	X	X

11/28/23

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
MARY MASSA	FEDEX: See page 1	11/28/2023	1600

CUSTODY SEALS: See page 1

Version: 27Sept23

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-247408-1

Login Number: 247408
List Number: 1
Creator: Roberts, Alexis J

List Source: Eurofins 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	1.1°C, 0.2°C IR10
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").	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. Job ID: 400-247408-1
Project/Site: ROXANA MONTHLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Roxana Groundwater Monthly – November/December 2023 Data Review

Laboratory SDG: 400-247410-1-Rev.1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 1/4/2024

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

Sample Identification	Sample Identification
TB-ROX-112823-8260-B	TB-ROX-112823-8011-B
ROST4PZG-ROX-112823	ROST4PZC-ROX-112823
MW16-ROX-112823	MW3-ROX-112823

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 case narrative indicated that PAHs in samples ROST4PZG-ROX-112823, ROST4PZC-ROX-112823, and MW3-ROX-112823 were re-extracted outside extraction time criteria. SVOC and VOCs LCS/LCSD recoveries were outside evaluation criteria. The continuing calibration verification (CCV) for multiple analytes were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review. The laboratory report was revised on January 5, 2024, to include missing ICVs for method 8270E SIM.

Three of 70 (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, PAHs in samples ROST4PZG-ROX-112823, ROST4PZC-ROX-112823, and MW3-ROX-112823 were re-extracted 7 days outside of extraction time criteria (7 days) and then re-analyzed for confirmation. Holding time exceedances were not greater than two times (2X) criteria; both sets of data are reported.

The results for the re-extracted and re-analyzed sample ROST4PZC-ROX-112823 were comparable to the initial results; both sets of data are reported. Based on professional judgement, the results from the initial analysis were used for the purposes of this report.

With regard to initial ROST4PZG-ROX-112823 and MW3-ROX-112823 PAH data, the laboratory previously issued a Corrective Action Report (CAR) stating that through confirmation analyses many previous detections were not confirmed and were therefore

deemed laboratory contamination. Based on professional judgement, the results from the re-analysis were used for the purposes of this report. Data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
ROST4PZG-ROX-112823—RERA	PAHs	All non-detects	**UJ**
MW3-ROX-112823—RERA	PAHs	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 400-652468/1001	VOCs	Acetone	**219**	NA	43-160
LCS 400-652468/1001	VOCs	Bromodichloromethane	**137**	NA	67-133
LCS 400-652468/1001	VOCs	2-Butanone (MEK)	**167**	NA	61-145
LCS 400-652468/1001	VOCs	1,2-Dichloropropane	**135**	NA	70-130
LCS 400-652468/1001	VOCs	Methylene bromide	**136**	NA	70-130
LCS 400-652468/1001	VOCs	Tetrachloroethene	**159**	NA	65-130
LCS 400-652468/1001	VOCs	Trichloroethene	**138**	NA	70-130
LCS 400-652297/2-A	SVOCs	Hexachlorocyclopentadiene	**7**	NA	10-134
LCS/LCSD 400-652297/3-A/4-A	SVOCs	Benzenethiol	**5/5**	1	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 and hexachlorocyclopentadiene below evaluation criteria; benzenethiol and hexachlorocyclopentadiene have been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
ROST4PZG-ROX-112823	SVOCs	Benzenethiol	**UJ**
ROST4PZG-ROX-112823	SVOCs	Hexachlorocyclopentadiene	**UJ**
ROST4PZC-ROX-112823	SVOCs	Benzenethiol	**UJ**

Sample ID	Parameter	Analyte	Qualification
ROST4PZC-ROX-112823	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW16-ROX-112823	SVOCs	Benzenethiol	**UJ**
MW16-ROX-112823	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW3-ROX-112823	SVOCs	Benzenethiol	**UJ**
MW3-ROX-112823	SVOCs	Hexachlorocyclopentadiene	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW3-ROX-112823	SVOCs	Terphenyl-d_{14}	**43**	44-149

Qualifications due to surrogate recoveries were not required if only one of three base/neutral and/or acid surrogate recoveries were outside evaluation criteria. 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 verifications (CCV) for 1,1,2,2-tetrachloroethane and chloroethane were outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
ROST4PZC-ROX-112823	VOCs	1,1,2,2-Tetrachloroethane	**UJ**
ROST4PZC-ROX-112823	VOCs	Chloroethane	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW16-ROX-112823	VOCs	1,1,2,2-Tetrachloroethane	**UJ**
MW16-ROX-112823	VOCs	Chloroethane	**UJ**
MW3-ROX-112823	VOCs	1,1,2,2-Tetrachloroethane	**UJ**
MW3-ROX-112823	VOCs	Chloroethane	**UJ**

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ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 12/15/2023 2:34:24 PM

JOB DESCRIPTION

ROXANA MONTHLY GW

JOB NUMBER

400-247410-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

my EOL

Job Notes

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Authorization



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Job ID: 400-247410-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-247410-1

Receipt
The samples were received on 11/29/2023 9:32 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 0.2º C and 1.1º C.

Receipt Exceptions

COC shows Roxana Monthly GW, did not find a AECOM project that matched that description. Put it under the AECOM Roxana Quarterly GW, please check.

GC/MS VOA
Method 8260D: The laboratory control sample (LCS) for analytical batch 400-652468 recovered outside control limits for the following analytes: 1,2-Dichloropropane, 2-Butanone (MEK), Acetone, Dibromomethane, Dichlorobromomethane, Tetrachloroethene and Trichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-652468 recovered above the upper control limit for 1,2-Dichloroethane, 1,2-Dichloropropane, 2-Butanone (MEK), Acetone, Carbon tetrachloride, cis-1,3-Dichloropropene, Dibromomethane, Dichlorobromomethane, Hexachlorobutadiene, Tetrachloroethene and Trichloroethene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260D: 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-112823-8260-B (400-247410-1), ROST4PZC-ROX-112823 (400-247410-4), MW16-ROX-112823 (400-247410-5) and MW3-ROX-112823 (400-247410-6). 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 8260D: The initial calibration verification (ICV) analyzed in batch 400-627009 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following sample was received preserved with hydrochloric acid: ROST4PZG-ROX-112823 (400-247410-3). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260D: The initial calibration verification (ICV) analyzed in batch 400-633903 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-652468 recovered outside acceptance criteria, low biased, for 1,1,2,2-Tetrachloroethane and Chloroethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are 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 8270E: The initial calibration verification (ICV) analyzed in batch 400-650079 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-652297 and analytical batch 400-652457 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has

Job ID: 400-247410-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

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 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-652297 and analytical batch 400-652457 recovered outside control limits for the following analyte(s): Hexachlorocyclopentadiene. Hexachlorocyclopentadiene 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 8270E: The initial calibration verification (ICV) analyzed in batch 400-652774 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E SIM: The continuing calibration verification (CCV) associated with batch 400-654224 recovered above the upper control limit for Benzo[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene and Dibenz(a,h)anthracene. The samples associated with this CCV were below the reporting limit for the affected analytes; therefore, the data have been reported.

Method 8270E SIM: The following samples were re-prepared outside of preparation holding time to confirm sample results: ROST4PZG-ROX-112823 (400-247410-3), ROST4PZC-ROX-112823 (400-247410-4) and MW3-ROX-112823 (400-247410-6). Both sets of data are 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 400-652266 recovered above the upper control limit for 1,2-Dibromoethane. 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.

Sample Summary

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

Job ID: 400-247410-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-247410-1	TB-ROX-112823-8260-B	Water	11/28/23 12:00	11/29/23 09:32
400-247410-2	TB-ROX-112823-8011-B	Water	11/28/23 12:00	11/29/23 09:32
400-247410-3	ROST4PZG-ROX-112823	Water	11/28/23 09:50	11/29/23 09:32
400-247410-4	ROST4PZC-ROX-112823	Water	11/28/23 10:35	11/29/23 09:32
400-247410-5	MW16-ROX-112823	Water	11/28/23 12:00	11/29/23 09:32
400-247410-6	MW3-ROX-112823	Water	11/28/23 12:55	11/29/23 09:32

Detection Summary

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

Job ID: 400-247410-1

Client Sample ID: TB-ROX-112823-8260-B — Lab Sample ID: 400-247410-1

No Detections.

Client Sample ID: TB-ROX-112823-8011-B — Lab Sample ID: 400-247410-2

No Detections.

Client Sample ID: ROST4PZG-ROX-112823 — Lab Sample ID: 400-247410-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.039	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.039	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA

Client Sample ID: ROST4PZC-ROX-112823 — Lab Sample ID: 400-247410-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
N-Propylbenzene	0.69	J	1.0	0.69	ug/L	1		8260D	Total/NA
2-Butanone (MEK) - RA	4.6	J	25	2.6	ug/L	1		8260D	Total/NA
Acenaphthene	0.24		0.19	0.094	ug/L	1		8270E SIM	Total/NA
Acenaphthylene	0.082	J	0.19	0.042	ug/L	1		8270E SIM	Total/NA
Anthracene	0.18	J	0.19	0.045	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.049	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Fluorene	0.26		0.19	0.084	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.033	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.089	J	0.19	0.085	ug/L	1		8270E SIM	Total/NA
Pyrene	0.057	J	0.19	0.037	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	0.13	J	0.19	0.076	ug/L	1		8270E SIM	Total/NA
Acenaphthene - RERA	0.25	H	0.19	0.094	ug/L	1		8270E SIM	Total/NA
Anthracene - RERA	0.18	J H	0.19	0.045	ug/L	1		8270E SIM	Total/NA
Fluoranthene - RERA	0.054	J H	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Fluorene - RERA	0.28	H	0.19	0.084	ug/L	1		8270E SIM	Total/NA
Phenanthrene - RERA	0.086	J H	0.19	0.085	ug/L	1		8270E SIM	Total/NA
Pyrene - RERA	0.046	J H	0.19	0.037	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene - RERA	0.14	J H	0.19	0.076	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW16-ROX-112823 — Lab Sample ID: 400-247410-5

No Detections.

Client Sample ID: MW3-ROX-112823 — Lab Sample ID: 400-247410-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.58	J	1.0	0.22	ug/L	1		8260D	Total/NA
Benzo[a]anthracene	0.033	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Benzo[g,h,i]perylene	0.034	J	0.19	0.026	ug/L	1		8270E SIM	Total/NA
Dibenz(a,h)anthracene	0.056	J	0.19	0.045	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.059	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Pensacola

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

Job ID: 400-247410-1

Client Sample ID: TB-ROX-112823-8260-B
Date Collected: 11/28/23 12:00
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247410-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			12/01/23 14:48	1
Acrolein	ND		20	3.3	ug/L			12/01/23 14:48	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 14:48	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 14:48	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 14:48	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 14:48	1
Bromodichloromethane	ND	*+	1.0	0.50	ug/L			12/01/23 14:48	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 14:48	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 14:48	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			12/01/23 14:48	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 14:48	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 14:48	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 14:48	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 14:48	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 14:48	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 14:48	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 14:48	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 14:48	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 14:48	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 14:48	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 14:48	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 14:48	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 14:48	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 14:48	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 14:48	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 14:48	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 14:48	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 14:48	1
1,2-Dichloropropane	ND	*+	1.0	0.50	ug/L			12/01/23 14:48	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 14:48	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 14:48	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 14:48	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 14:48	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 14:48	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 14:48	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 14:48	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 14:48	1
Methylene bromide	ND	*+	5.0	0.22	ug/L			12/01/23 14:48	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 14:48	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 14:48	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/01/23 14:48	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 14:48	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 14:48	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 14:48	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 14:48	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 14:48	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 14:48	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 14:48	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/01/23 14:48	1

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

Job ID: 400-247410-1

Client Sample ID: TB-ROX-112823-8260-B
Date Collected: 11/28/23 12:00
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247410-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 14:48	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 14:48	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/01/23 14:48	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 14:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 14:48	1
Tetrachloroethene	ND	*+	1.0	0.90	ug/L			12/01/23 14:48	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 14:48	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 14:48	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 14:48	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 14:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 14:48	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 14:48	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 14:48	1
Trichloroethene	ND	*+	1.0	0.15	ug/L			12/01/23 14:48	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 14:48	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 14:48	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 14:48	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 14:48	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 14:48	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 14:48	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*12/01/23 14:48*	*1*
Dibromofluoromethane	*93*		*75 - 126*		*12/01/23 14:48*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*12/01/23 14:48*	*1*

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

Job ID: 400-247410-1

Client Sample ID: TB-ROX-112823-8011-B
Date Collected: 11/28/23 12:00
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247410-2
Matrix: Water

Method: EPA 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		11/30/23 09:36	11/30/23 17:33	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		11/30/23 09:36	11/30/23 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*11/30/23 09:36*	*11/30/23 17:33*	*1*

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

Job ID: 400-247410-1

Client Sample ID: ROST4PZG-ROX-112823
Date Collected: 11/28/23 09:50
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247410-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/05/23 08:22	1
Acrolein	ND		20	3.3	ug/L			12/05/23 08:22	1
Acrylonitrile	ND		10	2.8	ug/L			12/05/23 08:22	1
Benzene	ND		1.0	0.50	ug/L			12/05/23 08:22	1
Bromobenzene	ND		1.0	0.54	ug/L			12/05/23 08:22	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/05/23 08:22	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/05/23 08:22	1
Bromoform	ND		5.0	0.25	ug/L			12/05/23 08:22	1
Bromomethane	ND		1.0	0.98	ug/L			12/05/23 08:22	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/05/23 08:22	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/05/23 08:22	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/05/23 08:22	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/05/23 08:22	1
Chloroethane	ND		1.0	0.76	ug/L			12/05/23 08:22	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/05/23 08:22	1
Chloroform	ND		1.0	0.90	ug/L			12/05/23 08:22	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/05/23 08:22	1
Chloromethane	ND		1.0	0.90	ug/L			12/05/23 08:22	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/05/23 08:22	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/05/23 08:22	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/05/23 08:22	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/05/23 08:22	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/05/23 08:22	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/05/23 08:22	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/05/23 08:22	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/05/23 08:22	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/05/23 08:22	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 08:22	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 08:22	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 08:22	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 08:22	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/05/23 08:22	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/05/23 08:22	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/05/23 08:22	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/05/23 08:22	1
2-Hexanone	ND		25	1.4	ug/L			12/05/23 08:22	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/05/23 08:22	1
Methylene bromide	ND		5.0	0.22	ug/L			12/05/23 08:22	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/05/23 08:22	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/05/23 08:22	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/05/23 08:22	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/05/23 08:22	1
Naphthalene	ND		5.0	3.0	ug/L			12/05/23 08:22	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/05/23 08:22	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/05/23 08:22	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/05/23 08:22	1
o-Xylene	ND		5.0	0.60	ug/L			12/05/23 08:22	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/05/23 08:22	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/05/23 08:22	1

Client Sample ID: ROST4PZG-ROX-112823
Date Collected: 11/28/23 09:50
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247410-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/05/23 08:22	1
Styrene	ND		1.0	1.0	ug/L			12/05/23 08:22	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/05/23 08:22	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/05/23 08:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/05/23 08:22	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/05/23 08:22	1
Toluene	ND		1.0	0.90	ug/L			12/05/23 08:22	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 08:22	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/05/23 08:22	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/05/23 08:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/05/23 08:22	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/05/23 08:22	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/05/23 08:22	1
Trichloroethene	ND		1.0	0.15	ug/L			12/05/23 08:22	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/05/23 08:22	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/05/23 08:22	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/05/23 08:22	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/05/23 08:22	1
Vinyl acetate	ND		25	0.93	ug/L			12/05/23 08:22	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/05/23 08:22	1
Xylenes, Total	ND		10	1.6	ug/L			12/05/23 08:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*12/05/23 08:22*	*1*
Dibromofluoromethane	*97*		*75 - 126*		*12/05/23 08:22*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*12/05/23 08:22*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.094	ug/L		11/30/23 14:11	12/05/23 22:09	1
Acenaphthylene	ND		0.19	0.042	ug/L		11/30/23 14:11	12/05/23 22:09	1
Anthracene	ND		0.19	0.045	ug/L		11/30/23 14:11	12/05/23 22:09	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		11/30/23 14:11	12/05/23 22:09	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		11/30/23 14:11	12/05/23 22:09	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		11/30/23 14:11	12/05/23 22:09	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		11/30/23 14:11	12/05/23 22:09	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		11/30/23 14:11	12/05/23 22:09	1
Chrysene	ND		0.19	0.031	ug/L		11/30/23 14:11	12/05/23 22:09	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		11/30/23 14:11	12/05/23 22:09	1
Fluoranthene	**0.039**	**J**	0.19	0.032	ug/L		11/30/23 14:11	12/05/23 22:09	1
Fluorene	ND		0.19	0.084	ug/L		11/30/23 14:11	12/05/23 22:09	1
Indeno[1,2,3-cd]pyrene	**0.039**	**J**	0.19	0.032	ug/L		11/30/23 14:11	12/05/23 22:09	1
Phenanthrene	ND		0.19	0.085	ug/L		11/30/23 14:11	12/05/23 22:09	1
Pyrene	ND		0.19	0.037	ug/L		11/30/23 14:11	12/05/23 22:09	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		11/30/23 14:11	12/05/23 22:09	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		11/30/23 14:11	12/05/23 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*18 - 147*	*11/30/23 14:11*	*12/05/23 22:09*	*1*
2-Fluorobiphenyl	*73*		*15 - 128*	*11/30/23 14:11*	*12/05/23 22:09*	*1*

Client Sample ID: ROST4PZG-ROX-112823
Date Collected: 11/28/23 09:50
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247410-3
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*72*		*10 - 144*	*11/30/23 14:11*	*12/05/23 22:09*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.19	0.095	ug/L		12/12/23 10:44	12/13/23 20:47	1
Acenaphthylene	ND	H	0.19	0.042	ug/L		12/12/23 10:44	12/13/23 20:47	1
Anthracene	ND	H	0.19	0.045	ug/L		12/12/23 10:44	12/13/23 20:47	1
Benzo[a]anthracene	ND	H	0.19	0.032	ug/L		12/12/23 10:44	12/13/23 20:47	1
Benzo[a]pyrene	ND	H	0.19	0.061	ug/L		12/12/23 10:44	12/13/23 20:47	1
Benzo[b]fluoranthene	ND	H	0.19	0.035	ug/L		12/12/23 10:44	12/13/23 20:47	1
Benzo[g,h,i]perylene	ND	H	0.19	0.026	ug/L		12/12/23 10:44	12/13/23 20:47	1
Benzo[k]fluoranthene	ND	H	0.19	0.059	ug/L		12/12/23 10:44	12/13/23 20:47	1
Chrysene	ND	H	0.19	0.032	ug/L		12/12/23 10:44	12/13/23 20:47	1
Dibenz(a,h)anthracene	ND	H	0.19	0.046	ug/L		12/12/23 10:44	12/13/23 20:47	1
Fluoranthene	ND	H	0.19	0.032	ug/L		12/12/23 10:44	12/13/23 20:47	1
Fluorene	ND	H	0.19	0.085	ug/L		12/12/23 10:44	12/13/23 20:47	1
Indeno[1,2,3-cd]pyrene	ND	H	0.19	0.032	ug/L		12/12/23 10:44	12/13/23 20:47	1
Phenanthrene	ND	H	0.19	0.086	ug/L		12/12/23 10:44	12/13/23 20:47	1
Pyrene	ND	H	0.19	0.037	ug/L		12/12/23 10:44	12/13/23 20:47	1
1-Methylnaphthalene	ND	H	0.19	0.076	ug/L		12/12/23 10:44	12/13/23 20:47	1
2-Methylnaphthalene	ND	H	0.19	0.063	ug/L		12/12/23 10:44	12/13/23 20:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*68*		*18 - 147*	*12/12/23 10:44*	*12/13/23 20:47*	*1*
2-Fluorobiphenyl	*66*		*15 - 128*	*12/12/23 10:44*	*12/13/23 20:47*	*1*
Nitrobenzene-d5	*64*		*10 - 144*	*12/12/23 10:44*	*12/13/23 20:47*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		11/30/23 14:11	12/05/23 19:30	1
Benzenethiol	ND	*-	9.5	1.6	ug/L		11/30/23 14:11	12/05/23 19:30	1
Benzoic acid	ND		28	6.9	ug/L		11/30/23 14:11	12/05/23 19:30	1
Benzyl alcohol	ND		9.5	1.9	ug/L		11/30/23 14:11	12/05/23 19:30	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		11/30/23 14:11	12/05/23 19:30	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		11/30/23 14:11	12/05/23 19:30	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		11/30/23 14:11	12/05/23 19:30	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		11/30/23 14:11	12/05/23 19:30	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		11/30/23 14:11	12/05/23 19:30	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		11/30/23 14:11	12/05/23 19:30	1
4-Chloroaniline	ND		9.5	3.2	ug/L		11/30/23 14:11	12/05/23 19:30	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		11/30/23 14:11	12/05/23 19:30	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		11/30/23 14:11	12/05/23 19:30	1
2-Chlorophenol	ND		9.5	2.1	ug/L		11/30/23 14:11	12/05/23 19:30	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		11/30/23 14:11	12/05/23 19:30	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		11/30/23 14:11	12/05/23 19:30	1
Dibenzofuran	ND		9.5	0.16	ug/L		11/30/23 14:11	12/05/23 19:30	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		11/30/23 14:11	12/05/23 19:30	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		11/30/23 14:11	12/05/23 19:30	1
Diethyl phthalate	ND		9.5	0.23	ug/L		11/30/23 14:11	12/05/23 19:30	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		11/30/23 14:11	12/05/23 19:30	1

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

Job ID: 400-247410-1

Client Sample ID: ROST4PZG-ROX-112823
Date Collected: 11/28/23 09:50
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247410-3
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.5	0.16	ug/L		11/30/23 14:11	12/05/23 19:30	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		11/30/23 14:11	12/05/23 19:30	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		11/30/23 14:11	12/05/23 19:30	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		11/30/23 14:11	12/05/23 19:30	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		11/30/23 14:11	12/05/23 19:30	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		11/30/23 14:11	12/05/23 19:30	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		11/30/23 14:11	12/05/23 19:30	1
1,4-Dioxane	ND		9.5	0.95	ug/L		11/30/23 14:11	12/05/23 19:30	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		11/30/23 14:11	12/05/23 19:30	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		11/30/23 14:11	12/05/23 19:30	1
Hexachlorocyclopentadiene	ND	*-	19	2.5	ug/L		11/30/23 14:11	12/05/23 19:30	1
Hexachloroethane	ND		9.5	4.0	ug/L		11/30/23 14:11	12/05/23 19:30	1
Indene	ND		9.5	0.95	ug/L		11/30/23 14:11	12/05/23 19:30	1
Isophorone	ND		9.5	0.13	ug/L		11/30/23 14:11	12/05/23 19:30	1
2-Methylphenol	ND		9.5	1.7	ug/L		11/30/23 14:11	12/05/23 19:30	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		11/30/23 14:11	12/05/23 19:30	1
2-Nitroaniline	ND		9.5	2.1	ug/L		11/30/23 14:11	12/05/23 19:30	1
3-Nitroaniline	ND		9.5	1.7	ug/L		11/30/23 14:11	12/05/23 19:30	1
4-Nitroaniline	ND		9.5	1.4	ug/L		11/30/23 14:11	12/05/23 19:30	1
Nitrobenzene	ND		9.5	0.12	ug/L		11/30/23 14:11	12/05/23 19:30	1
2-Nitrophenol	ND		9.5	4.9	ug/L		11/30/23 14:11	12/05/23 19:30	1
4-Nitrophenol	ND		9.5	2.0	ug/L		11/30/23 14:11	12/05/23 19:30	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		11/30/23 14:11	12/05/23 19:30	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		11/30/23 14:11	12/05/23 19:30	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		11/30/23 14:11	12/05/23 19:30	1
Pentachlorophenol	ND		19	1.3	ug/L		11/30/23 14:11	12/05/23 19:30	1
Phenol	ND		9.5	2.5	ug/L		11/30/23 14:11	12/05/23 19:30	1
Pyridine	ND		9.5	3.0	ug/L		11/30/23 14:11	12/05/23 19:30	1
Quinoline	ND		9.5	4.3	ug/L		11/30/23 14:11	12/05/23 19:30	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		11/30/23 14:11	12/05/23 19:30	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		11/30/23 14:11	12/05/23 19:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*46 - 124*	*11/30/23 14:11*	*12/05/23 19:30*	*1*
2-Fluorophenol	*66*		*13 - 113*	*11/30/23 14:11*	*12/05/23 19:30*	*1*
Nitrobenzene-d5	*77*		*36 - 126*	*11/30/23 14:11*	*12/05/23 19:30*	*1*
Phenol-d5	*78*		*17 - 127*	*11/30/23 14:11*	*12/05/23 19:30*	*1*
Terphenyl-d14	*95*		*44 - 149*	*11/30/23 14:11*	*12/05/23 19:30*	*1*
2,4,6-Tribromophenol	*77*		*26 - 150*	*11/30/23 14:11*	*12/05/23 19:30*	*1*

Method: EPA 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		11/30/23 09:36	11/30/23 17:54	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		11/30/23 09:36	11/30/23 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*51 - 149*	*11/30/23 09:36*	*11/30/23 17:54*	*1*

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

Job ID: 400-247410-1

Client Sample ID: ROST4PZC-ROX-112823
Date Collected: 11/28/23 10:35
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247410-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			12/01/23 17:19	1
Acrolein	ND		20	3.3	ug/L			12/01/23 17:19	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 17:19	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 17:19	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 17:19	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 17:19	1
Bromodichloromethane	ND	*+	1.0	0.50	ug/L			12/01/23 17:19	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 17:19	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 17:19	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 17:19	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 17:19	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 17:19	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 17:19	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 17:19	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 17:19	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 17:19	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 17:19	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 17:19	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 17:19	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 17:19	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 17:19	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 17:19	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 17:19	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 17:19	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 17:19	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 17:19	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 17:19	1
1,2-Dichloropropane	ND	*+	1.0	0.50	ug/L			12/01/23 17:19	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 17:19	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 17:19	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 17:19	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 17:19	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 17:19	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 17:19	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 17:19	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 17:19	1
Methylene bromide	ND	*+	5.0	0.22	ug/L			12/01/23 17:19	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 17:19	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 17:19	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/01/23 17:19	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 17:19	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 17:19	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 17:19	1
N-Propylbenzene	**0.69**	**J**	1.0	0.69	ug/L			12/01/23 17:19	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 17:19	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 17:19	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 17:19	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/01/23 17:19	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 17:19	1

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

Job ID: 400-247410-1

Client Sample ID: ROST4PZC-ROX-112823

Lab Sample ID: 400-247410-4

Date Collected: 11/28/23 10:35

Matrix: Water

Date Received: 11/29/23 09:32

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	1.0	ug/L			12/01/23 17:19	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/01/23 17:19	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 17:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 17:19	1
Tetrachloroethene	ND	*+	1.0	0.90	ug/L			12/01/23 17:19	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 17:19	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 17:19	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 17:19	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 17:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 17:19	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 17:19	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 17:19	1
Trichloroethene	ND	*+	1.0	0.15	ug/L			12/01/23 17:19	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 17:19	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 17:19	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 17:19	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 17:19	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 17:19	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 17:19	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*12/01/23 17:19*	*1*
Dibromofluoromethane	*88*		*75 - 126*		*12/01/23 17:19*	*1*
Toluene-d8 (Surr)	*105*		*64 - 132*		*12/01/23 17:19*	*1*

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	**4.6**	**J**	25	2.6	ug/L			12/05/23 08:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*12/05/23 08:44*	*1*
Dibromofluoromethane	*97*		*75 - 126*		*12/05/23 08:44*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*12/05/23 08:44*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.24**		0.19	0.094	ug/L		11/30/23 14:11	12/05/23 22:29	1
Acenaphthylene	**0.082**	**J**	0.19	0.042	ug/L		11/30/23 14:11	12/05/23 22:29	1
Anthracene	**0.18**	**J**	0.19	0.045	ug/L		11/30/23 14:11	12/05/23 22:29	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		11/30/23 14:11	12/05/23 22:29	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		11/30/23 14:11	12/05/23 22:29	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		11/30/23 14:11	12/05/23 22:29	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		11/30/23 14:11	12/05/23 22:29	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		11/30/23 14:11	12/05/23 22:29	1
Chrysene	ND		0.19	0.031	ug/L		11/30/23 14:11	12/05/23 22:29	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		11/30/23 14:11	12/05/23 22:29	1
Fluoranthene	**0.049**	**J**	0.19	0.032	ug/L		11/30/23 14:11	12/05/23 22:29	1
Fluorene	**0.26**		0.19	0.084	ug/L		11/30/23 14:11	12/05/23 22:29	1
Indeno[1,2,3-cd]pyrene	**0.033**	**J**	0.19	0.032	ug/L		11/30/23 14:11	12/05/23 22:29	1

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

Job ID: 400-247410-1

Client Sample ID: ROST4PZC-ROX-112823

Lab Sample ID: 400-247410-4

Date Collected: 11/28/23 10:35

Matrix: Water

Date Received: 11/29/23 09:32

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	**0.089**	**J**	0.19	0.085	ug/L		11/30/23 14:11	12/05/23 22:29	1
Pyrene	**0.057**	**J**	0.19	0.037	ug/L		11/30/23 14:11	12/05/23 22:29	1
1-Methylnaphthalene	**0.13**	**J**	0.19	0.076	ug/L		11/30/23 14:11	12/05/23 22:29	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		11/30/23 14:11	12/05/23 22:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*74*		*18 - 147*	*11/30/23 14:11*	*12/05/23 22:29*	*1*
2-Fluorobiphenyl	*67*		*15 - 128*	*11/30/23 14:11*	*12/05/23 22:29*	*1*
Nitrobenzene-d5	*68*		*10 - 144*	*11/30/23 14:11*	*12/05/23 22:29*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.25**	**H**	0.19	0.094	ug/L		12/12/23 10:44	12/13/23 21:07	1
Acenaphthylene	ND	H	0.19	0.042	ug/L		12/12/23 10:44	12/13/23 21:07	1
Anthracene	**0.18**	**J H**	0.19	0.045	ug/L		12/12/23 10:44	12/13/23 21:07	1
Benzo[a]anthracene	ND	H	0.19	0.032	ug/L		12/12/23 10:44	12/13/23 21:07	1
Benzo[a]pyrene	ND	H	0.19	0.061	ug/L		12/12/23 10:44	12/13/23 21:07	1
Benzo[b]fluoranthene	ND	H	0.19	0.035	ug/L		12/12/23 10:44	12/13/23 21:07	1
Benzo[g,h,i]perylene	ND	H	0.19	0.026	ug/L		12/12/23 10:44	12/13/23 21:07	1
Benzo[k]fluoranthene	ND	H	0.19	0.059	ug/L		12/12/23 10:44	12/13/23 21:07	1
Chrysene	ND	H	0.19	0.031	ug/L		12/12/23 10:44	12/13/23 21:07	1
Dibenz(a,h)anthracene	ND	H	0.19	0.046	ug/L		12/12/23 10:44	12/13/23 21:07	1
Fluoranthene	**0.054**	**J H**	0.19	0.032	ug/L		12/12/23 10:44	12/13/23 21:07	1
Fluorene	**0.28**	**H**	0.19	0.084	ug/L		12/12/23 10:44	12/13/23 21:07	1
Indeno[1,2,3-cd]pyrene	ND	H	0.19	0.032	ug/L		12/12/23 10:44	12/13/23 21:07	1
Phenanthrene	**0.086**	**J H**	0.19	0.085	ug/L		12/12/23 10:44	12/13/23 21:07	1
Pyrene	**0.046**	**J H**	0.19	0.037	ug/L		12/12/23 10:44	12/13/23 21:07	1
1-Methylnaphthalene	**0.14**	**J H**	0.19	0.076	ug/L		12/12/23 10:44	12/13/23 21:07	1
2-Methylnaphthalene	ND	H	0.19	0.063	ug/L		12/12/23 10:44	12/13/23 21:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*72*		*18 - 147*	*12/12/23 10:44*	*12/13/23 21:07*	*1*
2-Fluorobiphenyl	*71*		*15 - 128*	*12/12/23 10:44*	*12/13/23 21:07*	*1*
Nitrobenzene-d5	*72*		*10 - 144*	*12/12/23 10:44*	*12/13/23 21:07*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		11/30/23 14:11	12/05/23 19:51	1
Benzenethiol	ND	*-	9.5	1.6	ug/L		11/30/23 14:11	12/05/23 19:51	1
Benzoic acid	ND		28	6.9	ug/L		11/30/23 14:11	12/05/23 19:51	1
Benzyl alcohol	ND		9.5	1.9	ug/L		11/30/23 14:11	12/05/23 19:51	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		11/30/23 14:11	12/05/23 19:51	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		11/30/23 14:11	12/05/23 19:51	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		11/30/23 14:11	12/05/23 19:51	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		11/30/23 14:11	12/05/23 19:51	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		11/30/23 14:11	12/05/23 19:51	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		11/30/23 14:11	12/05/23 19:51	1
4-Chloroaniline	ND		9.5	3.2	ug/L		11/30/23 14:11	12/05/23 19:51	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		11/30/23 14:11	12/05/23 19:51	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		11/30/23 14:11	12/05/23 19:51	1

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

Job ID: 400-247410-1

Client Sample ID: ROST4PZC-ROX-112823
Date Collected: 11/28/23 10:35
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247410-4
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND		9.5	2.1	ug/L		11/30/23 14:11	12/05/23 19:51	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		11/30/23 14:11	12/05/23 19:51	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		11/30/23 14:11	12/05/23 19:51	1
Dibenzofuran	ND		9.5	0.16	ug/L		11/30/23 14:11	12/05/23 19:51	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		11/30/23 14:11	12/05/23 19:51	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		11/30/23 14:11	12/05/23 19:51	1
Diethyl phthalate	ND		9.5	0.23	ug/L		11/30/23 14:11	12/05/23 19:51	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		11/30/23 14:11	12/05/23 19:51	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		11/30/23 14:11	12/05/23 19:51	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		11/30/23 14:11	12/05/23 19:51	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		11/30/23 14:11	12/05/23 19:51	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		11/30/23 14:11	12/05/23 19:51	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		11/30/23 14:11	12/05/23 19:51	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		11/30/23 14:11	12/05/23 19:51	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		11/30/23 14:11	12/05/23 19:51	1
1,4-Dioxane	ND		9.5	0.95	ug/L		11/30/23 14:11	12/05/23 19:51	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		11/30/23 14:11	12/05/23 19:51	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		11/30/23 14:11	12/05/23 19:51	1
Hexachlorocyclopentadiene	ND	*-	19	2.5	ug/L		11/30/23 14:11	12/05/23 19:51	1
Hexachloroethane	ND		9.5	4.0	ug/L		11/30/23 14:11	12/05/23 19:51	1
Indene	ND		9.5	0.95	ug/L		11/30/23 14:11	12/05/23 19:51	1
Isophorone	ND		9.5	0.13	ug/L		11/30/23 14:11	12/05/23 19:51	1
2-Methylphenol	ND		9.5	1.7	ug/L		11/30/23 14:11	12/05/23 19:51	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		11/30/23 14:11	12/05/23 19:51	1
2-Nitroaniline	ND		9.5	2.1	ug/L		11/30/23 14:11	12/05/23 19:51	1
3-Nitroaniline	ND		9.5	1.7	ug/L		11/30/23 14:11	12/05/23 19:51	1
4-Nitroaniline	ND		9.5	1.4	ug/L		11/30/23 14:11	12/05/23 19:51	1
Nitrobenzene	ND		9.5	0.12	ug/L		11/30/23 14:11	12/05/23 19:51	1
2-Nitrophenol	ND		9.5	4.9	ug/L		11/30/23 14:11	12/05/23 19:51	1
4-Nitrophenol	ND		9.5	2.0	ug/L		11/30/23 14:11	12/05/23 19:51	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		11/30/23 14:11	12/05/23 19:51	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		11/30/23 14:11	12/05/23 19:51	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		11/30/23 14:11	12/05/23 19:51	1
Pentachlorophenol	ND		19	1.3	ug/L		11/30/23 14:11	12/05/23 19:51	1
Phenol	ND		9.5	2.5	ug/L		11/30/23 14:11	12/05/23 19:51	1
Pyridine	ND		9.5	3.0	ug/L		11/30/23 14:11	12/05/23 19:51	1
Quinoline	ND		9.5	4.3	ug/L		11/30/23 14:11	12/05/23 19:51	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		11/30/23 14:11	12/05/23 19:51	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		11/30/23 14:11	12/05/23 19:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*46 - 124*	*11/30/23 14:11*	*12/05/23 19:51*	*1*
2-Fluorophenol	*59*		*13 - 113*	*11/30/23 14:11*	*12/05/23 19:51*	*1*
Nitrobenzene-d5	*71*		*36 - 126*	*11/30/23 14:11*	*12/05/23 19:51*	*1*
Phenol-d5	*69*		*17 - 127*	*11/30/23 14:11*	*12/05/23 19:51*	*1*
Terphenyl-d14	*83*		*44 - 149*	*11/30/23 14:11*	*12/05/23 19:51*	*1*
2,4,6-Tribromophenol	*67*		*26 - 150*	*11/30/23 14:11*	*12/05/23 19:51*	*1*

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

Job ID: 400-247410-1

Client Sample ID: ROST4PZC-ROX-112823
Date Collected: 11/28/23 10:35
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247410-4
Matrix: Water

Method: EPA 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		11/30/23 09:36	11/30/23 18:15	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		11/30/23 09:36	11/30/23 18:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*51 - 149*	*11/30/23 09:36*	*11/30/23 18:15*	*1*

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

Job ID: 400-247410-1

Client Sample ID: MW16-ROX-112823
Date Collected: 11/28/23 12:00
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247410-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			12/01/23 17:44	1
Acrolein	ND		20	3.3	ug/L			12/01/23 17:44	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 17:44	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 17:44	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 17:44	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 17:44	1
Bromodichloromethane	ND	*+	1.0	0.50	ug/L			12/01/23 17:44	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 17:44	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 17:44	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			12/01/23 17:44	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 17:44	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 17:44	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 17:44	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 17:44	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 17:44	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 17:44	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 17:44	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 17:44	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 17:44	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 17:44	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 17:44	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 17:44	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 17:44	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 17:44	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 17:44	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 17:44	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 17:44	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 17:44	1
1,2-Dichloropropane	ND	*+	1.0	0.50	ug/L			12/01/23 17:44	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 17:44	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 17:44	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 17:44	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 17:44	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 17:44	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 17:44	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 17:44	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 17:44	1
Methylene bromide	ND	*+	5.0	0.22	ug/L			12/01/23 17:44	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 17:44	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 17:44	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/01/23 17:44	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 17:44	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 17:44	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 17:44	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 17:44	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 17:44	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 17:44	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 17:44	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/01/23 17:44	1

Client Sample ID: MW16-ROX-112823
Date Collected: 11/28/23 12:00
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247410-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 17:44	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 17:44	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/01/23 17:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 17:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 17:44	1
Tetrachloroethene	ND	*+	1.0	0.90	ug/L			12/01/23 17:44	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 17:44	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 17:44	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 17:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 17:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 17:44	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 17:44	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 17:44	1
Trichloroethene	ND	*+	1.0	0.15	ug/L			12/01/23 17:44	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 17:44	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 17:44	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 17:44	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 17:44	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 17:44	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 17:44	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*12/01/23 17:44*	*1*
Dibromofluoromethane	*92*		*75 - 126*		*12/01/23 17:44*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*12/01/23 17:44*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.094	ug/L		11/30/23 14:11	12/05/23 22:50	1
Acenaphthylene	ND		0.19	0.042	ug/L		11/30/23 14:11	12/05/23 22:50	1
Anthracene	ND		0.19	0.044	ug/L		11/30/23 14:11	12/05/23 22:50	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		11/30/23 14:11	12/05/23 22:50	1
Benzo[a]pyrene	ND		0.19	0.060	ug/L		11/30/23 14:11	12/05/23 22:50	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		11/30/23 14:11	12/05/23 22:50	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		11/30/23 14:11	12/05/23 22:50	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		11/30/23 14:11	12/05/23 22:50	1
Chrysene	ND		0.19	0.031	ug/L		11/30/23 14:11	12/05/23 22:50	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		11/30/23 14:11	12/05/23 22:50	1
Fluoranthene	ND		0.19	0.032	ug/L		11/30/23 14:11	12/05/23 22:50	1
Fluorene	ND		0.19	0.084	ug/L		11/30/23 14:11	12/05/23 22:50	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		11/30/23 14:11	12/05/23 22:50	1
Phenanthrene	ND		0.19	0.085	ug/L		11/30/23 14:11	12/05/23 22:50	1
Pyrene	ND		0.19	0.037	ug/L		11/30/23 14:11	12/05/23 22:50	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		11/30/23 14:11	12/05/23 22:50	1
2-Methylnaphthalene	ND		0.19	0.062	ug/L		11/30/23 14:11	12/05/23 22:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*60*		*18 - 147*	*11/30/23 14:11*	*12/05/23 22:50*	*1*
2-Fluorobiphenyl	*73*		*15 - 128*	*11/30/23 14:11*	*12/05/23 22:50*	*1*

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

Job ID: 400-247410-1

Client Sample ID: MW16-ROX-112823
Date Collected: 11/28/23 12:00
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247410-5
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*71*		*10 - 144*	*11/30/23 14:11*	*12/05/23 22:50*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.4	3.6	ug/L		11/30/23 14:11	12/05/23 20:12	1
Benzenethiol	ND	*-	9.4	1.6	ug/L		11/30/23 14:11	12/05/23 20:12	1
Benzoic acid	ND		28	6.9	ug/L		11/30/23 14:11	12/05/23 20:12	1
Benzyl alcohol	ND		9.4	1.9	ug/L		11/30/23 14:11	12/05/23 20:12	1
Bis(2-chloroethoxy)methane	ND		9.4	0.15	ug/L		11/30/23 14:11	12/05/23 20:12	1
Bis(2-chloroethyl)ether	ND		9.4	2.6	ug/L		11/30/23 14:11	12/05/23 20:12	1
bis (2-chloroisopropyl) ether	ND		9.4	0.15	ug/L		11/30/23 14:11	12/05/23 20:12	1
Bis(2-ethylhexyl) phthalate	ND		9.4	4.7	ug/L		11/30/23 14:11	12/05/23 20:12	1
4-Bromophenyl phenyl ether	ND		9.4	0.19	ug/L		11/30/23 14:11	12/05/23 20:12	1
Butyl benzyl phthalate	ND		9.4	0.18	ug/L		11/30/23 14:11	12/05/23 20:12	1
4-Chloroaniline	ND		9.4	3.2	ug/L		11/30/23 14:11	12/05/23 20:12	1
4-Chloro-3-methylphenol	ND		9.4	3.6	ug/L		11/30/23 14:11	12/05/23 20:12	1
2-Chloronaphthalene	ND		9.4	0.13	ug/L		11/30/23 14:11	12/05/23 20:12	1
2-Chlorophenol	ND		9.4	2.1	ug/L		11/30/23 14:11	12/05/23 20:12	1
4-Chlorophenyl phenyl ether	ND		9.4	1.9	ug/L		11/30/23 14:11	12/05/23 20:12	1
Dibenz[a,h]acridine	ND		9.4	0.94	ug/L		11/30/23 14:11	12/05/23 20:12	1
Dibenzofuran	ND		9.4	0.16	ug/L		11/30/23 14:11	12/05/23 20:12	1
3,3'-Dichlorobenzidine	ND		9.4	2.5	ug/L		11/30/23 14:11	12/05/23 20:12	1
2,4-Dichlorophenol	ND		9.4	2.8	ug/L		11/30/23 14:11	12/05/23 20:12	1
Diethyl phthalate	ND		9.4	0.23	ug/L		11/30/23 14:11	12/05/23 20:12	1
2,4-Dimethylphenol	ND		9.4	3.3	ug/L		11/30/23 14:11	12/05/23 20:12	1
Dimethyl phthalate	ND		9.4	0.16	ug/L		11/30/23 14:11	12/05/23 20:12	1
Di-n-butyl phthalate	ND		9.4	2.6	ug/L		11/30/23 14:11	12/05/23 20:12	1
4,6-Dinitro-ortho-cresol	ND		9.4	1.5	ug/L		11/30/23 14:11	12/05/23 20:12	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		11/30/23 14:11	12/05/23 20:12	1
2,4-Dinitrotoluene	ND		9.4	1.8	ug/L		11/30/23 14:11	12/05/23 20:12	1
2,6-Dinitrotoluene	ND		9.4	1.8	ug/L		11/30/23 14:11	12/05/23 20:12	1
Di-n-octyl phthalate	ND		9.4	0.16	ug/L		11/30/23 14:11	12/05/23 20:12	1
1,4-Dioxane	ND		9.4	0.94	ug/L		11/30/23 14:11	12/05/23 20:12	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	0.94	ug/L		11/30/23 14:11	12/05/23 20:12	1
Hexachlorobenzene	ND		9.4	0.16	ug/L		11/30/23 14:11	12/05/23 20:12	1
Hexachlorocyclopentadiene	ND	*-	19	2.5	ug/L		11/30/23 14:11	12/05/23 20:12	1
Hexachloroethane	ND		9.4	4.0	ug/L		11/30/23 14:11	12/05/23 20:12	1
Indene	ND		9.4	0.94	ug/L		11/30/23 14:11	12/05/23 20:12	1
Isophorone	ND		9.4	0.13	ug/L		11/30/23 14:11	12/05/23 20:12	1
2-Methylphenol	ND		9.4	1.7	ug/L		11/30/23 14:11	12/05/23 20:12	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		11/30/23 14:11	12/05/23 20:12	1
2-Nitroaniline	ND		9.4	2.1	ug/L		11/30/23 14:11	12/05/23 20:12	1
3-Nitroaniline	ND		9.4	1.7	ug/L		11/30/23 14:11	12/05/23 20:12	1
4-Nitroaniline	ND		9.4	1.4	ug/L		11/30/23 14:11	12/05/23 20:12	1
Nitrobenzene	ND		9.4	0.12	ug/L		11/30/23 14:11	12/05/23 20:12	1
2-Nitrophenol	ND		9.4	4.9	ug/L		11/30/23 14:11	12/05/23 20:12	1
4-Nitrophenol	ND		9.4	2.0	ug/L		11/30/23 14:11	12/05/23 20:12	1
N-Nitrosodimethylamine	ND		9.4	3.3	ug/L		11/30/23 14:11	12/05/23 20:12	1

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

Job ID: 400-247410-1

Client Sample ID: MW16-ROX-112823
Date Collected: 11/28/23 12:00
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247410-5
Matrix: Water

Method: SW846 8270E - 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		11/30/23 14:11	12/05/23 20:12	1
N-Nitrosodiphenylamine	ND		9.4	0.17	ug/L		11/30/23 14:11	12/05/23 20:12	1
Pentachlorophenol	ND		19	1.3	ug/L		11/30/23 14:11	12/05/23 20:12	1
Phenol	ND		9.4	2.5	ug/L		11/30/23 14:11	12/05/23 20:12	1
Pyridine	ND		9.4	3.0	ug/L		11/30/23 14:11	12/05/23 20:12	1
Quinoline	ND		9.4	4.3	ug/L		11/30/23 14:11	12/05/23 20:12	1
2,4,5-Trichlorophenol	ND		9.4	3.5	ug/L		11/30/23 14:11	12/05/23 20:12	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		11/30/23 14:11	12/05/23 20:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*46 - 124*	*11/30/23 14:11*	*12/05/23 20:12*	*1*
2-Fluorophenol	*67*		*13 - 113*	*11/30/23 14:11*	*12/05/23 20:12*	*1*
Nitrobenzene-d5	*75*		*36 - 126*	*11/30/23 14:11*	*12/05/23 20:12*	*1*
Phenol-d5	*74*		*17 - 127*	*11/30/23 14:11*	*12/05/23 20:12*	*1*
Terphenyl-d14	*68*		*44 - 149*	*11/30/23 14:11*	*12/05/23 20:12*	*1*
2,4,6-Tribromophenol	*65*		*26 - 150*	*11/30/23 14:11*	*12/05/23 20:12*	*1*

Method: EPA 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		11/30/23 09:36	11/30/23 18:36	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		11/30/23 09:36	11/30/23 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*11/30/23 09:36*	*11/30/23 18:36*	*1*

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

Job ID: 400-247410-1

Client Sample ID: MW3-ROX-112823
Date Collected: 11/28/23 12:55
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247410-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			12/01/23 18:09	1
Acrolein	ND		20	3.3	ug/L			12/01/23 18:09	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 18:09	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 18:09	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 18:09	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 18:09	1
Bromodichloromethane	ND	*+	1.0	0.50	ug/L			12/01/23 18:09	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 18:09	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 18:09	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			12/01/23 18:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 18:09	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 18:09	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 18:09	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 18:09	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 18:09	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 18:09	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 18:09	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 18:09	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 18:09	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 18:09	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 18:09	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 18:09	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 18:09	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 18:09	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 18:09	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 18:09	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 18:09	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 18:09	1
1,2-Dichloropropane	ND	*+	1.0	0.50	ug/L			12/01/23 18:09	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 18:09	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 18:09	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 18:09	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 18:09	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 18:09	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 18:09	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 18:09	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 18:09	1
Methylene bromide	ND	*+	5.0	0.22	ug/L			12/01/23 18:09	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 18:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 18:09	1
Methyl tert-butyl ether	**0.58**	**J**	1.0	0.22	ug/L			12/01/23 18:09	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 18:09	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 18:09	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 18:09	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 18:09	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 18:09	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 18:09	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 18:09	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/01/23 18:09	1

Client Sample ID: MW3-ROX-112823
Date Collected: 11/28/23 12:55
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247410-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 18:09	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 18:09	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/01/23 18:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 18:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 18:09	1
Tetrachloroethene	ND	*+	1.0	0.90	ug/L			12/01/23 18:09	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 18:09	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 18:09	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 18:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 18:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 18:09	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 18:09	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 18:09	1
Trichloroethene	ND	*+	1.0	0.15	ug/L			12/01/23 18:09	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 18:09	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 18:09	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 18:09	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 18:09	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 18:09	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 18:09	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*12/01/23 18:09*	*1*
Dibromofluoromethane	*91*		*75 - 126*		*12/01/23 18:09*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*12/01/23 18:09*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.094	ug/L		11/30/23 14:11	12/05/23 23:10	1
Acenaphthylene	ND		0.19	0.042	ug/L		11/30/23 14:11	12/05/23 23:10	1
Anthracene	ND		0.19	0.045	ug/L		11/30/23 14:11	12/05/23 23:10	1
Benzo[a]anthracene	**0.033**	**J**	0.19	0.032	ug/L		11/30/23 14:11	12/05/23 23:10	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		11/30/23 14:11	12/05/23 23:10	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		11/30/23 14:11	12/05/23 23:10	1
Benzo[g,h,i]perylene	**0.034**	**J**	0.19	0.026	ug/L		11/30/23 14:11	12/05/23 23:10	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		11/30/23 14:11	12/05/23 23:10	1
Chrysene	ND		0.19	0.031	ug/L		11/30/23 14:11	12/05/23 23:10	1
Dibenz(a,h)anthracene	**0.056**	**J**	0.19	0.045	ug/L		11/30/23 14:11	12/05/23 23:10	1
Fluoranthene	ND		0.19	0.032	ug/L		11/30/23 14:11	12/05/23 23:10	1
Fluorene	ND		0.19	0.084	ug/L		11/30/23 14:11	12/05/23 23:10	1
Indeno[1,2,3-cd]pyrene	**0.059**	**J**	0.19	0.032	ug/L		11/30/23 14:11	12/05/23 23:10	1
Phenanthrene	ND		0.19	0.085	ug/L		11/30/23 14:11	12/05/23 23:10	1
Pyrene	ND		0.19	0.037	ug/L		11/30/23 14:11	12/05/23 23:10	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		11/30/23 14:11	12/05/23 23:10	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		11/30/23 14:11	12/05/23 23:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*39*		*18 - 147*	*11/30/23 14:11*	*12/05/23 23:10*	*1*
2-Fluorobiphenyl	*76*		*15 - 128*	*11/30/23 14:11*	*12/05/23 23:10*	*1*

Client Sample ID: MW3-ROX-112823
Date Collected: 11/28/23 12:55
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247410-6
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*75*		*10 - 144*	*11/30/23 14:11*	*12/05/23 23:10*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.19	0.094	ug/L		12/12/23 10:44	12/13/23 21:27	1
Acenaphthylene	ND	H	0.19	0.042	ug/L		12/12/23 10:44	12/13/23 21:27	1
Anthracene	ND	H	0.19	0.044	ug/L		12/12/23 10:44	12/13/23 21:27	1
Benzo[a]anthracene	ND	H	0.19	0.032	ug/L		12/12/23 10:44	12/13/23 21:27	1
Benzo[a]pyrene	ND	H	0.19	0.060	ug/L		12/12/23 10:44	12/13/23 21:27	1
Benzo[b]fluoranthene	ND	H	0.19	0.035	ug/L		12/12/23 10:44	12/13/23 21:27	1
Benzo[g,h,i]perylene	ND	H	0.19	0.026	ug/L		12/12/23 10:44	12/13/23 21:27	1
Benzo[k]fluoranthene	ND	H	0.19	0.059	ug/L		12/12/23 10:44	12/13/23 21:27	1
Chrysene	ND	H	0.19	0.031	ug/L		12/12/23 10:44	12/13/23 21:27	1
Dibenz(a,h)anthracene	ND	H	0.19	0.045	ug/L		12/12/23 10:44	12/13/23 21:27	1
Fluoranthene	ND	H	0.19	0.032	ug/L		12/12/23 10:44	12/13/23 21:27	1
Fluorene	ND	H	0.19	0.084	ug/L		12/12/23 10:44	12/13/23 21:27	1
Indeno[1,2,3-cd]pyrene	ND	H	0.19	0.032	ug/L		12/12/23 10:44	12/13/23 21:27	1
Phenanthrene	ND	H	0.19	0.085	ug/L		12/12/23 10:44	12/13/23 21:27	1
Pyrene	ND	H	0.19	0.037	ug/L		12/12/23 10:44	12/13/23 21:27	1
1-Methylnaphthalene	ND	H	0.19	0.076	ug/L		12/12/23 10:44	12/13/23 21:27	1
2-Methylnaphthalene	ND	H	0.19	0.062	ug/L		12/12/23 10:44	12/13/23 21:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*59*		*18 - 147*	*12/12/23 10:44*	*12/13/23 21:27*	*1*
2-Fluorobiphenyl	*67*		*15 - 128*	*12/12/23 10:44*	*12/13/23 21:27*	*1*
Nitrobenzene-d5	*67*		*10 - 144*	*12/12/23 10:44*	*12/13/23 21:27*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		11/30/23 14:11	12/05/23 20:33	1
Benzenethiol	ND	*-	9.5	1.6	ug/L		11/30/23 14:11	12/05/23 20:33	1
Benzoic acid	ND		28	6.9	ug/L		11/30/23 14:11	12/05/23 20:33	1
Benzyl alcohol	ND		9.5	1.9	ug/L		11/30/23 14:11	12/05/23 20:33	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		11/30/23 14:11	12/05/23 20:33	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		11/30/23 14:11	12/05/23 20:33	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		11/30/23 14:11	12/05/23 20:33	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		11/30/23 14:11	12/05/23 20:33	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		11/30/23 14:11	12/05/23 20:33	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		11/30/23 14:11	12/05/23 20:33	1
4-Chloroaniline	ND		9.5	3.2	ug/L		11/30/23 14:11	12/05/23 20:33	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		11/30/23 14:11	12/05/23 20:33	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		11/30/23 14:11	12/05/23 20:33	1
2-Chlorophenol	ND		9.5	2.1	ug/L		11/30/23 14:11	12/05/23 20:33	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		11/30/23 14:11	12/05/23 20:33	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		11/30/23 14:11	12/05/23 20:33	1
Dibenzofuran	ND		9.5	0.16	ug/L		11/30/23 14:11	12/05/23 20:33	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		11/30/23 14:11	12/05/23 20:33	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		11/30/23 14:11	12/05/23 20:33	1
Diethyl phthalate	ND		9.5	0.23	ug/L		11/30/23 14:11	12/05/23 20:33	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		11/30/23 14:11	12/05/23 20:33	1

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

Job ID: 400-247410-1

Client Sample ID: MW3-ROX-112823

Date Collected: 11/28/23 12:55
Date Received: 11/29/23 09:32

Lab Sample ID: 400-247410-6

Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.5	0.16	ug/L		11/30/23 14:11	12/05/23 20:33	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		11/30/23 14:11	12/05/23 20:33	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		11/30/23 14:11	12/05/23 20:33	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		11/30/23 14:11	12/05/23 20:33	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		11/30/23 14:11	12/05/23 20:33	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		11/30/23 14:11	12/05/23 20:33	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		11/30/23 14:11	12/05/23 20:33	1
1,4-Dioxane	ND		9.5	0.95	ug/L		11/30/23 14:11	12/05/23 20:33	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		11/30/23 14:11	12/05/23 20:33	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		11/30/23 14:11	12/05/23 20:33	1
Hexachlorocyclopentadiene	ND	*-	19	2.5	ug/L		11/30/23 14:11	12/05/23 20:33	1
Hexachloroethane	ND		9.5	4.0	ug/L		11/30/23 14:11	12/05/23 20:33	1
Indene	ND		9.5	0.95	ug/L		11/30/23 14:11	12/05/23 20:33	1
Isophorone	ND		9.5	0.13	ug/L		11/30/23 14:11	12/05/23 20:33	1
2-Methylphenol	ND		9.5	1.7	ug/L		11/30/23 14:11	12/05/23 20:33	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		11/30/23 14:11	12/05/23 20:33	1
2-Nitroaniline	ND		9.5	2.1	ug/L		11/30/23 14:11	12/05/23 20:33	1
3-Nitroaniline	ND		9.5	1.7	ug/L		11/30/23 14:11	12/05/23 20:33	1
4-Nitroaniline	ND		9.5	1.4	ug/L		11/30/23 14:11	12/05/23 20:33	1
Nitrobenzene	ND		9.5	0.12	ug/L		11/30/23 14:11	12/05/23 20:33	1
2-Nitrophenol	ND		9.5	4.9	ug/L		11/30/23 14:11	12/05/23 20:33	1
4-Nitrophenol	ND		9.5	2.0	ug/L		11/30/23 14:11	12/05/23 20:33	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		11/30/23 14:11	12/05/23 20:33	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		11/30/23 14:11	12/05/23 20:33	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		11/30/23 14:11	12/05/23 20:33	1
Pentachlorophenol	ND		19	1.3	ug/L		11/30/23 14:11	12/05/23 20:33	1
Phenol	ND		9.5	2.5	ug/L		11/30/23 14:11	12/05/23 20:33	1
Pyridine	ND		9.5	3.0	ug/L		11/30/23 14:11	12/05/23 20:33	1
Quinoline	ND		9.5	4.3	ug/L		11/30/23 14:11	12/05/23 20:33	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		11/30/23 14:11	12/05/23 20:33	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		11/30/23 14:11	12/05/23 20:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*91*		*46 - 124*	*11/30/23 14:11*	*12/05/23 20:33*	*1*
2-Fluorophenol	*62*		*13 - 113*	*11/30/23 14:11*	*12/05/23 20:33*	*1*
Nitrobenzene-d5	*80*		*36 - 126*	*11/30/23 14:11*	*12/05/23 20:33*	*1*
Phenol-d5	*74*		*17 - 127*	*11/30/23 14:11*	*12/05/23 20:33*	*1*
Terphenyl-d14	*43*	*S1-*	*44 - 149*	*11/30/23 14:11*	*12/05/23 20:33*	*1*
2,4,6-Tribromophenol	*80*		*26 - 150*	*11/30/23 14:11*	*12/05/23 20:33*	*1*

Method: EPA 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		11/30/23 09:36	11/30/23 18:56	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		11/30/23 09:36	11/30/23 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*80*		*51 - 149*	*11/30/23 09:36*	*11/30/23 18:56*	*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.
E	Result exceeded calibration range.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
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.

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 MONTHLY GW

Job ID: 400-247410-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-130)	(75-126)	(64-132)
400-247410-1	TB-ROX-112823-8260-B	103	93	101
400-247410-3	ROST4PZG-ROX-112823	105	97	98
400-247410-4	ROST4PZC-ROX-112823	106	88	105
400-247410-4 - RA	ROST4PZC-ROX-112823	105	97	98
400-247410-5	MW16-ROX-112823	102	92	101
400-247410-6	MW3-ROX-112823	104	91	101
LCS 400-652468/1001	Lab Control Sample	105	100	101
LCS 400-652928/1002	Lab Control Sample	106	93	100
MB 400-652468/3	Method Blank	104	89	101
MB 400-652928/4	Method Blank	103	94	99

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - 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)
400-247410-3	ROST4PZG-ROX-112823	86	66	77	78	95	77
400-247410-4	ROST4PZC-ROX-112823	78	59	71	69	83	67
400-247410-5	MW16-ROX-112823	83	67	75	74	68	65
400-247410-6	MW3-ROX-112823	91	62	80	74	43 S1-	80
LCS 400-652297/2-A	Lab Control Sample	64	35	76	63	80	77
LCS 400-652297/3-A	Lab Control Sample	73	26	72	58	89	68
LCSD 400-652297/4-A	Lab Control Sample Dup	71	41	70	66	88	66
MB 400-652297/1-A	Method Blank	76	20	79	60	92	72

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-247410-3	ROST4PZG-ROX-112823	81	73	72
400-247410-3 - RERA	ROST4PZG-ROX-112823	68	66	64
400-247410-4	ROST4PZC-ROX-112823	74	67	68
400-247410-4 - RERA	ROST4PZC-ROX-112823	72	71	72
400-247410-5	MW16-ROX-112823	60	73	71
400-247410-6	MW3-ROX-112823	39	76	75

Surrogate Summary

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

Job ID: 400-247410-1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-247410-6 - RERA	MW3-ROX-112823	59	67	67
LCS 400-652297/2-A	Lab Control Sample	70	71	75
LCS 400-653912/2-A	Lab Control Sample	70	74	73
LCSD 400-653912/3-A	Lab Control Sample Dup	64	71	68
MB 400-652297/1-A	Method Blank	117	79	71
MB 400-653912/1-A	Method Blank	75	73	68

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-247410-2	TB-ROX-112823-8011-B	94
400-247410-3	ROST4PZG-ROX-112823	92
400-247410-4	ROST4PZC-ROX-112823	87
400-247410-5	MW16-ROX-112823	94
400-247410-6	MW3-ROX-112823	80
LCS 400-652288/2-A	Lab Control Sample	75
LCSD 400-652288/3-A	Lab Control Sample Dup	75
MB 400-652288/1-A	Method Blank	79

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-247410-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

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

Job ID: 400-247410-1

Client Sample ID: TB-ROX-112823-8260-B
Lab Sample ID: 400-247410-1
Date Collected: 11/28/23 12:00
Matrix: Water
Date Received: 11/29/23 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652468	12/01/23 14:48	BPO	EET PEN

Client Sample ID: TB-ROX-112823-8011-B
Lab Sample ID: 400-247410-2
Date Collected: 11/28/23 12:00
Matrix: Water
Date Received: 11/29/23 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			36 mL	35 mL	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 17:33	PG	EET PEN

Client Sample ID: ROST4PZG-ROX-112823
Lab Sample ID: 400-247410-3
Date Collected: 11/28/23 09:50
Matrix: Water
Date Received: 11/29/23 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652928	12/05/23 08:22	WPD	EET PEN
Total/NA	Prep	3520C			264 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653033	12/05/23 19:30	VC1	EET PEN
Total/NA	Prep	3520C			264 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653064	12/05/23 22:09	S1B	EET PEN
Total/NA	Prep	3520C	RERA		261.8 mL	1 mL	653912	12/12/23 10:44	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	654224	12/13/23 20:47	KJA	EET PEN
Total/NA	Prep	8011			35 mL	35 mL	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 17:54	PG	EET PEN

Client Sample ID: ROST4PZC-ROX-112823
Lab Sample ID: 400-247410-4
Date Collected: 11/28/23 10:35
Matrix: Water
Date Received: 11/29/23 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D	RA	1	5 mL	5 mL	652928	12/05/23 08:44	WPD	EET PEN
Total/NA	Analysis	8260D		1	5 mL	5 mL	652468	12/01/23 17:19	BPO	EET PEN
Total/NA	Prep	3520C			264 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653033	12/05/23 19:51	VC1	EET PEN
Total/NA	Prep	3520C			264 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653064	12/05/23 22:29	S1B	EET PEN
Total/NA	Prep	3520C	RERA		263.6 mL	1 mL	653912	12/12/23 10:44	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	654224	12/13/23 21:07	KJA	EET PEN
Total/NA	Prep	8011			34.5 mL	35 mL	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 18:15	PG	EET PEN

Lab Chronicle

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

Job ID: 400-247410-1

Client Sample ID: MW16-ROX-112823

Lab Sample ID: 400-247410-5

Date Collected: 11/28/23 12:00

Matrix: Water

Date Received: 11/29/23 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652468	12/01/23 17:44	BPO	EET PEN
Total/NA	Prep	3520C			264.6 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653033	12/05/23 20:12	VC1	EET PEN
Total/NA	Prep	3520C			264.6 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653064	12/05/23 22:50	S1B	EET PEN
Total/NA	Prep	8011			34.7 mL	35 mL	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 18:36	PG	EET PEN

Client Sample ID: MW3-ROX-112823

Lab Sample ID: 400-247410-6

Date Collected: 11/28/23 12:55

Matrix: Water

Date Received: 11/29/23 09:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652468	12/01/23 18:09	BPO	EET PEN
Total/NA	Prep	3520C			263.8 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653033	12/05/23 20:33	VC1	EET PEN
Total/NA	Prep	3520C			263.8 mL	1 mL	652297	11/30/23 14:11	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653064	12/05/23 23:10	S1B	EET PEN
Total/NA	Prep	3520C	RERA		264.6 mL	1 mL	653912	12/12/23 10:44	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	654224	12/13/23 21:27	KJA	EET PEN
Total/NA	Prep	8011			35.2 mL	35 mL	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 18:56	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-652288/1-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	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 13:00	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-652297/1-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	652297	11/30/23 10:33	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 15:36	VC1	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	652297	11/30/23 10:33	AR	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	652559	12/01/23 18:06	KJA	EET PEN

Lab Chronicle

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

Job ID: 400-247410-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-652468/3
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	8260D		1	5 mL	5 mL	652468	12/01/23 11:53	BPO	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-652928/4
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	8260D		1	5 mL	5 mL	652928	12/05/23 07:57	WPD	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-653912/1-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	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	654224	12/13/23 18:25	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652288/2-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	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 13:20	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652297/2-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	652297	11/30/23 10:33	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 16:44	VC1	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	652297	11/30/23 10:33	AR	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	652559	12/01/23 18:27	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652297/3-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	652297	11/30/23 10:33	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 15:59	VC1	EET PEN

Lab Chronicle

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

Job ID: 400-247410-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652468/1001
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	8260D		1	5 mL	5 mL	652468	12/01/23 10:42	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652928/1002
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	8260D		1	5 mL	5 mL	652928	12/05/23 07:13	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653912/2-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	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	654224	12/13/23 18:45	KJA	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-652288/3-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	652288	11/30/23 09:36	PG	EET PEN
Total/NA	Analysis	8011		1			652266	11/30/23 13:41	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-652297/4-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	652297	11/30/23 10:33	AR	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	652457	12/01/23 16:21	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653912/3-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	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	654224	12/13/23 19:06	KJA	EET PEN

Laboratory References:
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

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

Job ID: 400-247410-1

GC/MS VOA

Analysis Batch: 652468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247410-1	TB-ROX-112823-8260-B	Total/NA	Water	8260D	
400-247410-4	ROST4PZC-ROX-112823	Total/NA	Water	8260D	
400-247410-5	MW16-ROX-112823	Total/NA	Water	8260D	
400-247410-6	MW3-ROX-112823	Total/NA	Water	8260D	
MB 400-652468/3	Method Blank	Total/NA	Water	8260D	
LCS 400-652468/1001	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 652928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247410-3	ROST4PZG-ROX-112823	Total/NA	Water	8260D	
400-247410-4 - RA	ROST4PZC-ROX-112823	Total/NA	Water	8260D	
MB 400-652928/4	Method Blank	Total/NA	Water	8260D	
LCS 400-652928/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 652297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247410-3	ROST4PZG-ROX-112823	Total/NA	Water	3520C	
400-247410-4	ROST4PZC-ROX-112823	Total/NA	Water	3520C	
400-247410-5	MW16-ROX-112823	Total/NA	Water	3520C	
400-247410-6	MW3-ROX-112823	Total/NA	Water	3520C	
MB 400-652297/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-652297/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-652297/3-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-652297/4-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 652457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-652297/1-A	Method Blank	Total/NA	Water	8270E	652297
LCS 400-652297/2-A	Lab Control Sample	Total/NA	Water	8270E	652297
LCS 400-652297/3-A	Lab Control Sample	Total/NA	Water	8270E	652297
LCSD 400-652297/4-A	Lab Control Sample Dup	Total/NA	Water	8270E	652297

Analysis Batch: 652559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-652297/1-A	Method Blank	Total/NA	Water	8270E SIM	652297
LCS 400-652297/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	652297

Analysis Batch: 653033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247410-3	ROST4PZG-ROX-112823	Total/NA	Water	8270E	652297
400-247410-4	ROST4PZC-ROX-112823	Total/NA	Water	8270E	652297
400-247410-5	MW16-ROX-112823	Total/NA	Water	8270E	652297
400-247410-6	MW3-ROX-112823	Total/NA	Water	8270E	652297

Analysis Batch: 653064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247410-3	ROST4PZG-ROX-112823	Total/NA	Water	8270E SIM	652297
400-247410-4	ROST4PZC-ROX-112823	Total/NA	Water	8270E SIM	652297
400-247410-5	MW16-ROX-112823	Total/NA	Water	8270E SIM	652297

GC/MS Semi VOA (Continued)

Analysis Batch: 653064 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247410-6	MW3-ROX-112823	Total/NA	Water	8270E SIM	652297

Prep Batch: 653912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247410-3 - RERA	ROST4PZG-ROX-112823	Total/NA	Water	3520C	
400-247410-4 - RERA	ROST4PZC-ROX-112823	Total/NA	Water	3520C	
400-247410-6 - RERA	MW3-ROX-112823	Total/NA	Water	3520C	
MB 400-653912/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-653912/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-653912/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 654224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247410-3 - RERA	ROST4PZG-ROX-112823	Total/NA	Water	8270E SIM	653912
400-247410-4 - RERA	ROST4PZC-ROX-112823	Total/NA	Water	8270E SIM	653912
400-247410-6 - RERA	MW3-ROX-112823	Total/NA	Water	8270E SIM	653912
MB 400-653912/1-A	Method Blank	Total/NA	Water	8270E SIM	653912
LCS 400-653912/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	653912
LCSD 400-653912/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	653912

GC Semi VOA

Analysis Batch: 652266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247410-2	TB-ROX-112823-8011-B	Total/NA	Water	8011	652288
400-247410-3	ROST4PZG-ROX-112823	Total/NA	Water	8011	652288
400-247410-4	ROST4PZC-ROX-112823	Total/NA	Water	8011	652288
400-247410-5	MW16-ROX-112823	Total/NA	Water	8011	652288
400-247410-6	MW3-ROX-112823	Total/NA	Water	8011	652288
MB 400-652288/1-A	Method Blank	Total/NA	Water	8011	652288
LCS 400-652288/2-A	Lab Control Sample	Total/NA	Water	8011	652288
LCSD 400-652288/3-A	Lab Control Sample Dup	Total/NA	Water	8011	652288

Prep Batch: 652288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247410-2	TB-ROX-112823-8011-B	Total/NA	Water	8011	
400-247410-3	ROST4PZG-ROX-112823	Total/NA	Water	8011	
400-247410-4	ROST4PZC-ROX-112823	Total/NA	Water	8011	
400-247410-5	MW16-ROX-112823	Total/NA	Water	8011	
400-247410-6	MW3-ROX-112823	Total/NA	Water	8011	
MB 400-652288/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-652288/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-652288/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

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

Job ID: 400-247410-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-652468/3
Matrix: Water
Analysis Batch: 652468

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			12/01/23 11:53	1
Acrolein	ND		20	3.3	ug/L			12/01/23 11:53	1
Acrylonitrile	ND		10	2.8	ug/L			12/01/23 11:53	1
Benzene	ND		1.0	0.50	ug/L			12/01/23 11:53	1
Bromobenzene	ND		1.0	0.54	ug/L			12/01/23 11:53	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/01/23 11:53	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/01/23 11:53	1
Bromoform	ND		5.0	0.25	ug/L			12/01/23 11:53	1
Bromomethane	ND		1.0	0.98	ug/L			12/01/23 11:53	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/01/23 11:53	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/01/23 11:53	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/01/23 11:53	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/01/23 11:53	1
Chloroethane	ND		1.0	0.76	ug/L			12/01/23 11:53	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/01/23 11:53	1
Chloroform	ND		1.0	0.90	ug/L			12/01/23 11:53	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/01/23 11:53	1
Chloromethane	ND		1.0	0.90	ug/L			12/01/23 11:53	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/01/23 11:53	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/01/23 11:53	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/01/23 11:53	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/01/23 11:53	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/01/23 11:53	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/01/23 11:53	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/01/23 11:53	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/01/23 11:53	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/01/23 11:53	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 11:53	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 11:53	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 11:53	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/01/23 11:53	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/01/23 11:53	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/01/23 11:53	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/01/23 11:53	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/01/23 11:53	1
2-Hexanone	ND		25	1.4	ug/L			12/01/23 11:53	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/01/23 11:53	1
Methylene bromide	ND		5.0	0.22	ug/L			12/01/23 11:53	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/01/23 11:53	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/01/23 11:53	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/01/23 11:53	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/01/23 11:53	1
Naphthalene	ND		5.0	3.0	ug/L			12/01/23 11:53	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/01/23 11:53	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/01/23 11:53	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/01/23 11:53	1
o-Xylene	ND		5.0	0.60	ug/L			12/01/23 11:53	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/01/23 11:53	1

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

Lab Sample ID: MB 400-652468/3
Matrix: Water
Analysis Batch: 652468

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			12/01/23 11:53	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/01/23 11:53	1
Styrene	ND		1.0	1.0	ug/L			12/01/23 11:53	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/01/23 11:53	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/01/23 11:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/01/23 11:53	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/01/23 11:53	1
Toluene	ND		1.0	0.90	ug/L			12/01/23 11:53	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/01/23 11:53	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/01/23 11:53	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/01/23 11:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/01/23 11:53	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/01/23 11:53	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/01/23 11:53	1
Trichloroethene	ND		1.0	0.15	ug/L			12/01/23 11:53	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/01/23 11:53	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/01/23 11:53	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/01/23 11:53	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/01/23 11:53	1
Vinyl acetate	ND		25	0.93	ug/L			12/01/23 11:53	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/01/23 11:53	1
Xylenes, Total	ND		10	1.6	ug/L			12/01/23 11:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*12/01/23 11:53*	*1*
Dibromofluoromethane	*89*		*75 - 126*		*12/01/23 11:53*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*12/01/23 11:53*	*1*

Lab Sample ID: LCS 400-652468/1001
Matrix: Water
Analysis Batch: 652468

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	439	*+	ug/L		219	43 - 160
Acrolein	500	420		ug/L		84	38 - 160
Acrylonitrile	500	499		ug/L		100	64 - 142
Benzene	50.0	54.5		ug/L		109	70 - 130
Bromobenzene	50.0	50.0		ug/L		100	70 - 132
Bromochloromethane	50.0	46.1		ug/L		92	70 - 130
Bromodichloromethane	50.0	68.7	*+	ug/L		137	67 - 133
Bromoform	50.0	47.6		ug/L		95	57 - 140
Bromomethane	50.0	49.3		ug/L		99	10 - 160
2-Butanone (MEK)	200	334	*+	ug/L		167	61 - 145
Carbon disulfide	50.0	42.4		ug/L		85	61 - 137
Carbon tetrachloride	50.0	62.3		ug/L		125	61 - 137
Chlorobenzene	50.0	55.3		ug/L		111	70 - 130
Chloroethane	50.0	39.1		ug/L		78	55 - 141
2-Chloroethyl vinyl ether	50.0	66.3		ug/L		133	10 - 160

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

Lab Sample ID: LCS 400-652468/1001
Matrix: Water
Analysis Batch: 652468

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	55.5		ug/L		111	69 - 130
1-Chlorohexane	50.0	54.4		ug/L		109	69 - 130
Chloromethane	50.0	46.2		ug/L		92	58 - 137
cis-1,2-Dichloroethene	50.0	54.5		ug/L		109	68 - 130
cis-1,3-Dichloropropene	50.0	63.3		ug/L		127	69 - 132
Dibromochloromethane	50.0	55.1		ug/L		110	67 - 135
1,2-Dichlorobenzene	50.0	52.0		ug/L		104	67 - 130
1,3-Dichlorobenzene	50.0	52.8		ug/L		106	70 - 130
1,4-Dichlorobenzene	50.0	52.9		ug/L		106	70 - 130
Dichlorodifluoromethane	50.0	48.5		ug/L		97	41 - 146
1,1-Dichloroethane	50.0	51.7		ug/L		103	70 - 130
1,2-Dichloroethane	50.0	62.6		ug/L		125	69 - 130
1,1-Dichloroethene	50.0	48.1		ug/L		96	63 - 134
1,2-Dichloropropane	50.0	67.6	*+	ug/L		135	70 - 130
1,3-Dichloropropane	50.0	54.8		ug/L		110	70 - 130
2,2-Dichloropropane	50.0	53.1		ug/L		106	52 - 135
1,1-Dichloropropene	50.0	55.5		ug/L		111	70 - 130
Ethylbenzene	50.0	57.4		ug/L		115	70 - 130
Ethyl methacrylate	50.0	54.6		ug/L		109	68 - 130
Hexachlorobutadiene	50.0	67.9		ug/L		136	53 - 140
2-Hexanone	200	274		ug/L		137	65 - 137
Isopropylbenzene	50.0	58.1		ug/L		116	70 - 130
Methylene bromide	50.0	68.1	*+	ug/L		136	70 - 130
Methylene Chloride	50.0	47.5		ug/L		95	66 - 135
4-Methyl-2-pentanone (MIBK)	200	271		ug/L		136	69 - 138
Methyl tert-butyl ether	50.0	51.2		ug/L		102	66 - 130
m-Xylene & p-Xylene	50.0	58.3		ug/L		117	70 - 130
Naphthalene	50.0	53.5		ug/L		107	47 - 149
n-Butylbenzene	50.0	56.9		ug/L		114	67 - 130
N-Propylbenzene	50.0	54.1		ug/L		108	70 - 130
o-Chlorotoluene	50.0	54.9		ug/L		110	70 - 130
o-Xylene	50.0	55.7		ug/L		111	70 - 130
p-Chlorotoluene	50.0	56.9		ug/L		114	70 - 130
p-Isopropyltoluene	50.0	55.2		ug/L		110	65 - 130
sec-Butylbenzene	50.0	55.1		ug/L		110	66 - 130
Styrene	50.0	53.1		ug/L		106	70 - 130
tert-Butylbenzene	50.0	57.9		ug/L		116	64 - 139
1,1,1,2-Tetrachloroethane	50.0	54.1		ug/L		108	67 - 131
1,1,2,2-Tetrachloroethane	50.0	35.3		ug/L		71	70 - 131
Tetrachloroethene	50.0	79.6	*+	ug/L		159	65 - 130
Toluene	50.0	55.1		ug/L		110	70 - 130
trans-1,2-Dichloroethene	50.0	47.7		ug/L		95	70 - 130
trans-1,3-Dichloropropene	50.0	53.5		ug/L		107	63 - 130
1,2,3-Trichlorobenzene	50.0	54.4		ug/L		109	60 - 138
1,2,4-Trichlorobenzene	50.0	54.5		ug/L		109	60 - 140
1,1,1-Trichloroethane	50.0	59.4		ug/L		119	68 - 130
1,1,2-Trichloroethane	50.0	54.8		ug/L		110	70 - 130
Trichloroethene	50.0	69.2	*+	ug/L		138	70 - 130
Trichlorofluoromethane	50.0	43.4		ug/L		87	65 - 138

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

Lab Sample ID: LCS 400-652468/1001
Matrix: Water
Analysis Batch: 652468

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	51.7		ug/L		103	70 - 130
1,2,4-Trimethylbenzene	50.0	55.1		ug/L		110	70 - 130
1,3,5-Trimethylbenzene	50.0	55.4		ug/L		111	69 - 130
Vinyl acetate	100	94.7		ug/L		95	26 - 160
Vinyl chloride	50.0	44.3		ug/L		89	59 - 136
Xylenes, Total	100	114		ug/L		114	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*72 - 130*
Dibromofluoromethane	*100*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

Lab Sample ID: MB 400-652928/4
Matrix: Water
Analysis Batch: 652928

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			12/05/23 07:57	1
Acrolein	ND		20	3.3	ug/L			12/05/23 07:57	1
Acrylonitrile	ND		10	2.8	ug/L			12/05/23 07:57	1
Benzene	ND		1.0	0.50	ug/L			12/05/23 07:57	1
Bromobenzene	ND		1.0	0.54	ug/L			12/05/23 07:57	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/05/23 07:57	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/05/23 07:57	1
Bromoform	ND		5.0	0.25	ug/L			12/05/23 07:57	1
Bromomethane	ND		1.0	0.98	ug/L			12/05/23 07:57	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/05/23 07:57	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/05/23 07:57	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/05/23 07:57	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/05/23 07:57	1
Chloroethane	ND		1.0	0.76	ug/L			12/05/23 07:57	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/05/23 07:57	1
Chloroform	ND		1.0	0.90	ug/L			12/05/23 07:57	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/05/23 07:57	1
Chloromethane	ND		1.0	0.90	ug/L			12/05/23 07:57	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/05/23 07:57	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/05/23 07:57	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/05/23 07:57	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/05/23 07:57	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/05/23 07:57	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/05/23 07:57	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/05/23 07:57	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/05/23 07:57	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/05/23 07:57	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 07:57	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 07:57	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 07:57	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 07:57	1

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

Lab Sample ID: MB 400-652928/4
Matrix: Water
Analysis Batch: 652928

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			12/05/23 07:57	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/05/23 07:57	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/05/23 07:57	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/05/23 07:57	1
2-Hexanone	ND		25	1.4	ug/L			12/05/23 07:57	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/05/23 07:57	1
Methylene bromide	ND		5.0	0.22	ug/L			12/05/23 07:57	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/05/23 07:57	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/05/23 07:57	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/05/23 07:57	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/05/23 07:57	1
Naphthalene	ND		5.0	3.0	ug/L			12/05/23 07:57	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/05/23 07:57	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/05/23 07:57	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/05/23 07:57	1
o-Xylene	ND		5.0	0.60	ug/L			12/05/23 07:57	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/05/23 07:57	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/05/23 07:57	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/05/23 07:57	1
Styrene	ND		1.0	1.0	ug/L			12/05/23 07:57	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/05/23 07:57	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/05/23 07:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/05/23 07:57	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/05/23 07:57	1
Toluene	ND		1.0	0.90	ug/L			12/05/23 07:57	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 07:57	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/05/23 07:57	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/05/23 07:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/05/23 07:57	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/05/23 07:57	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/05/23 07:57	1
Trichloroethene	ND		1.0	0.15	ug/L			12/05/23 07:57	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/05/23 07:57	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/05/23 07:57	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/05/23 07:57	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/05/23 07:57	1
Vinyl acetate	ND		25	0.93	ug/L			12/05/23 07:57	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/05/23 07:57	1
Xylenes, Total	ND		10	1.6	ug/L			12/05/23 07:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*12/05/23 07:57*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*12/05/23 07:57*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*12/05/23 07:57*	*1*

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

Lab Sample ID: LCS 400-652928/1002
Matrix: Water
Analysis Batch: 652928

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	178		ug/L		89	43 - 160
Acrolein	250	206		ug/L		83	38 - 160
Acrylonitrile	500	412		ug/L		82	64 - 142
Benzene	50.0	45.1		ug/L		90	70 - 130
Bromobenzene	50.0	46.7		ug/L		93	70 - 132
Bromochloromethane	50.0	41.5		ug/L		83	70 - 130
Bromodichloromethane	50.0	45.9		ug/L		92	67 - 133
Bromoform	50.0	49.3		ug/L		99	57 - 140
Bromomethane	25.0	20.8		ug/L		83	10 - 160
2-Butanone (MEK)	200	191		ug/L		95	61 - 145
Carbon disulfide	50.0	41.3		ug/L		83	61 - 137
Carbon tetrachloride	50.0	45.2		ug/L		90	61 - 137
Chlorobenzene	50.0	45.3		ug/L		91	70 - 130
Chloroethane	25.0	20.1		ug/L		80	55 - 141
2-Chloroethyl vinyl ether	25.0	17.3		ug/L		69	10 - 160
Chloroform	50.0	42.9		ug/L		86	69 - 130
1-Chlorohexane	50.0	50.0		ug/L		100	69 - 130
Chloromethane	25.0	24.0		ug/L		96	58 - 137
cis-1,2-Dichloroethene	50.0	44.4		ug/L		89	68 - 130
cis-1,3-Dichloropropene	50.0	47.0		ug/L		94	69 - 132
Dibromochloromethane	50.0	46.2		ug/L		92	67 - 135
1,2-Dichlorobenzene	50.0	45.6		ug/L		91	67 - 130
1,3-Dichlorobenzene	50.0	48.4		ug/L		97	70 - 130
1,4-Dichlorobenzene	50.0	47.4		ug/L		95	70 - 130
Dichlorodifluoromethane	25.0	17.3		ug/L		69	41 - 146
1,1-Dichloroethane	50.0	44.7		ug/L		89	70 - 130
1,2-Dichloroethane	50.0	40.2		ug/L		80	69 - 130
1,1-Dichloroethene	50.0	42.3		ug/L		85	63 - 134
1,2-Dichloropropane	50.0	47.3		ug/L		95	70 - 130
1,3-Dichloropropane	50.0	44.3		ug/L		89	70 - 130
2,2-Dichloropropane	50.0	45.4		ug/L		91	52 - 135
1,1-Dichloropropene	50.0	44.5		ug/L		89	70 - 130
Ethylbenzene	50.0	47.4		ug/L		95	70 - 130
Ethyl methacrylate	50.0	42.6		ug/L		85	68 - 130
Hexachlorobutadiene	50.0	59.8		ug/L		120	53 - 140
2-Hexanone	200	190		ug/L		95	65 - 137
Isopropylbenzene	50.0	46.6		ug/L		93	70 - 130
Methylene bromide	50.0	40.9		ug/L		82	70 - 130
Methylene Chloride	50.0	42.4		ug/L		85	66 - 135
4-Methyl-2-pentanone (MIBK)	200	158		ug/L		79	69 - 138
Methyl tert-butyl ether	50.0	41.2		ug/L		82	66 - 130
m-Xylene & p-Xylene	50.0	47.5		ug/L		95	70 - 130
Naphthalene	50.0	40.7		ug/L		81	47 - 149
n-Butylbenzene	50.0	47.5		ug/L		95	67 - 130
N-Propylbenzene	50.0	47.8		ug/L		96	70 - 130
o-Chlorotoluene	50.0	47.7		ug/L		95	70 - 130
o-Xylene	50.0	46.8		ug/L		94	70 - 130
p-Chlorotoluene	50.0	47.1		ug/L		94	70 - 130

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

Lab Sample ID: LCS 400-652928/1002
Matrix: Water
Analysis Batch: 652928

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	48.7		ug/L		97	65 - 130
sec-Butylbenzene	50.0	48.4		ug/L		97	66 - 130
Styrene	50.0	44.2		ug/L		88	70 - 130
tert-Butylbenzene	50.0	53.5		ug/L		107	64 - 139
1,1,1,2-Tetrachloroethane	50.0	47.5		ug/L		95	67 - 131
1,1,2,2-Tetrachloroethane	50.0	40.4		ug/L		81	70 - 131
Tetrachloroethene	50.0	45.8		ug/L		92	65 - 130
Toluene	50.0	46.0		ug/L		92	70 - 130
trans-1,2-Dichloroethene	50.0	45.0		ug/L		90	70 - 130
trans-1,3-Dichloropropene	50.0	45.0		ug/L		90	63 - 130
1,2,3-Trichlorobenzene	50.0	49.5		ug/L		99	60 - 138
1,2,4-Trichlorobenzene	50.0	50.3		ug/L		101	60 - 140
1,1,1-Trichloroethane	50.0	43.7		ug/L		87	68 - 130
1,1,2-Trichloroethane	50.0	44.0		ug/L		88	70 - 130
Trichloroethene	50.0	44.2		ug/L		88	70 - 130
Trichlorofluoromethane	25.0	20.7		ug/L		83	65 - 138
1,2,3-Trichloropropane	50.0	40.0		ug/L		80	70 - 130
1,2,4-Trimethylbenzene	50.0	47.2		ug/L		94	70 - 130
1,3,5-Trimethylbenzene	50.0	47.5		ug/L		95	69 - 130
Vinyl acetate	50.0	40.0		ug/L		80	26 - 160
Vinyl chloride	25.0	22.1		ug/L		89	59 - 136
Xylenes, Total	100	94.3		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*72 - 130*
Dibromofluoromethane	*93*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-652297/1-A
Matrix: Water
Analysis Batch: 652457

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		11/30/23 10:33	12/01/23 15:36	1
Benzenethiol	ND		10	1.7	ug/L		11/30/23 10:33	12/01/23 15:36	1
Benzoic acid	ND		30	7.3	ug/L		11/30/23 10:33	12/01/23 15:36	1
Benzyl alcohol	ND		10	2.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		11/30/23 10:33	12/01/23 15:36	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		11/30/23 10:33	12/01/23 15:36	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		11/30/23 10:33	12/01/23 15:36	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		11/30/23 10:33	12/01/23 15:36	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		11/30/23 10:33	12/01/23 15:36	1
4-Chloroaniline	ND		10	3.4	ug/L		11/30/23 10:33	12/01/23 15:36	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		11/30/23 10:33	12/01/23 15:36	1
2-Chloronaphthalene	ND		10	0.14	ug/L		11/30/23 10:33	12/01/23 15:36	1
2-Chlorophenol	ND		10	2.2	ug/L		11/30/23 10:33	12/01/23 15:36	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-652297/1-A
Matrix: Water
Analysis Batch: 652457

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
Dibenzofuran	ND		10	0.17	ug/L		11/30/23 10:33	12/01/23 15:36	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
Diethyl phthalate	ND		10	0.24	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		11/30/23 10:33	12/01/23 15:36	1
Dimethyl phthalate	ND		10	0.17	ug/L		11/30/23 10:33	12/01/23 15:36	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		11/30/23 10:33	12/01/23 15:36	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		11/30/23 10:33	12/01/23 15:36	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		11/30/23 10:33	12/01/23 15:36	1
1,4-Dioxane	ND		10	1.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
Hexachlorobenzene	ND		10	0.17	ug/L		11/30/23 10:33	12/01/23 15:36	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		11/30/23 10:33	12/01/23 15:36	1
Hexachloroethane	ND		10	4.2	ug/L		11/30/23 10:33	12/01/23 15:36	1
Indene	ND		10	1.0	ug/L		11/30/23 10:33	12/01/23 15:36	1
Isophorone	ND		10	0.14	ug/L		11/30/23 10:33	12/01/23 15:36	1
2-Methylphenol	ND		10	1.8	ug/L		11/30/23 10:33	12/01/23 15:36	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		11/30/23 10:33	12/01/23 15:36	1
2-Nitroaniline	ND		10	2.2	ug/L		11/30/23 10:33	12/01/23 15:36	1
3-Nitroaniline	ND		10	1.8	ug/L		11/30/23 10:33	12/01/23 15:36	1
4-Nitroaniline	ND		10	1.5	ug/L		11/30/23 10:33	12/01/23 15:36	1
Nitrobenzene	ND		10	0.13	ug/L		11/30/23 10:33	12/01/23 15:36	1
2-Nitrophenol	ND		10	5.2	ug/L		11/30/23 10:33	12/01/23 15:36	1
4-Nitrophenol	ND		10	2.1	ug/L		11/30/23 10:33	12/01/23 15:36	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		11/30/23 10:33	12/01/23 15:36	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		11/30/23 10:33	12/01/23 15:36	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		11/30/23 10:33	12/01/23 15:36	1
Pentachlorophenol	ND		20	1.4	ug/L		11/30/23 10:33	12/01/23 15:36	1
Phenol	ND		10	2.6	ug/L		11/30/23 10:33	12/01/23 15:36	1
Pyridine	ND		10	3.2	ug/L		11/30/23 10:33	12/01/23 15:36	1
Quinoline	ND		10	4.5	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		11/30/23 10:33	12/01/23 15:36	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		11/30/23 10:33	12/01/23 15:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*46 - 124*	*11/30/23 10:33*	*12/01/23 15:36*	*1*
2-Fluorophenol	*20*		*13 - 113*	*11/30/23 10:33*	*12/01/23 15:36*	*1*
Nitrobenzene-d5	*79*		*36 - 126*	*11/30/23 10:33*	*12/01/23 15:36*	*1*
Phenol-d5	*60*		*17 - 127*	*11/30/23 10:33*	*12/01/23 15:36*	*1*
Terphenyl-d14	*92*		*44 - 149*	*11/30/23 10:33*	*12/01/23 15:36*	*1*
2,4,6-Tribromophenol	*72*		*26 - 150*	*11/30/23 10:33*	*12/01/23 15:36*	*1*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-652297/2-A
Matrix: Water
Analysis Batch: 652457

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	61.1		ug/L		51	21 - 120
Benzoic acid	120	51.3		ug/L		43	10 - 144
Benzyl alcohol	120	85.5		ug/L		71	28 - 120
Bis(2-chloroethoxy)methane	120	78.9		ug/L		66	47 - 120
Bis(2-chloroethyl)ether	120	93.7		ug/L		78	44 - 120
bis (2-chloroisopropyl) ether	120	74.2		ug/L		62	33 - 121
Bis(2-ethylhexyl) phthalate	120	108		ug/L		90	52 - 147
4-Bromophenyl phenyl ether	120	94.9		ug/L		79	54 - 122
Butyl benzyl phthalate	120	97.5		ug/L		81	54 - 133
4-Chloroaniline	120	66.1		ug/L		55	26 - 120
4-Chloro-3-methylphenol	120	90.5		ug/L		75	48 - 131
2-Chloronaphthalene	120	82.6		ug/L		69	52 - 121
2-Chlorophenol	120	72.6		ug/L		60	40 - 120
4-Chlorophenyl phenyl ether	120	89.3		ug/L		74	56 - 125
Dibenz[a,h]acridine	120	134		ug/L		112	31 - 150
Dibenzofuran	120	83.3		ug/L		69	56 - 122
3,3'-Dichlorobenzidine	160	178		ug/L		111	36 - 132
2,4-Dichlorophenol	120	83.7		ug/L		70	49 - 120
Diethyl phthalate	120	95.6		ug/L		80	50 - 137
2,4-Dimethylphenol	120	83.5		ug/L		70	48 - 120
Dimethyl phthalate	120	87.2		ug/L		73	57 - 124
Di-n-butyl phthalate	120	118		ug/L		98	58 - 126
4,6-Dinitro-ortho-cresol	240	227		ug/L		95	23 - 148
2,4-Dinitrophenol	240	169		ug/L		71	10 - 150
2,4-Dinitrotoluene	120	90.5		ug/L		75	54 - 142
2,6-Dinitrotoluene	120	89.9		ug/L		75	55 - 130
Di-n-octyl phthalate	120	110		ug/L		91	57 - 138
1,4-Dioxane	120	62.2		ug/L		52	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	86.9		ug/L		72	45 - 124
Hexachlorobenzene	120	105		ug/L		87	52 - 129
Hexachlorocyclopentadiene	120	8.76	J *-	ug/L		7	10 - 134
Hexachloroethane	120	84.7		ug/L		71	20 - 120
Indene	120	96.1		ug/L		80	49 - 120
Isophorone	120	83.7		ug/L		70	48 - 120
2-Methylphenol	120	88.8		ug/L		74	46 - 124
3 & 4 Methylphenol	120	82.0		ug/L		68	45 - 120
2-Nitroaniline	120	88.4		ug/L		74	51 - 145
3-Nitroaniline	120	79.8		ug/L		66	37 - 127
4-Nitroaniline	120	101		ug/L		84	36 - 137
Nitrobenzene	120	81.4		ug/L		68	45 - 120
2-Nitrophenol	120	86.4		ug/L		72	40 - 124
4-Nitrophenol	240	150		ug/L		63	23 - 146
N-Nitrosodimethylamine	120	75.9		ug/L		63	29 - 137
N-Nitrosodi-n-propylamine	120	77.4		ug/L		65	45 - 120
N-Nitrosodiphenylamine	119	88.1		ug/L		74	54 - 120
Pentachlorophenol	240	178		ug/L		74	31 - 130
Phenol	120	83.1		ug/L		69	11 - 120
Pyridine	240	129		ug/L		54	16 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-652297/2-A
Matrix: Water
Analysis Batch: 652457

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652297

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Quinoline			120	85.1		ug/L		71	49 - 130		
2,4,5-Trichlorophenol			120	81.5		ug/L		68	51 - 136		
2,4,6-Trichlorophenol			120	82.8		ug/L		69	50 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*64*		*46 - 124*
2-Fluorophenol	*35*		*13 - 113*
Nitrobenzene-d5	*76*		*36 - 126*
Phenol-d5	*63*		*17 - 127*
Terphenyl-d14	*80*		*44 - 149*
2,4,6-Tribromophenol	*77*		*26 - 150*

Lab Sample ID: LCS 400-652297/3-A
Matrix: Water
Analysis Batch: 652457

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652297

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	5.96	J *-	ug/L		5	10 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*46 - 124*
2-Fluorophenol	*26*		*13 - 113*
Nitrobenzene-d5	*72*		*36 - 126*
Phenol-d5	*58*		*17 - 127*
Terphenyl-d14	*89*		*44 - 149*
2,4,6-Tribromophenol	*68*		*26 - 150*

Lab Sample ID: LCSD 400-652297/4-A
Matrix: Water
Analysis Batch: 652457

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652297

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	5.87	J *-	ug/L		5	10 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*71*		*46 - 124*
2-Fluorophenol	*41*		*13 - 113*
Nitrobenzene-d5	*70*		*36 - 126*
Phenol-d5	*66*		*17 - 127*
Terphenyl-d14	*88*		*44 - 149*
2,4,6-Tribromophenol	*66*		*26 - 150*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-652297/1-A
Matrix: Water
Analysis Batch: 652559

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		11/30/23 10:33	12/01/23 18:06	1
Acenaphthylene	ND		0.20	0.044	ug/L		11/30/23 10:33	12/01/23 18:06	1
Anthracene	ND		0.20	0.047	ug/L		11/30/23 10:33	12/01/23 18:06	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		11/30/23 10:33	12/01/23 18:06	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		11/30/23 10:33	12/01/23 18:06	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		11/30/23 10:33	12/01/23 18:06	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		11/30/23 10:33	12/01/23 18:06	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		11/30/23 10:33	12/01/23 18:06	1
Chrysene	ND		0.20	0.033	ug/L		11/30/23 10:33	12/01/23 18:06	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		11/30/23 10:33	12/01/23 18:06	1
Fluoranthene	ND		0.20	0.034	ug/L		11/30/23 10:33	12/01/23 18:06	1
Fluorene	ND		0.20	0.089	ug/L		11/30/23 10:33	12/01/23 18:06	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		11/30/23 10:33	12/01/23 18:06	1
Phenanthrene	ND		0.20	0.090	ug/L		11/30/23 10:33	12/01/23 18:06	1
Pyrene	ND		0.20	0.039	ug/L		11/30/23 10:33	12/01/23 18:06	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		11/30/23 10:33	12/01/23 18:06	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		11/30/23 10:33	12/01/23 18:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*117*		*18 - 147*	*11/30/23 10:33*	*12/01/23 18:06*	*1*
2-Fluorobiphenyl	*79*		*15 - 128*	*11/30/23 10:33*	*12/01/23 18:06*	*1*
Nitrobenzene-d5	*71*		*10 - 144*	*11/30/23 10:33*	*12/01/23 18:06*	*1*

Lab Sample ID: LCS 400-652297/2-A
Matrix: Water
Analysis Batch: 652559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652297

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	95.9		ug/L		80	40 - 140
Acenaphthylene	120	98.0		ug/L		82	40 - 140
Anthracene	120	92.8		ug/L		77	40 - 140
Benzo[a]anthracene	120	111		ug/L		92	40 - 140
Benzo[a]pyrene	120	88.4		ug/L		74	40 - 140
Benzo[b]fluoranthene	120	103		ug/L		85	40 - 140
Benzo[g,h,i]perylene	120	91.0		ug/L		76	40 - 140
Benzo[k]fluoranthene	120	95.4		ug/L		80	40 - 140
Chrysene	120	91.6		ug/L		76	40 - 140
Dibenz(a,h)anthracene	120	93.8		ug/L		78	40 - 140
Fluoranthene	120	99.7		ug/L		83	40 - 140
Fluorene	120	97.5		ug/L		81	40 - 140
Indeno[1,2,3-cd]pyrene	120	92.7		ug/L		77	40 - 140
Phenanthrene	120	89.7		ug/L		75	40 - 140
Pyrene	120	96.9		ug/L		81	40 - 140
1-Methylnaphthalene	120	82.5		ug/L		69	40 - 140
2-Methylnaphthalene	120	84.5		ug/L		70	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*70*		*18 - 147*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 400-652297/2-A
Matrix: Water
Analysis Batch: 652559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652297

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*71*		*15 - 128*
Nitrobenzene-d5	*75*		*10 - 144*

Lab Sample ID: MB 400-653912/1-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		12/12/23 10:43	12/13/23 18:25	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/12/23 10:43	12/13/23 18:25	1
Anthracene	ND		0.20	0.047	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/12/23 10:43	12/13/23 18:25	1
Chrysene	ND		0.20	0.033	ug/L		12/12/23 10:43	12/13/23 18:25	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/12/23 10:43	12/13/23 18:25	1
Fluoranthene	ND		0.20	0.034	ug/L		12/12/23 10:43	12/13/23 18:25	1
Fluorene	ND		0.20	0.089	ug/L		12/12/23 10:43	12/13/23 18:25	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/12/23 10:43	12/13/23 18:25	1
Phenanthrene	ND		0.20	0.090	ug/L		12/12/23 10:43	12/13/23 18:25	1
Pyrene	ND		0.20	0.039	ug/L		12/12/23 10:43	12/13/23 18:25	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		12/12/23 10:43	12/13/23 18:25	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		12/12/23 10:43	12/13/23 18:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*75*		*18 - 147*	*12/12/23 10:43*	*12/13/23 18:25*	*1*
2-Fluorobiphenyl	*73*		*15 - 128*	*12/12/23 10:43*	*12/13/23 18:25*	*1*
Nitrobenzene-d5	*68*		*10 - 144*	*12/12/23 10:43*	*12/13/23 18:25*	*1*

Lab Sample ID: LCS 400-653912/2-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653912

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	105		ug/L		87	40 - 140
Acenaphthylene	120	120		ug/L		100	40 - 140
Anthracene	120	121		ug/L		101	40 - 140
Benzo[a]anthracene	120	149	E	ug/L		124	40 - 140
Benzo[a]pyrene	120	118		ug/L		98	40 - 140
Benzo[b]fluoranthene	120	119		ug/L		99	40 - 140
Benzo[g,h,i]perylene	120	92.6		ug/L		77	40 - 140
Benzo[k]fluoranthene	120	104		ug/L		86	40 - 140
Chrysene	120	104		ug/L		87	40 - 140
Dibenz(a,h)anthracene	120	108		ug/L		90	40 - 140
Fluoranthene	120	118		ug/L		98	40 - 140
Fluorene	120	109		ug/L		91	40 - 140

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 400-653912/2-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653912

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Indeno[1,2,3-cd]pyrene			120	106		ug/L		88	40 - 140		
Phenanthrene			120	103		ug/L		86	40 - 140		
Pyrene			120	97.0		ug/L		81	40 - 140		
1-Methylnaphthalene			120	86.9		ug/L		72	40 - 140		
2-Methylnaphthalene			120	90.7		ug/L		76	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*70*		*18 - 147*
2-Fluorobiphenyl	*74*		*15 - 128*
Nitrobenzene-d5	*73*		*10 - 144*

Lab Sample ID: LCSD 400-653912/3-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653912

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	99.9		ug/L		83	40 - 140	5	40
Acenaphthylene			120	114		ug/L		95	40 - 140	6	40
Anthracene			120	115		ug/L		96	40 - 140	5	40
Benzo[a]anthracene			120	139	E	ug/L		115	40 - 140	7	40
Benzo[a]pyrene			120	114		ug/L		95	40 - 140	3	40
Benzo[b]fluoranthene			120	120		ug/L		100	40 - 140	1	40
Benzo[g,h,i]perylene			120	89.1		ug/L		74	40 - 140	4	40
Benzo[k]fluoranthene			120	105		ug/L		87	40 - 140	1	40
Chrysene			120	99.1		ug/L		83	40 - 140	5	40
Dibenz(a,h)anthracene			120	103		ug/L		86	40 - 140	5	40
Fluoranthene			120	113		ug/L		94	40 - 140	4	40
Fluorene			120	105		ug/L		87	40 - 140	5	40
Indeno[1,2,3-cd]pyrene			120	101		ug/L		84	40 - 140	4	40
Phenanthrene			120	99.0		ug/L		82	40 - 140	4	40
Pyrene			120	90.5		ug/L		75	40 - 140	7	40
1-Methylnaphthalene			120	81.5		ug/L		68	40 - 140	6	40
2-Methylnaphthalene			120	84.3		ug/L		70	40 - 140	7	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*64*		*18 - 147*
2-Fluorobiphenyl	*71*		*15 - 128*
Nitrobenzene-d5	*68*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-652288/1-A
Matrix: Water
Analysis Batch: 652266

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652288

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		11/30/23 09:36	11/30/23 13:00	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		11/30/23 09:36	11/30/23 13:00	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-652288/1-A
Matrix: Water
Analysis Batch: 652266

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652288

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	79		51 - 149	11/30/23 09:36	11/30/23 13:00	1

Lab Sample ID: LCS 400-652288/2-A
Matrix: Water
Analysis Batch: 652266

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652288

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0985		ug/L		98	60 - 140		
1,2-Dibromoethane			0.100	0.0901		ug/L		90	60 - 140		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	75		51 - 149

Lab Sample ID: LCSD 400-652288/3-A
Matrix: Water
Analysis Batch: 652266

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652288

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.100		ug/L		99	60 - 140	2	30
1,2-Dibromoethane			0.100	0.0898		ug/L		90	60 - 140	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	75		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
Melissa Remiger	25278	DATE: 11/28/2023
PO #	**GSAP Project ID**	PAGE: 2 of 2
60697537 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS: Street and City	State	AECOM Project / Task Number:
AECOM		900 South Central Ave; ROXANA	IL	Roxana Monthly GW 60697537 -- 3.4.2

ADDRESS:	EDF DELIVERABLE TO (Name, Company, Office Location):	PHONE NO.:	E-MAIL:	AECOM Other ID:
100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA	Melissa Remiger - please see special instructions	314-802-1207	melissa.remiger@aecom.com	

PROJECT CONTACT (Hardcopy or PDF Report to):	SAMPLER NAME(S) (Print):	LAB USE ONLY
Melissa Remiger, Mary Massa, Brett Howell	M. Massa, T. Jones	

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

*** Please include "J" values on Reports.**
*** Please provide sample receipt upon login.**
*** Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com**

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

400-247410 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 8270 SIMS
	TB-ROX-112823-8260-B	11/28/2023	0000	Water	2					2	X			
	TB-ROX-112823-8011-B	11/28/2023	0000	Water	2					2		X		
	ROST4PZG-ROX-112823	11/28/2023	0950	Water	6			2		8	X	X	X	X
	ROST4PZC-ROX-112823	11/28/2023	1035	Water	6			2		8	X	X	X	X
	MW16-ROX-112823	11/28/2023	1200	Water	6			2		8	X	X	X	X
	MW3-ROX-112823	11/28/2023	1255	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
MARY MASSA	FEDEX: See page 1	11/28/2023	1600
Relinquished by: (Signature)	Received by: (Signature) BP	Date: 11/29/23	Time: 932
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: See page 1

1.1°C 0.2°C FRID

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-247410-1

Login Number: 247410
List Number: 1
Creator: Roberts, Alexis J

List Source: Eurofins 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	1.1°C, 0.2°C IR10
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: 400-247410-1
Project/Site: ROXANA MONTHLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Roxana Groundwater Monthly – November/December 2023 Data Review

Laboratory SDG: 400-247491-1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 1/4/2024

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

Sample Identification	Sample Identification
TB-ROX-112923-8260	TB-ROX-112923-8011
MW12-ROX-112923	MW13-ROX-112923
P114R-ROX-112923	--

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 were re-extracted outside extraction time criteria in samples MW12-ROX-112923, MW13-ROX-112923, and P114R-ROX-112923. SVOCs in sample MW13-ROX-112923 were also re-extracted outside of the extraction time criteria. Several SVOC LCS/LCSD recoveries, and/or SVOC LCS/LCSD RPDs, were outside evaluation criteria. Several SVOC surrogate recoveries were outside criteria in several investigative and quality control samples. Several VOC MS/MSD recoveries were outside evaluation criteria in sample MW12-ROX-112923. The continuing calibration verification (CCV) for several analytes was outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (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, PAHs in samples MW12-ROX-112923, MW13-ROX-112923, and P114R-ROX-112923 were re-extracted 7 days outside of extraction time criteria (7 days) for confirmation; the samples were re-extracted out of hold time and the results were non-detect. Holding time exceedances were not greater than two times (2X) criteria; both sets of data are reported.

The results for the re-extracted and re-analyzed sample P114R-ROX-112923 were

comparable to the initial results; both sets of data are reported. Based on professional judgement, the results from the initial analysis were used for the purposes of this report.

With regard to initial MW12-ROX-112923 and MW13-ROX-112923 PAH data, the laboratory previously issued a Corrective Action Report (CAR) stating that through confirmation analyses, many previous detections were not confirmed and were therefore deemed laboratory contamination. Based on professional judgement, the results from the re-analysis were used for the purposes of this report.

SVOCs in sample MW13-ROX-112923 were re-extracted 7 days outside of extraction time criteria (7 days) due to initial failing basic surrogate recoveries. Holding time exceedances were not greater than two times (2X) criteria; both sets of data are reported. Therefore, using professional judgement, basic SVOCs in sample MW13-ROX-112923 were reported from the secondary run due to failing basic surrogate recoveries in the initial run. Acid SVOCs in sample MW13-ROX-112923 were reported from the initial run due to extraction time exceedance in the re-extracted secondary run.

Data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW12-ROX-112923—RERA	PAHs	All non-detects	**UJ**
MW13-ROX-112923—RERA	PAHs	All non-detects	**UJ**
MW13-ROX-112923—RERA	SVOCs	Hexachlorobenzene	**UJ**
MW13-ROX-112923—RERA	SVOCs	4-Nitroaniline	**UJ**
MW13-ROX-112923—RERA	SVOCs	Nitrobenzene	**UJ**
MW13-ROX-112923—RERA	SVOCs	3-Nitroaniline	**UJ**
MW13-ROX-112923—RERA	SVOCs	Indene	**UJ**
MW13-ROX-112923—RERA	SVOCs	2-Chloronaphthalene	**J**
MW13-ROX-112923—RERA	SVOCs	Quinoline	**UJ**
MW13-ROX-112923—RERA	SVOCs	2-Nitroaniline	**UJ**
MW13-ROX-112923—RERA	SVOCs	Butyl benzyl phthalate	**UJ**
MW13-ROX-112923—RERA	SVOCs	N-Nitrosodiphenylamine	**UJ**
MW13-ROX-112923—RERA	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW13-ROX-112923—RERA	SVOCs	Di-n-butyl phthalate	**UJ**
MW13-ROX-112923—RERA	SVOCs	Isophorone	**UJ**
MW13-ROX-112923—RERA	SVOCs	Diethyl phthalate	**J**
MW13-ROX-112923—RERA	SVOCs	Hexachloroethane	**UJ**
MW13-ROX-112923—RERA	SVOCs	4-Chlorophenyl phenyl ether	**UJ**
MW13-ROX-112923—RERA	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW13-ROX-112923—RERA	SVOCs	N-Nitrosodimethylamine	**UJ**
MW13-ROX-112923—RERA	SVOCs	N-Nitrosodi-n-propylamine	**UJ**
MW13-ROX-112923—RERA	SVOCs	2,6-Dinitrotoluene	**UJ**
MW13-ROX-112923—RERA	SVOCs	Aniline	**UJ**
MW13-ROX-112923—RERA	SVOCs	Dibenz[a,h]acridine	**UJ**
MW13-ROX-112923—RERA	SVOCs	Dimethyl phthalate	**J**
MW13-ROX-112923—RERA	SVOCs	Dibenzofuran	**UJ**
MW13-ROX-112923—RERA	SVOCs	2,4-Dinitrotoluene	**UJ**
MW13-ROX-112923—RERA	SVOCs	1,4-Dioxane	**UJ**
MW13-ROX-112923—RERA	SVOCs	Bis(2-chloroethoxy)methane	**UJ**
MW13-ROX-112923—RERA	SVOCs	Bis(2-ethylhexyl)phthalate	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW13-ROX-112923—RERA	SVOCs	Di-n-octyl phthalate	**UJ**
MW13-ROX-112923—RERA	SVOCs	Pyridine	**UJ**
MW13-ROX-112923—RERA	SVOCs	Bis(2-chloroethyl)ether	**UJ**
MW13-ROX-112923—RERA	SVOCs	4-Chloroaniline	**UJ**
MW13-ROX-112923—RERA	SVOCs	bis(2-Chloroisopropyl)ether	**UJ**
MW13-ROX-112923—RERA	SVOCs	4-Bromophenyl phenyl ether	**UJ**
MW13-ROX-112923—RERA	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	**UJ**
MW13-ROX-112923—RERA	SVOCs	Benzenethiol	**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/LCSD 400-652972/4-A/5-A	SVOCs	Benzenethiol	**4**/97	**183**	10-120/30
LCS/LCSD 400-653912/6-A/7-A	SVOCs	Benzenethiol	**5**/13	**95**	10-120/30
LCS/LCD 400-653912/2-A/3-A	SVOCs	Benzoic acid	73/29	**88**	10-144/30
LCS/LCD 400-653912/2-A/3-A	SVOCs	4-Chloro-3-methylphenol	81/58	**33**	48-131/30
LCS/LCD 400-653912/2-A/3-A	SVOCs	2-Chlorophenol	62/**30**	**71**	40-120/30
LCS/LCD 400-653912/2-A/3-A	SVOCs	2,4-Dichlorophenol	76/**41**	**60**	49-120/30
LCS/LCD 400-653912/2-A/3-A	SVOCs	2,4-Dinitrophenol	79/55	**37**	10-150/30
LCS/LCD 400-653912/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	62/**6**	**163**	10-134/30
LCS/LCD 400-653912/2-A/3-A	SVOCs	2-Methylphenol	74/51	**37**	46-124/30
LCS/LCD 400-653912/2-A/3-A	SVOCs	3 & 4 Methylphenol	76/49	**42**	45-120/30
LCS/LCD 400-653912/2-A/3-A	SVOCs	2-Nitrophenol	80/**38**	**71**	40-124/30
LCS/LCD 400-653912/2-A/3-A	SVOCs	Pentachlorophenol	86/58	**30**	31-130/30
LCS/LCD 400-653912/2-A/3-A	SVOCs	Phenol	64/38	**51**	11-120/30
LCS/LCD 400-653912/2-A/3-A	SVOCs	Quinoline	101/70	**37**	49-130/30

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/ RPD Criteria
LCS/LCD 400-653912/2-A/3-A	SVOCs	2,4,5-Trichlorophenol	87/60	**36**	51-136/30
LCS/LCD 400-653912/2-A/3-A	SVOCs	2,4,6-Trichlorophenol	86/58	**41**	50-127/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol below evaluation criteria; benzenethiol have been identified as a poor performing analyte under Method 8270. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification. Basic SVOC analytes in sample MW13-ROX-112923 have been qualified due to hold time exceedances in Section 3.0 of this data review; no further qualification is needed. Acid SVOC analytes in sample MW13-ROX-112923 were reported from the initial run due to extraction time exceedance in the re-extracted secondary run.

Sample ID	Parameter	Analyte	Qualification
MW12-ROX-112923	SVOCs	Benzenethiol	**UJ**
P114R-ROX-112923	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW13-ROX-112923	SVOCs	2-Fluorobiphenyl	**45**	46-124
MW13-ROX-112923	SVOCs	Nitrobenzene-d_5	**34**	36-126
MW13-ROX-112923	SVOCs	Terphenyl-d_{14}	**36**	44-149
P114R-ROX-112923	SVOCs	Terphenyl-d_{14}	**38**	44-149
MB 400-653912/1-A	SVOCs	2-Fluorophenol	**11**	13-113
MB 400-652972/1-A	PAHs	Terphenyl-d_{14}	**158**	18-147

Qualifications due to surrogate recoveries were not required if only one of three base/neutral and/or acid surrogate recoveries were outside evaluation criteria. Method blanks are quality control samples and do not require qualification. Basic SVOCs in sample MW13-ROX-112923 were reported from the re-extracted secondary run due to non-detect data in the initial run; qualifications due to extraction time criteria were reported in Section 3.0 of this data review. 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, sample MW12-ROX-112923 was spiked and duplicated for Method 8260B VOCs.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW12-ROX-112923 MS/MSD	VOCs	Acetone	**29/35**	17	43-150/30
MW12-ROX-112923 MS/MSD	VOCs	2-Butanone (MEK)	**48**/58	18	55-150/30
MW12-ROX-112923 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW12-ROX-112923 MS/MSD	VOCs	2-Hexanone	**53/64**	18	65-140/30

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 2-chloroethyl vinyl ether due to acceptable LCS recoveries and to the acid reactive nature of 2-chloroethyl vinyl ether.

Sample ID	Parameter	Analyte	Qualification
MW12-ROX-112923	VOCs	Acetone	**UJ**
MW12-ROX-112923	VOCs	2-Butanone (MEK)	**UJ**
MW12-ROX-112923	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW12-ROX-112923	VOCs	2-Hexanone	**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?

Yes, the continuing calibration verification (CCV) for chloroethane, trichlorofluoromethane, and benzo[g,h,i]perylene was outside evaluation criteria, biased low. Benzo[g,h,i]perylene in samples MW12-ROX-112923 RERA and MW13-ROX-112923 RERA was previously qualified in Section 3.0 of this data review due to hold time exceedances; no further qualification of benzo[g,h,i]perylene was required. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW-12-ROX-112923	VOCs	Chloroethane	**UJ**
MW-12-ROX-112923	VOCs	Trichlorofluoromethane	**UJ**
MW-13-ROX-112923	VOCs	Chloroethane	**UJ**
MW-13-ROX-112923	VOCs	Trichlorofluoromethane	**UJ**
P114R-ROX-112923	VOCs	Chloroethane	**UJ**
P114R-ROX-112923	VOCs	Trichlorofluoromethane	**UJ**

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 12/19/2023 4:51:21 PM

JOB DESCRIPTION

ROXANA MONTHLY GW

JOB NUMBER

400-247491-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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Authorized for release by
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(615)301-5038

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Job Narrative
400-247491-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 11/30/2023 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 time was 0.0°C

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-652698 recovered outside acceptance criteria, low biased, for Chloroethane and Trichlorofluoromethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-652698 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-652698 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260D: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-652698 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: 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-112923-8260 (400-247491-1), MW-12-ROX-112923 (400-247491-3), MW-13-ROX-112923 (400-247491-4) and P114R-ROX-112923 (400-247491-5). 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 8260D: The initial calibration verification (ICV) analyzed in batch 400-633903 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

GC/MS Semi VOA
Method 8270E: The laboratory control sample (LCS) for preparation batch 400-652972 and analytical batch 400-653218 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 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-652972 and analytical batch 400-653218 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270E: 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: P114R-ROX-112923 (400-247491-5). These results have been reported and qualified.

Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-652774 was outside method criteria for the following

analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: Surrogate recovery for the following sample was outside control limits: MW-13-ROX-112923 (400-247491-4). Re-extraction and/or re-analysis was performed outside of holding time with acceptable results. Both sets of data have been reported.

Method 8270E: 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: (MB 400-653912/1-A). These results have been reported and qualified.

Method 8270E: The laboratory control sample duplicate (/LCSD) for preparation batch 400-653912 and analytical batch 400-654464 recovered outside control limits for the following analyte(s): Hexachlorocyclopentadiene. Hexachlorocyclopentadiene 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 8270E: The following analyte(s) recovered outside control limits for the LCSD associated with preparation batch 400-653912 and analytical batch 400-654464: 2,4-Dichlorophenol, 2-Chlorophenol and 2-Nitrophenol. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-653912 and analytical batch 400-654464 recovered outside control limits for the following analytes: 2,4-Dinitrophenol, 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, Quinoline, Phenol, 4-Chloro-3-methylphenol, Benzoic acid, 2-Methylphenol, 3 & 4 Methylphenol, Pentachlorophenol, Hexachlorocyclopentadiene, 2,4-Dichlorophenol, 2-Chlorophenol and 2-Nitrophenol.

Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-653222 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-653195 recovered above the upper control limit for Benzo[g,h,i]perylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E_SIM: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample: P114R-ROX-112923 (400-247491-5).

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-654224 recovered above the upper control limit for Benzo[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene and Dibenz(a,h)anthracene. The samples associated with this CCV were below the reporting limit for the affected analytes; therefore, the data have been reported.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-654319 recovered above the upper control limit for Benzo[a]anthracene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-654319 recovered outside acceptance criteria, low biased, for Benzo[g,h,i]perylene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E_SIM: The following samples were re-prepared outside of preparation holding time for confirmation: MW-12-ROX-112923 (400-247491-3), MW-13-ROX-112923 (400-247491-4) and P114R-ROX-112923 (400-247491-5). Both sets of data are reported.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-654774 recovered above the upper control limit for Benzo[a]anthracene, Dibenz(a,h)anthracene and Indeno[1,2,3-cd]pyrene. 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
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Job ID: 400-247491-1 (Continued)

Eurofins Pensacola

Sample Summary

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

Job ID: 400-247491-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-247491-1	TB-ROX-112923-8260	Water	11/29/23 12:00	11/30/23 09:28
400-247491-2	TB-ROX-112923-8011	Water	11/29/23 12:00	11/30/23 09:28
400-247491-3	MW-12-ROX-112923	Water	11/29/23 10:15	11/30/23 09:28
400-247491-4	MW-13-ROX-112923	Water	11/29/23 12:05	11/30/23 09:28
400-247491-5	P114R-ROX-112923	Water	11/29/23 12:55	11/30/23 09:28

Detection Summary

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

Job ID: 400-247491-1

Client Sample ID: TB-ROX-112923-8260 — Lab Sample ID: 400-247491-1

No Detections.

Client Sample ID: TB-ROX-112923-8011 — Lab Sample ID: 400-247491-2

No Detections.

Client Sample ID: MW-12-ROX-112923 — Lab Sample ID: 400-247491-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.053	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Benzo[a]pyrene	0.11	J	0.20	0.064	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.055	J	0.20	0.037	ug/L	1		8270E SIM	Total/NA
Dibenz(a,h)anthracene	0.063	J	0.20	0.048	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.079	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW-13-ROX-112923 — Lab Sample ID: 400-247491-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.59	J	1.0	0.22	ug/L	1		8260D	Total/NA
Benzo[a]anthracene	0.053	J	0.21	0.035	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.046	J	0.21	0.038	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.068	J	0.21	0.035	ug/L	1		8270E SIM	Total/NA
2-Chloronaphthalene - RERA	0.19	J H	10	0.15	ug/L	1		8270E	Total/NA
Diethyl phthalate - RERA	0.26	J H	10	0.25	ug/L	1		8270E	Total/NA
Dimethyl phthalate - RERA	1.2	J H	10	0.18	ug/L	1		8270E	Total/NA

Client Sample ID: P114R-ROX-112923 — Lab Sample ID: 400-247491-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.3		1.0	0.22	ug/L	1		8260D	Total/NA
Acenaphthene	0.57		0.20	0.10	ug/L	1		8270E SIM	Total/NA
Anthracene	0.086	J	0.20	0.048	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.053	J	0.20	0.035	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.048	J	0.20	0.038	ug/L	1		8270E SIM	Total/NA
Acenaphthene - RERA	0.59	H	0.21	0.10	ug/L	1		8270E SIM	Total/NA
Acenaphthylene - RERA	0.17	J H	0.21	0.045	ug/L	1		8270E SIM	Total/NA
Fluoranthene - RERA	0.041	J H	0.21	0.035	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene - RERA	0.18	J H	0.41	0.17	ug/L	2		8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-247491-1

Client Sample ID: TB-ROX-112923-8260
Date Collected: 11/29/23 12:00
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247491-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/04/23 09:42	1
Acrolein	ND		20	3.3	ug/L			12/04/23 09:42	1
Acrylonitrile	ND		10	2.8	ug/L			12/04/23 09:42	1
Benzene	ND		1.0	0.50	ug/L			12/04/23 09:42	1
Bromobenzene	ND		1.0	0.54	ug/L			12/04/23 09:42	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/04/23 09:42	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/04/23 09:42	1
Bromoform	ND		5.0	0.25	ug/L			12/04/23 09:42	1
Bromomethane	ND		1.0	0.98	ug/L			12/04/23 09:42	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/04/23 09:42	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/04/23 09:42	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/04/23 09:42	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/04/23 09:42	1
Chloroethane	ND		1.0	0.76	ug/L			12/04/23 09:42	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/04/23 09:42	1
Chloroform	ND		1.0	0.90	ug/L			12/04/23 09:42	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/04/23 09:42	1
Chloromethane	ND		1.0	0.90	ug/L			12/04/23 09:42	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/04/23 09:42	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/04/23 09:42	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/04/23 09:42	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/04/23 09:42	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/04/23 09:42	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/04/23 09:42	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/04/23 09:42	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/04/23 09:42	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/04/23 09:42	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/04/23 09:42	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/04/23 09:42	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/04/23 09:42	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/04/23 09:42	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/04/23 09:42	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/04/23 09:42	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/04/23 09:42	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/04/23 09:42	1
2-Hexanone	ND		25	1.4	ug/L			12/04/23 09:42	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/04/23 09:42	1
Methylene bromide	ND		5.0	0.22	ug/L			12/04/23 09:42	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/04/23 09:42	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/04/23 09:42	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/04/23 09:42	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/04/23 09:42	1
Naphthalene	ND		5.0	3.0	ug/L			12/04/23 09:42	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/04/23 09:42	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/04/23 09:42	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/04/23 09:42	1
o-Xylene	ND		5.0	0.60	ug/L			12/04/23 09:42	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/04/23 09:42	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/04/23 09:42	1

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

Job ID: 400-247491-1

Client Sample ID: TB-ROX-112923-8260
Date Collected: 11/29/23 12:00
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247491-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/04/23 09:42	1
Styrene	ND		1.0	1.0	ug/L			12/04/23 09:42	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/04/23 09:42	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/04/23 09:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/04/23 09:42	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/04/23 09:42	1
Toluene	ND		1.0	0.90	ug/L			12/04/23 09:42	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/04/23 09:42	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/04/23 09:42	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/04/23 09:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/04/23 09:42	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/04/23 09:42	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/04/23 09:42	1
Trichloroethene	ND		1.0	0.15	ug/L			12/04/23 09:42	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/04/23 09:42	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/04/23 09:42	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/04/23 09:42	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/04/23 09:42	1
Vinyl acetate	ND		25	0.93	ug/L			12/04/23 09:42	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/04/23 09:42	1
Xylenes, Total	ND		10	1.6	ug/L			12/04/23 09:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*12/04/23 09:42*	*1*
Dibromofluoromethane	*95*		*75 - 126*		*12/04/23 09:42*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*12/04/23 09:42*	*1*

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

Job ID: 400-247491-1

Client Sample ID: TB-ROX-112923-8011
Date Collected: 11/29/23 12:00
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247491-2
Matrix: Water

Method: EPA 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		12/01/23 07:56	12/01/23 17:36	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/01/23 07:56	12/01/23 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*51 - 149*	*12/01/23 07:56*	*12/01/23 17:36*	*1*

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

Job ID: 400-247491-1

Client Sample ID: MW-12-ROX-112923
Date Collected: 11/29/23 10:15
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247491-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	F1	25	10	ug/L			12/04/23 10:04	1
Acrolein	ND		20	3.3	ug/L			12/04/23 10:04	1
Acrylonitrile	ND		10	2.8	ug/L			12/04/23 10:04	1
Benzene	ND		1.0	0.50	ug/L			12/04/23 10:04	1
Bromobenzene	ND		1.0	0.54	ug/L			12/04/23 10:04	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/04/23 10:04	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/04/23 10:04	1
Bromoform	ND		5.0	0.25	ug/L			12/04/23 10:04	1
Bromomethane	ND		1.0	0.98	ug/L			12/04/23 10:04	1
2-Butanone (MEK)	ND	F1	25	2.6	ug/L			12/04/23 10:04	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/04/23 10:04	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/04/23 10:04	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/04/23 10:04	1
Chloroethane	ND		1.0	0.76	ug/L			12/04/23 10:04	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			12/04/23 10:04	1
Chloroform	ND		1.0	0.90	ug/L			12/04/23 10:04	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/04/23 10:04	1
Chloromethane	ND		1.0	0.90	ug/L			12/04/23 10:04	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/04/23 10:04	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/04/23 10:04	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/04/23 10:04	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/04/23 10:04	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/04/23 10:04	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/04/23 10:04	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/04/23 10:04	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/04/23 10:04	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/04/23 10:04	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/04/23 10:04	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/04/23 10:04	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/04/23 10:04	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/04/23 10:04	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/04/23 10:04	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/04/23 10:04	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/04/23 10:04	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/04/23 10:04	1
2-Hexanone	ND	F1	25	1.4	ug/L			12/04/23 10:04	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/04/23 10:04	1
Methylene bromide	ND		5.0	0.22	ug/L			12/04/23 10:04	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/04/23 10:04	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/04/23 10:04	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/04/23 10:04	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/04/23 10:04	1
Naphthalene	ND		5.0	3.0	ug/L			12/04/23 10:04	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/04/23 10:04	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/04/23 10:04	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/04/23 10:04	1
o-Xylene	ND		5.0	0.60	ug/L			12/04/23 10:04	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/04/23 10:04	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/04/23 10:04	1

Client Sample ID: MW-12-ROX-112923

Date Collected: 11/29/23 10:15
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247491-3

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/04/23 10:04	1
Styrene	ND		1.0	1.0	ug/L			12/04/23 10:04	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/04/23 10:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/04/23 10:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/04/23 10:04	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/04/23 10:04	1
Toluene	ND		1.0	0.90	ug/L			12/04/23 10:04	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/04/23 10:04	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/04/23 10:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/04/23 10:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/04/23 10:04	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/04/23 10:04	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/04/23 10:04	1
Trichloroethene	ND		1.0	0.15	ug/L			12/04/23 10:04	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/04/23 10:04	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/04/23 10:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/04/23 10:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/04/23 10:04	1
Vinyl acetate	ND		25	0.93	ug/L			12/04/23 10:04	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/04/23 10:04	1
Xylenes, Total	ND		10	1.6	ug/L			12/04/23 10:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*12/04/23 10:04*	*1*
Dibromofluoromethane	*96*		*75 - 126*		*12/04/23 10:04*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*12/04/23 10:04*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		12/05/23 09:57	12/06/23 16:45	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/05/23 09:57	12/06/23 16:45	1
Anthracene	ND		0.20	0.047	ug/L		12/05/23 09:57	12/06/23 16:45	1
Benzo[a]anthracene	**0.053**	**J**	0.20	0.034	ug/L		12/05/23 09:57	12/06/23 16:45	1
Benzo[a]pyrene	**0.11**	**J**	0.20	0.064	ug/L		12/05/23 09:57	12/06/23 16:45	1
Benzo[b]fluoranthene	**0.055**	**J**	0.20	0.037	ug/L		12/05/23 09:57	12/06/23 16:45	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/05/23 09:57	12/06/23 16:45	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/05/23 09:57	12/06/23 16:45	1
Chrysene	ND		0.20	0.033	ug/L		12/05/23 09:57	12/06/23 16:45	1
Dibenz(a,h)anthracene	**0.063**	**J**	0.20	0.048	ug/L		12/05/23 09:57	12/06/23 16:45	1
Fluoranthene	ND		0.20	0.034	ug/L		12/05/23 09:57	12/06/23 16:45	1
Fluorene	ND		0.20	0.090	ug/L		12/05/23 09:57	12/06/23 16:45	1
Indeno[1,2,3-cd]pyrene	**0.079**	**J**	0.20	0.034	ug/L		12/05/23 09:57	12/06/23 16:45	1
Phenanthrene	ND		0.20	0.091	ug/L		12/05/23 09:57	12/06/23 16:45	1
Pyrene	ND		0.20	0.039	ug/L		12/05/23 09:57	12/06/23 16:45	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		12/05/23 09:57	12/06/23 16:45	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		12/05/23 09:57	12/06/23 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*89*		*18 - 147*	*12/05/23 09:57*	*12/06/23 16:45*	*1*
2-Fluorobiphenyl	*68*		*15 - 128*	*12/05/23 09:57*	*12/06/23 16:45*	*1*

Client Sample ID: MW-12-ROX-112923

Date Collected: 11/29/23 10:15
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247491-3

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*70*		*10 - 144*	*12/05/23 09:57*	*12/06/23 16:45*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.20	0.097	ug/L		12/13/23 09:48	12/14/23 14:46	1
Acenaphthylene	ND	H	0.20	0.043	ug/L		12/13/23 09:48	12/14/23 14:46	1
Anthracene	ND	H	0.20	0.046	ug/L		12/13/23 09:48	12/14/23 14:46	1
Benzo[a]anthracene	ND	H	0.20	0.033	ug/L		12/13/23 09:48	12/14/23 14:46	1
Benzo[a]pyrene	ND	H	0.20	0.063	ug/L		12/13/23 09:48	12/14/23 14:46	1
Benzo[b]fluoranthene	ND	H	0.20	0.036	ug/L		12/13/23 09:48	12/14/23 14:46	1
Benzo[g,h,i]perylene	ND	H	0.20	0.027	ug/L		12/13/23 09:48	12/14/23 14:46	1
Benzo[k]fluoranthene	ND	H	0.20	0.061	ug/L		12/13/23 09:48	12/14/23 14:46	1
Chrysene	ND	H	0.20	0.032	ug/L		12/13/23 09:48	12/14/23 14:46	1
Dibenz(a,h)anthracene	ND	H	0.20	0.047	ug/L		12/13/23 09:48	12/14/23 14:46	1
Fluoranthene	ND	H	0.20	0.033	ug/L		12/13/23 09:48	12/14/23 14:46	1
Fluorene	ND	H	0.20	0.088	ug/L		12/13/23 09:48	12/14/23 14:46	1
Indeno[1,2,3-cd]pyrene	ND	H	0.20	0.033	ug/L		12/13/23 09:48	12/14/23 14:46	1
Phenanthrene	ND	H	0.20	0.089	ug/L		12/13/23 09:48	12/14/23 14:46	1
Pyrene	ND	H	0.20	0.038	ug/L		12/13/23 09:48	12/14/23 14:46	1
1-Methylnaphthalene	ND	H	0.20	0.079	ug/L		12/13/23 09:48	12/14/23 14:46	1
2-Methylnaphthalene	ND	H	0.20	0.065	ug/L		12/13/23 09:48	12/14/23 14:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*73*		*18 - 147*	*12/13/23 09:48*	*12/14/23 14:46*	*1*
2-Fluorobiphenyl	*76*		*15 - 128*	*12/13/23 09:48*	*12/14/23 14:46*	*1*
Nitrobenzene-d5	*68*		*10 - 144*	*12/13/23 09:48*	*12/14/23 14:46*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		12/05/23 09:57	12/06/23 18:12	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		12/05/23 09:57	12/06/23 18:12	1
Benzoic acid	ND		30	7.3	ug/L		12/05/23 09:57	12/06/23 18:12	1
Benzyl alcohol	ND		10	2.0	ug/L		12/05/23 09:57	12/06/23 18:12	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/05/23 09:57	12/06/23 18:12	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		12/05/23 09:57	12/06/23 18:12	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		12/05/23 09:57	12/06/23 18:12	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		12/05/23 09:57	12/06/23 18:12	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/05/23 09:57	12/06/23 18:12	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/05/23 09:57	12/06/23 18:12	1
4-Chloroaniline	ND		10	3.4	ug/L		12/05/23 09:57	12/06/23 18:12	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		12/05/23 09:57	12/06/23 18:12	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/05/23 09:57	12/06/23 18:12	1
2-Chlorophenol	ND		10	2.2	ug/L		12/05/23 09:57	12/06/23 18:12	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/05/23 09:57	12/06/23 18:12	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 18:12	1
Dibenzofuran	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 18:12	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		12/05/23 09:57	12/06/23 18:12	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		12/05/23 09:57	12/06/23 18:12	1
Diethyl phthalate	ND		10	0.24	ug/L		12/05/23 09:57	12/06/23 18:12	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		12/05/23 09:57	12/06/23 18:12	1

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

Job ID: 400-247491-1

Client Sample ID: MW-12-ROX-112923
Date Collected: 11/29/23 10:15
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247491-3
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 18:12	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		12/05/23 09:57	12/06/23 18:12	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/05/23 09:57	12/06/23 18:12	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		12/05/23 09:57	12/06/23 18:12	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/05/23 09:57	12/06/23 18:12	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/05/23 09:57	12/06/23 18:12	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 18:12	1
1,4-Dioxane	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 18:12	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 18:12	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 18:12	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/05/23 09:57	12/06/23 18:12	1
Hexachloroethane	ND		10	4.2	ug/L		12/05/23 09:57	12/06/23 18:12	1
Indene	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 18:12	1
Isophorone	ND		10	0.14	ug/L		12/05/23 09:57	12/06/23 18:12	1
2-Methylphenol	ND		10	1.8	ug/L		12/05/23 09:57	12/06/23 18:12	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		12/05/23 09:57	12/06/23 18:12	1
2-Nitroaniline	ND		10	2.2	ug/L		12/05/23 09:57	12/06/23 18:12	1
3-Nitroaniline	ND		10	1.8	ug/L		12/05/23 09:57	12/06/23 18:12	1
4-Nitroaniline	ND		10	1.5	ug/L		12/05/23 09:57	12/06/23 18:12	1
Nitrobenzene	ND		10	0.13	ug/L		12/05/23 09:57	12/06/23 18:12	1
2-Nitrophenol	ND		10	5.2	ug/L		12/05/23 09:57	12/06/23 18:12	1
4-Nitrophenol	ND		10	2.1	ug/L		12/05/23 09:57	12/06/23 18:12	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		12/05/23 09:57	12/06/23 18:12	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		12/05/23 09:57	12/06/23 18:12	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/05/23 09:57	12/06/23 18:12	1
Pentachlorophenol	ND		20	1.4	ug/L		12/05/23 09:57	12/06/23 18:12	1
Phenol	ND		10	2.6	ug/L		12/05/23 09:57	12/06/23 18:12	1
Pyridine	ND		10	3.2	ug/L		12/05/23 09:57	12/06/23 18:12	1
Quinoline	ND		10	4.5	ug/L		12/05/23 09:57	12/06/23 18:12	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		12/05/23 09:57	12/06/23 18:12	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		12/05/23 09:57	12/06/23 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*91*		*46 - 124*	*12/05/23 09:57*	*12/06/23 18:12*	*1*
2-Fluorophenol	*47*		*13 - 113*	*12/05/23 09:57*	*12/06/23 18:12*	*1*
Nitrobenzene-d5	*82*		*36 - 126*	*12/05/23 09:57*	*12/06/23 18:12*	*1*
Phenol-d5	*64*		*17 - 127*	*12/05/23 09:57*	*12/06/23 18:12*	*1*
Terphenyl-d14	*77*		*44 - 149*	*12/05/23 09:57*	*12/06/23 18:12*	*1*
2,4,6-Tribromophenol	*53*		*26 - 150*	*12/05/23 09:57*	*12/06/23 18:12*	*1*

Method: EPA 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		12/01/23 07:56	12/01/23 17:58	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/01/23 07:56	12/01/23 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*12/01/23 07:56*	*12/01/23 17:58*	*1*

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

Job ID: 400-247491-1

Client Sample ID: MW-13-ROX-112923
Date Collected: 11/29/23 12:05
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247491-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/04/23 10:28	1
Acrolein	ND		20	3.3	ug/L			12/04/23 10:28	1
Acrylonitrile	ND		10	2.8	ug/L			12/04/23 10:28	1
Benzene	ND		1.0	0.50	ug/L			12/04/23 10:28	1
Bromobenzene	ND		1.0	0.54	ug/L			12/04/23 10:28	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/04/23 10:28	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/04/23 10:28	1
Bromoform	ND		5.0	0.25	ug/L			12/04/23 10:28	1
Bromomethane	ND		1.0	0.98	ug/L			12/04/23 10:28	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/04/23 10:28	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/04/23 10:28	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/04/23 10:28	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/04/23 10:28	1
Chloroethane	ND		1.0	0.76	ug/L			12/04/23 10:28	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/04/23 10:28	1
Chloroform	ND		1.0	0.90	ug/L			12/04/23 10:28	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/04/23 10:28	1
Chloromethane	ND		1.0	0.90	ug/L			12/04/23 10:28	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/04/23 10:28	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/04/23 10:28	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/04/23 10:28	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/04/23 10:28	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/04/23 10:28	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/04/23 10:28	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/04/23 10:28	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/04/23 10:28	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/04/23 10:28	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/04/23 10:28	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/04/23 10:28	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/04/23 10:28	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/04/23 10:28	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/04/23 10:28	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/04/23 10:28	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/04/23 10:28	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/04/23 10:28	1
2-Hexanone	ND		25	1.4	ug/L			12/04/23 10:28	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/04/23 10:28	1
Methylene bromide	ND		5.0	0.22	ug/L			12/04/23 10:28	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/04/23 10:28	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/04/23 10:28	1
Methyl tert-butyl ether	**0.59**	**J**	1.0	0.22	ug/L			12/04/23 10:28	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/04/23 10:28	1
Naphthalene	ND		5.0	3.0	ug/L			12/04/23 10:28	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/04/23 10:28	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/04/23 10:28	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/04/23 10:28	1
o-Xylene	ND		5.0	0.60	ug/L			12/04/23 10:28	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/04/23 10:28	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/04/23 10:28	1

Client Sample ID: MW-13-ROX-112923
Date Collected: 11/29/23 12:05
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247491-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/04/23 10:28	1
Styrene	ND		1.0	1.0	ug/L			12/04/23 10:28	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/04/23 10:28	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/04/23 10:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/04/23 10:28	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/04/23 10:28	1
Toluene	ND		1.0	0.90	ug/L			12/04/23 10:28	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/04/23 10:28	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/04/23 10:28	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/04/23 10:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/04/23 10:28	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/04/23 10:28	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/04/23 10:28	1
Trichloroethene	ND		1.0	0.15	ug/L			12/04/23 10:28	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/04/23 10:28	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/04/23 10:28	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/04/23 10:28	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/04/23 10:28	1
Vinyl acetate	ND		25	0.93	ug/L			12/04/23 10:28	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/04/23 10:28	1
Xylenes, Total	ND		10	1.6	ug/L			12/04/23 10:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 130*		*12/04/23 10:28*	*1*
Dibromofluoromethane	*96*		*75 - 126*		*12/04/23 10:28*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*12/04/23 10:28*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.10	ug/L		12/05/23 09:57	12/06/23 17:05	1
Acenaphthylene	ND		0.21	0.045	ug/L		12/05/23 09:57	12/06/23 17:05	1
Anthracene	ND		0.21	0.048	ug/L		12/05/23 09:57	12/06/23 17:05	1
Benzo[a]anthracene	**0.053**	**J**	0.21	0.035	ug/L		12/05/23 09:57	12/06/23 17:05	1
Benzo[a]pyrene	ND		0.21	0.066	ug/L		12/05/23 09:57	12/06/23 17:05	1
Benzo[b]fluoranthene	**0.046**	**J**	0.21	0.038	ug/L		12/05/23 09:57	12/06/23 17:05	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		12/05/23 09:57	12/06/23 17:05	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		12/05/23 09:57	12/06/23 17:05	1
Chrysene	ND		0.21	0.034	ug/L		12/05/23 09:57	12/06/23 17:05	1
Dibenz(a,h)anthracene	ND		0.21	0.049	ug/L		12/05/23 09:57	12/06/23 17:05	1
Fluoranthene	ND		0.21	0.035	ug/L		12/05/23 09:57	12/06/23 17:05	1
Fluorene	ND		0.21	0.092	ug/L		12/05/23 09:57	12/06/23 17:05	1
Indeno[1,2,3-cd]pyrene	**0.068**	**J**	0.21	0.035	ug/L		12/05/23 09:57	12/06/23 17:05	1
Phenanthrene	ND		0.21	0.093	ug/L		12/05/23 09:57	12/06/23 17:05	1
Pyrene	ND		0.21	0.040	ug/L		12/05/23 09:57	12/06/23 17:05	1
1-Methylnaphthalene	ND		0.21	0.082	ug/L		12/05/23 09:57	12/06/23 17:05	1
2-Methylnaphthalene	ND		0.21	0.068	ug/L		12/05/23 09:57	12/06/23 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*42*		*18 - 147*	*12/05/23 09:57*	*12/06/23 17:05*	*1*
2-Fluorobiphenyl	*29*		*15 - 128*	*12/05/23 09:57*	*12/06/23 17:05*	*1*

Client Sample ID: MW-13-ROX-112923
Date Collected: 11/29/23 12:05
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247491-4
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*32*		*10 - 144*	*12/05/23 09:57*	*12/06/23 17:05*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.21	0.10	ug/L		12/13/23 09:48	12/14/23 15:06	1
Acenaphthylene	ND	H	0.21	0.046	ug/L		12/13/23 09:48	12/14/23 15:06	1
Anthracene	ND	H	0.21	0.049	ug/L		12/13/23 09:48	12/14/23 15:06	1
Benzo[a]anthracene	ND	H	0.21	0.035	ug/L		12/13/23 09:48	12/14/23 15:06	1
Benzo[a]pyrene	ND	H	0.21	0.067	ug/L		12/13/23 09:48	12/14/23 15:06	1
Benzo[b]fluoranthene	ND	H	0.21	0.038	ug/L		12/13/23 09:48	12/14/23 15:06	1
Benzo[g,h,i]perylene	ND	H	0.21	0.028	ug/L		12/13/23 09:48	12/14/23 15:06	1
Benzo[k]fluoranthene	ND	H	0.21	0.064	ug/L		12/13/23 09:48	12/14/23 15:06	1
Chrysene	ND	H	0.21	0.034	ug/L		12/13/23 09:48	12/14/23 15:06	1
Dibenz(a,h)anthracene	ND	H	0.21	0.050	ug/L		12/13/23 09:48	12/14/23 15:06	1
Fluoranthene	ND	H	0.21	0.035	ug/L		12/13/23 09:48	12/14/23 15:06	1
Fluorene	ND	H	0.21	0.093	ug/L		12/13/23 09:48	12/14/23 15:06	1
Indeno[1,2,3-cd]pyrene	ND	H	0.21	0.035	ug/L		12/13/23 09:48	12/14/23 15:06	1
Phenanthrene	ND	H	0.21	0.094	ug/L		12/13/23 09:48	12/14/23 15:06	1
Pyrene	ND	H	0.21	0.041	ug/L		12/13/23 09:48	12/14/23 15:06	1
1-Methylnaphthalene	ND	H	0.21	0.083	ug/L		12/13/23 09:48	12/14/23 15:06	1
2-Methylnaphthalene	ND	H	0.21	0.069	ug/L		12/13/23 09:48	12/14/23 15:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*47*		*18 - 147*	*12/13/23 09:48*	*12/14/23 15:06*	*1*
2-Fluorobiphenyl	*48*		*15 - 128*	*12/13/23 09:48*	*12/14/23 15:06*	*1*
Nitrobenzene-d5	*60*		*10 - 144*	*12/13/23 09:48*	*12/14/23 15:06*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		12/05/23 09:57	12/06/23 18:34	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		12/05/23 09:57	12/06/23 18:34	1
Benzoic acid	ND		31	7.5	ug/L		12/05/23 09:57	12/06/23 18:34	1
Benzyl alcohol	ND		10	2.1	ug/L		12/05/23 09:57	12/06/23 18:34	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/05/23 09:57	12/06/23 18:34	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		12/05/23 09:57	12/06/23 18:34	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		12/05/23 09:57	12/06/23 18:34	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		12/05/23 09:57	12/06/23 18:34	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		12/05/23 09:57	12/06/23 18:34	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		12/05/23 09:57	12/06/23 18:34	1
4-Chloroaniline	ND		10	3.5	ug/L		12/05/23 09:57	12/06/23 18:34	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		12/05/23 09:57	12/06/23 18:34	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/05/23 09:57	12/06/23 18:34	1
2-Chlorophenol	ND		10	2.3	ug/L		12/05/23 09:57	12/06/23 18:34	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		12/05/23 09:57	12/06/23 18:34	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 18:34	1
Dibenzofuran	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 18:34	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		12/05/23 09:57	12/06/23 18:34	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		12/05/23 09:57	12/06/23 18:34	1
Diethyl phthalate	ND		10	0.25	ug/L		12/05/23 09:57	12/06/23 18:34	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		12/05/23 09:57	12/06/23 18:34	1

Client Sample ID: MW-13-ROX-112923
Date Collected: 11/29/23 12:05
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247491-4
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 18:34	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		12/05/23 09:57	12/06/23 18:34	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/05/23 09:57	12/06/23 18:34	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		12/05/23 09:57	12/06/23 18:34	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		12/05/23 09:57	12/06/23 18:34	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		12/05/23 09:57	12/06/23 18:34	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 18:34	1
1,4-Dioxane	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 18:34	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 18:34	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 18:34	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		12/05/23 09:57	12/06/23 18:34	1
Hexachloroethane	ND		10	4.3	ug/L		12/05/23 09:57	12/06/23 18:34	1
Indene	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 18:34	1
Isophorone	ND		10	0.14	ug/L		12/05/23 09:57	12/06/23 18:34	1
2-Methylphenol	ND		10	1.9	ug/L		12/05/23 09:57	12/06/23 18:34	1
3 & 4 Methylphenol	ND		21	0.40	ug/L		12/05/23 09:57	12/06/23 18:34	1
2-Nitroaniline	ND		10	2.3	ug/L		12/05/23 09:57	12/06/23 18:34	1
3-Nitroaniline	ND		10	1.9	ug/L		12/05/23 09:57	12/06/23 18:34	1
4-Nitroaniline	ND		10	1.5	ug/L		12/05/23 09:57	12/06/23 18:34	1
Nitrobenzene	ND		10	0.13	ug/L		12/05/23 09:57	12/06/23 18:34	1
2-Nitrophenol	ND		10	5.3	ug/L		12/05/23 09:57	12/06/23 18:34	1
4-Nitrophenol	ND		10	2.2	ug/L		12/05/23 09:57	12/06/23 18:34	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		12/05/23 09:57	12/06/23 18:34	1
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		12/05/23 09:57	12/06/23 18:34	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		12/05/23 09:57	12/06/23 18:34	1
Pentachlorophenol	ND		21	1.4	ug/L		12/05/23 09:57	12/06/23 18:34	1
Phenol	ND		10	2.7	ug/L		12/05/23 09:57	12/06/23 18:34	1
Pyridine	ND		10	3.3	ug/L		12/05/23 09:57	12/06/23 18:34	1
Quinoline	ND		10	4.6	ug/L		12/05/23 09:57	12/06/23 18:34	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		12/05/23 09:57	12/06/23 18:34	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		12/05/23 09:57	12/06/23 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*45*	*S1-*	*46 - 124*	*12/05/23 09:57*	*12/06/23 18:34*	*1*
2-Fluorophenol	*14*		*13 - 113*	*12/05/23 09:57*	*12/06/23 18:34*	*1*
Nitrobenzene-d5	*34*	*S1-*	*36 - 126*	*12/05/23 09:57*	*12/06/23 18:34*	*1*
Phenol-d5	*26*		*17 - 127*	*12/05/23 09:57*	*12/06/23 18:34*	*1*
Terphenyl-d14	*36*	*S1-*	*44 - 149*	*12/05/23 09:57*	*12/06/23 18:34*	*1*
2,4,6-Tribromophenol	*58*		*26 - 150*	*12/05/23 09:57*	*12/06/23 18:34*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	H	10	4.0	ug/L		12/13/23 09:48	12/14/23 21:18	1
Benzenethiol	ND	H *1 *-	10	1.8	ug/L		12/13/23 09:48	12/14/23 21:18	1
Benzoic acid	ND	H *1	31	7.6	ug/L		12/13/23 09:48	12/14/23 21:18	1
Benzyl alcohol	ND	H	10	2.1	ug/L		12/13/23 09:48	12/14/23 21:18	1
Bis(2-chloroethoxy)methane	ND	H	10	0.17	ug/L		12/13/23 09:48	12/14/23 21:18	1
Bis(2-chloroethyl)ether	ND	H	10	2.8	ug/L		12/13/23 09:48	12/14/23 21:18	1
bis (2-chloroisopropyl) ether	ND	H	10	0.17	ug/L		12/13/23 09:48	12/14/23 21:18	1

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

Job ID: 400-247491-1

Client Sample ID: MW-13-ROX-112923
Date Collected: 11/29/23 12:05
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247491-4
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) - RERA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H	10	5.2	ug/L		12/13/23 09:48	12/14/23 21:18	1
4-Bromophenyl phenyl ether	ND	H	10	0.21	ug/L		12/13/23 09:48	12/14/23 21:18	1
Butyl benzyl phthalate	ND	H	10	0.20	ug/L		12/13/23 09:48	12/14/23 21:18	1
4-Chloroaniline	ND	H	10	3.5	ug/L		12/13/23 09:48	12/14/23 21:18	1
4-Chloro-3-methylphenol	ND	H *1	10	4.0	ug/L		12/13/23 09:48	12/14/23 21:18	1
2-Chloronaphthalene	**0.19**	**J H**	10	0.15	ug/L		12/13/23 09:48	12/14/23 21:18	1
2-Chlorophenol	ND	H *- *1	10	2.3	ug/L		12/13/23 09:48	12/14/23 21:18	1
4-Chlorophenyl phenyl ether	ND	H	10	2.1	ug/L		12/13/23 09:48	12/14/23 21:18	1
Dibenz[a,h]acridine	ND	H	10	1.0	ug/L		12/13/23 09:48	12/14/23 21:18	1
Dibenzofuran	ND	H	10	0.18	ug/L		12/13/23 09:48	12/14/23 21:18	1
3,3'-Dichlorobenzidine	ND	H	10	2.7	ug/L		12/13/23 09:48	12/14/23 21:18	1
2,4-Dichlorophenol	ND	H *- *1	10	3.1	ug/L		12/13/23 09:48	12/14/23 21:18	1
Diethyl phthalate	**0.26**	**J H**	10	0.25	ug/L		12/13/23 09:48	12/14/23 21:18	1
2,4-Dimethylphenol	ND	H	10	3.6	ug/L		12/13/23 09:48	12/14/23 21:18	1
Dimethyl phthalate	**1.2**	**J H**	10	0.18	ug/L		12/13/23 09:48	12/14/23 21:18	1
Di-n-butyl phthalate	ND	H	10	2.8	ug/L		12/13/23 09:48	12/14/23 21:18	1
4,6-Dinitro-ortho-cresol	ND	H	10	1.7	ug/L		12/13/23 09:48	12/14/23 21:18	1
2,4-Dinitrophenol	ND	H *1	31	3.5	ug/L		12/13/23 09:48	12/14/23 21:18	1
2,4-Dinitrotoluene	ND	H	10	2.0	ug/L		12/13/23 09:48	12/14/23 21:18	1
2,6-Dinitrotoluene	ND	H	10	2.0	ug/L		12/13/23 09:48	12/14/23 21:18	1
Di-n-octyl phthalate	ND	H	10	0.18	ug/L		12/13/23 09:48	12/14/23 21:18	1
1,4-Dioxane	ND	H	10	1.0	ug/L		12/13/23 09:48	12/14/23 21:18	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	H	10	1.0	ug/L		12/13/23 09:48	12/14/23 21:18	1
Hexachlorobenzene	ND	H	10	0.18	ug/L		12/13/23 09:48	12/14/23 21:18	1
Hexachlorocyclopentadiene	ND	H *- *1	21	2.7	ug/L		12/13/23 09:48	12/14/23 21:18	1
Hexachloroethane	ND	H	10	4.4	ug/L		12/13/23 09:48	12/14/23 21:18	1
Indene	ND	H	10	1.0	ug/L		12/13/23 09:48	12/14/23 21:18	1
Isophorone	ND	H	10	0.15	ug/L		12/13/23 09:48	12/14/23 21:18	1
2-Methylphenol	ND	H *1	10	1.9	ug/L		12/13/23 09:48	12/14/23 21:18	1
3 & 4 Methylphenol	ND	H *1	21	0.41	ug/L		12/13/23 09:48	12/14/23 21:18	1
2-Nitroaniline	ND	H	10	2.3	ug/L		12/13/23 09:48	12/14/23 21:18	1
3-Nitroaniline	ND	H	10	1.9	ug/L		12/13/23 09:48	12/14/23 21:18	1
4-Nitroaniline	ND	H	10	1.6	ug/L		12/13/23 09:48	12/14/23 21:18	1
Nitrobenzene	ND	H	10	0.14	ug/L		12/13/23 09:48	12/14/23 21:18	1
2-Nitrophenol	ND	H *- *1	10	5.4	ug/L		12/13/23 09:48	12/14/23 21:18	1
4-Nitrophenol	ND	H	10	2.2	ug/L		12/13/23 09:48	12/14/23 21:18	1
N-Nitrosodimethylamine	ND	H	10	3.6	ug/L		12/13/23 09:48	12/14/23 21:18	1
N-Nitrosodi-n-propylamine	ND	H	10	3.4	ug/L		12/13/23 09:48	12/14/23 21:18	1
N-Nitrosodiphenylamine	ND	H	10	0.19	ug/L		12/13/23 09:48	12/14/23 21:18	1
Pentachlorophenol	ND	H *1	21	1.5	ug/L		12/13/23 09:48	12/14/23 21:18	1
Phenol	ND	H *1	10	2.7	ug/L		12/13/23 09:48	12/14/23 21:18	1
Pyridine	ND	H	10	3.3	ug/L		12/13/23 09:48	12/14/23 21:18	1
Quinoline	ND	H *1	10	4.7	ug/L		12/13/23 09:48	12/14/23 21:18	1
2,4,5-Trichlorophenol	ND	H *1	10	3.8	ug/L		12/13/23 09:48	12/14/23 21:18	1
2,4,6-Trichlorophenol	ND	H *1	10	3.6	ug/L		12/13/23 09:48	12/14/23 21:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*46 - 124*	*12/13/23 09:48*	*12/14/23 21:18*	*1*
2-Fluorophenol	*24*		*13 - 113*	*12/13/23 09:48*	*12/14/23 21:18*	*1*

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

Job ID: 400-247491-1

Client Sample ID: MW-13-ROX-112923
Date Collected: 11/29/23 12:05
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247491-4
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) - RERA (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*59*		*36 - 126*	*12/13/23 09:48*	*12/14/23 21:18*	*1*
Phenol-d5	*46*		*17 - 127*	*12/13/23 09:48*	*12/14/23 21:18*	*1*
Terphenyl-d14	*62*		*44 - 149*	*12/13/23 09:48*	*12/14/23 21:18*	*1*
2,4,6-Tribromophenol	*78*		*26 - 150*	*12/13/23 09:48*	*12/14/23 21:18*	*1*

Method: EPA 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		12/01/23 07:56	12/01/23 18:19	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		12/01/23 07:56	12/01/23 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*131*		*51 - 149*	*12/01/23 07:56*	*12/01/23 18:19*	*1*

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

Job ID: 400-247491-1

Client Sample ID: P114R-ROX-112923
Date Collected: 11/29/23 12:55
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247491-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/04/23 10:51	1
Acrolein	ND		20	3.3	ug/L			12/04/23 10:51	1
Acrylonitrile	ND		10	2.8	ug/L			12/04/23 10:51	1
Benzene	ND		1.0	0.50	ug/L			12/04/23 10:51	1
Bromobenzene	ND		1.0	0.54	ug/L			12/04/23 10:51	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/04/23 10:51	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/04/23 10:51	1
Bromoform	ND		5.0	0.25	ug/L			12/04/23 10:51	1
Bromomethane	ND		1.0	0.98	ug/L			12/04/23 10:51	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/04/23 10:51	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/04/23 10:51	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/04/23 10:51	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/04/23 10:51	1
Chloroethane	ND		1.0	0.76	ug/L			12/04/23 10:51	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/04/23 10:51	1
Chloroform	ND		1.0	0.90	ug/L			12/04/23 10:51	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/04/23 10:51	1
Chloromethane	ND		1.0	0.90	ug/L			12/04/23 10:51	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/04/23 10:51	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/04/23 10:51	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/04/23 10:51	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/04/23 10:51	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/04/23 10:51	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/04/23 10:51	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/04/23 10:51	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/04/23 10:51	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/04/23 10:51	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/04/23 10:51	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/04/23 10:51	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/04/23 10:51	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/04/23 10:51	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/04/23 10:51	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/04/23 10:51	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/04/23 10:51	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/04/23 10:51	1
2-Hexanone	ND		25	1.4	ug/L			12/04/23 10:51	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/04/23 10:51	1
Methylene bromide	ND		5.0	0.22	ug/L			12/04/23 10:51	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/04/23 10:51	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/04/23 10:51	1
Methyl tert-butyl ether	**1.3**		1.0	0.22	ug/L			12/04/23 10:51	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/04/23 10:51	1
Naphthalene	ND		5.0	3.0	ug/L			12/04/23 10:51	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/04/23 10:51	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/04/23 10:51	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/04/23 10:51	1
o-Xylene	ND		5.0	0.60	ug/L			12/04/23 10:51	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/04/23 10:51	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/04/23 10:51	1

Client Sample ID: P114R-ROX-112923
Date Collected: 11/29/23 12:55
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247491-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/04/23 10:51	1
Styrene	ND		1.0	1.0	ug/L			12/04/23 10:51	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/04/23 10:51	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/04/23 10:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/04/23 10:51	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/04/23 10:51	1
Toluene	ND		1.0	0.90	ug/L			12/04/23 10:51	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/04/23 10:51	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/04/23 10:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/04/23 10:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/04/23 10:51	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/04/23 10:51	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/04/23 10:51	1
Trichloroethene	ND		1.0	0.15	ug/L			12/04/23 10:51	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/04/23 10:51	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/04/23 10:51	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/04/23 10:51	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/04/23 10:51	1
Vinyl acetate	ND		25	0.93	ug/L			12/04/23 10:51	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/04/23 10:51	1
Xylenes, Total	ND		10	1.6	ug/L			12/04/23 10:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*12/04/23 10:51*	*1*
Dibromofluoromethane	*95*		*75 - 126*		*12/04/23 10:51*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*12/04/23 10:51*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.57**		0.20	0.10	ug/L		12/05/23 09:57	12/06/23 17:26	1
Acenaphthylene	ND		0.20	0.045	ug/L		12/05/23 09:57	12/06/23 17:26	1
Anthracene	**0.086**	**J**	0.20	0.048	ug/L		12/05/23 09:57	12/06/23 17:26	1
Benzo[a]anthracene	**0.053**	**J**	0.20	0.035	ug/L		12/05/23 09:57	12/06/23 17:26	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		12/05/23 09:57	12/06/23 17:26	1
Benzo[b]fluoranthene	**0.048**	**J**	0.20	0.038	ug/L		12/05/23 09:57	12/06/23 17:26	1
Benzo[g,h,i]perylene	ND		0.20	0.028	ug/L		12/05/23 09:57	12/06/23 17:26	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		12/05/23 09:57	12/06/23 17:26	1
Chrysene	ND		0.20	0.034	ug/L		12/05/23 09:57	12/06/23 17:26	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		12/05/23 09:57	12/06/23 17:26	1
Fluoranthene	ND		0.20	0.035	ug/L		12/05/23 09:57	12/06/23 17:26	1
Fluorene	ND		0.20	0.091	ug/L		12/05/23 09:57	12/06/23 17:26	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.035	ug/L		12/05/23 09:57	12/06/23 17:26	1
Phenanthrene	ND		0.20	0.092	ug/L		12/05/23 09:57	12/06/23 17:26	1
Pyrene	ND		0.20	0.040	ug/L		12/05/23 09:57	12/06/23 17:26	1
1-Methylnaphthalene	ND		0.41	0.16	ug/L		12/05/23 09:57	12/07/23 17:01	2
2-Methylnaphthalene	ND		0.41	0.13	ug/L		12/05/23 09:57	12/07/23 17:01	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*38*		*18 - 147*	*12/05/23 09:57*	*12/06/23 17:26*	*1*
2-Fluorobiphenyl	*50*		*15 - 128*	*12/05/23 09:57*	*12/06/23 17:26*	*1*

Client Sample ID: P114R-ROX-112923

Date Collected: 11/29/23 12:55
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247491-5

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*37*		*10 - 144*	*12/05/23 09:57*	*12/07/23 17:01*	*2*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.59**	**H**	0.21	0.10	ug/L		12/13/23 09:48	12/14/23 15:27	1
Acenaphthylene	**0.17**	**J H**	0.21	0.045	ug/L		12/13/23 09:48	12/14/23 15:27	1
Anthracene	ND	H	0.21	0.049	ug/L		12/13/23 09:48	12/14/23 15:27	1
Benzo[a]anthracene	ND	H	0.21	0.035	ug/L		12/13/23 09:48	12/14/23 15:27	1
Benzo[a]pyrene	ND	H	0.21	0.066	ug/L		12/13/23 09:48	12/14/23 15:27	1
Benzo[b]fluoranthene	ND	H	0.21	0.038	ug/L		12/13/23 09:48	12/14/23 15:27	1
Benzo[g,h,i]perylene	ND	H	0.21	0.028	ug/L		12/13/23 09:48	12/14/23 15:27	1
Benzo[k]fluoranthene	ND	H	0.21	0.064	ug/L		12/13/23 09:48	12/14/23 15:27	1
Chrysene	ND	H	0.21	0.034	ug/L		12/13/23 09:48	12/14/23 15:27	1
Dibenz(a,h)anthracene	ND	H	0.21	0.050	ug/L		12/13/23 09:48	12/14/23 15:27	1
Fluoranthene	**0.041**	**J H**	0.21	0.035	ug/L		12/13/23 09:48	12/14/23 15:27	1
Fluorene	ND	H	0.21	0.092	ug/L		12/13/23 09:48	12/14/23 15:27	1
Indeno[1,2,3-cd]pyrene	ND	H	0.21	0.035	ug/L		12/13/23 09:48	12/14/23 15:27	1
Phenanthrene	ND	H	0.21	0.093	ug/L		12/13/23 09:48	12/14/23 15:27	1
Pyrene	ND	H	0.21	0.040	ug/L		12/13/23 09:48	12/14/23 15:27	1
1-Methylnaphthalene	**0.18**	**J H**	0.41	0.17	ug/L		12/13/23 09:48	12/19/23 09:10	2
2-Methylnaphthalene	ND	H	0.41	0.14	ug/L		12/13/23 09:48	12/19/23 09:10	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*58*		*18 - 147*	*12/13/23 09:48*	*12/14/23 15:27*	*1*
2-Fluorobiphenyl	*49*		*15 - 128*	*12/13/23 09:48*	*12/14/23 15:27*	*1*
Nitrobenzene-d5	*38*		*10 - 144*	*12/13/23 09:48*	*12/19/23 09:10*	*2*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		12/05/23 09:57	12/06/23 18:54	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		12/05/23 09:57	12/06/23 18:54	1
Benzoic acid	ND		31	7.5	ug/L		12/05/23 09:57	12/06/23 18:54	1
Benzyl alcohol	ND		10	2.0	ug/L		12/05/23 09:57	12/06/23 18:54	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/05/23 09:57	12/06/23 18:54	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		12/05/23 09:57	12/06/23 18:54	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		12/05/23 09:57	12/06/23 18:54	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		12/05/23 09:57	12/06/23 18:54	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/05/23 09:57	12/06/23 18:54	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/05/23 09:57	12/06/23 18:54	1
4-Chloroaniline	ND		10	3.5	ug/L		12/05/23 09:57	12/06/23 18:54	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		12/05/23 09:57	12/06/23 18:54	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/05/23 09:57	12/06/23 18:54	1
2-Chlorophenol	ND		10	2.2	ug/L		12/05/23 09:57	12/06/23 18:54	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/05/23 09:57	12/06/23 18:54	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 18:54	1
Dibenzofuran	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 18:54	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		12/05/23 09:57	12/06/23 18:54	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		12/05/23 09:57	12/06/23 18:54	1
Diethyl phthalate	ND		10	0.25	ug/L		12/05/23 09:57	12/06/23 18:54	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		12/05/23 09:57	12/06/23 18:54	1

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

Job ID: 400-247491-1

Client Sample ID: P114R-ROX-112923
Date Collected: 11/29/23 12:55
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247491-5
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 18:54	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		12/05/23 09:57	12/06/23 18:54	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/05/23 09:57	12/06/23 18:54	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		12/05/23 09:57	12/06/23 18:54	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/05/23 09:57	12/06/23 18:54	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/05/23 09:57	12/06/23 18:54	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 18:54	1
1,4-Dioxane	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 18:54	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 18:54	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 18:54	1
Hexachlorocyclopentadiene	ND		20	2.7	ug/L		12/05/23 09:57	12/06/23 18:54	1
Hexachloroethane	ND		10	4.3	ug/L		12/05/23 09:57	12/06/23 18:54	1
Indene	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 18:54	1
Isophorone	ND		10	0.14	ug/L		12/05/23 09:57	12/06/23 18:54	1
2-Methylphenol	ND		10	1.8	ug/L		12/05/23 09:57	12/06/23 18:54	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		12/05/23 09:57	12/06/23 18:54	1
2-Nitroaniline	ND		10	2.2	ug/L		12/05/23 09:57	12/06/23 18:54	1
3-Nitroaniline	ND		10	1.8	ug/L		12/05/23 09:57	12/06/23 18:54	1
4-Nitroaniline	ND		10	1.5	ug/L		12/05/23 09:57	12/06/23 18:54	1
Nitrobenzene	ND		10	0.13	ug/L		12/05/23 09:57	12/06/23 18:54	1
2-Nitrophenol	ND		10	5.3	ug/L		12/05/23 09:57	12/06/23 18:54	1
4-Nitrophenol	ND		10	2.1	ug/L		12/05/23 09:57	12/06/23 18:54	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		12/05/23 09:57	12/06/23 18:54	1
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		12/05/23 09:57	12/06/23 18:54	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/05/23 09:57	12/06/23 18:54	1
Pentachlorophenol	ND		20	1.4	ug/L		12/05/23 09:57	12/06/23 18:54	1
Phenol	ND		10	2.7	ug/L		12/05/23 09:57	12/06/23 18:54	1
Pyridine	ND		10	3.3	ug/L		12/05/23 09:57	12/06/23 18:54	1
Quinoline	ND		10	4.6	ug/L		12/05/23 09:57	12/06/23 18:54	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		12/05/23 09:57	12/06/23 18:54	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		12/05/23 09:57	12/06/23 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*46 - 124*	*12/05/23 09:57*	*12/06/23 18:54*	*1*
2-Fluorophenol	*52*		*13 - 113*	*12/05/23 09:57*	*12/06/23 18:54*	*1*
Nitrobenzene-d5	*72*		*36 - 126*	*12/05/23 09:57*	*12/06/23 18:54*	*1*
Phenol-d5	*72*		*17 - 127*	*12/05/23 09:57*	*12/06/23 18:54*	*1*
Terphenyl-d14	*38*	*S1-*	*44 - 149*	*12/05/23 09:57*	*12/06/23 18:54*	*1*
2,4,6-Tribromophenol	*84*		*26 - 150*	*12/05/23 09:57*	*12/06/23 18:54*	*1*

Method: EPA 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		12/01/23 07:56	12/01/23 19:01	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/01/23 07:56	12/01/23 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*51 - 149*	*12/01/23 07:56*	*12/01/23 19:01*	*1*

Qualifiers

GC/MS 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/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
E	Result exceeded calibration range.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
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.

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 MONTHLY GW

Job ID: 400-247491-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-130)	(75-126)	(64-132)
400-247491-1	TB-ROX-112923-8260	105	95	101
400-247491-3	MW-12-ROX-112923	103	96	100
400-247491-3 MS	MW-12-ROX-112923	102	94	100
400-247491-3 MSD	MW-12-ROX-112923	105	94	99
400-247491-4	MW-13-ROX-112923	107	96	100
400-247491-5	P114R-ROX-112923	103	95	102
LCS 400-652698/1002	Lab Control Sample	106	93	101
MB 400-652698/4	Method Blank	105	95	99

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - 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)
400-247491-3	MW-12-ROX-112923	91	47	82	64	77	53
400-247491-4	MW-13-ROX-112923	45 S1-	14	34 S1-	26	36 S1-	58
400-247491-4 - RERA	MW-13-ROX-112923	75	24	59	46	62	78
400-247491-5	P114R-ROX-112923	81	52	72	72	38 S1-	84
LCS 400-652972/2-A	Lab Control Sample	83	53	73	71	91	79
LCS 400-652972/4-A	Lab Control Sample	89	67	79	80	100	68
LCS 400-653912/2-A	Lab Control Sample	83	35	76	63	92	97
LCS 400-653912/6-A	Lab Control Sample	74	31	61	55	83	77
LCSD 400-652972/3-A	Lab Control Sample Dup	89	55	81	77	94	82
LCSD 400-652972/5-A	Lab Control Sample Dup	94	72	85	84	98	72
LCSD 400-653912/3-A	Lab Control Sample Dup	71	14	62	32	99	71
LCSD 400-653912/7-A	Lab Control Sample Dup	79	36	62	57	87	82
MB 400-652972/1-A	Method Blank	80	23	71	46	83	48
MB 400-653912/1-A	Method Blank	85	11 S1-	68	50	88	84

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-247491-3	MW-12-ROX-112923	89	68	70
400-247491-3 - RERA	MW-12-ROX-112923	73	76	68

Surrogate Summary

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

Job ID: 400-247491-1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-247491-4	MW-13-ROX-112923	42	29	32
400-247491-4 - RERA	MW-13-ROX-112923	47	48	60
400-247491-5	P114R-ROX-112923	38	50	
400-247491-5	P114R-ROX-112923			37
400-247491-5 - RERA	P114R-ROX-112923	58	49	
400-247491-5 - RERA	P114R-ROX-112923			38
LCS 400-652972/2-A	Lab Control Sample	93	70	72
LCS 400-653912/2-A	Lab Control Sample	70	74	73
LCSD 400-652972/3-A	Lab Control Sample Dup	87	67	76
LCSD 400-653912/3-A	Lab Control Sample Dup	64	71	68
MB 400-652972/1-A	Method Blank	158 S1+	73	71
MB 400-653912/1-A	Method Blank	75	73	68

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-247491-2	TB-ROX-112923-8011	100
400-247491-3	MW-12-ROX-112923	94
400-247491-4	MW-13-ROX-112923	131
400-247491-5	P114R-ROX-112923	100
LCS 400-652451/2-A	Lab Control Sample	65
LCSD 400-652451/3-A	Lab Control Sample Dup	82
MB 400-652451/1-A	Method Blank	94

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-247491-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

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

Job ID: 400-247491-1

Client Sample ID: TB-ROX-112923-8260

Lab Sample ID: 400-247491-1
Date Collected: 11/29/23 12:00
Matrix: Water
Date Received: 11/30/23 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	8260D		1	5 mL	5 mL	652698	12/04/23 09:42	WPD	EET PEN

Client Sample ID: TB-ROX-112923-8011

Lab Sample ID: 400-247491-2
Date Collected: 11/29/23 12:00
Matrix: Water
Date Received: 11/30/23 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			35.4 mL	35 mL	652451	12/01/23 07:56	PG	EET PEN
Total/NA	Analysis	8011		1			652449	12/01/23 17:36	PG	EET PEN

Client Sample ID: MW-12-ROX-112923

Lab Sample ID: 400-247491-3
Date Collected: 11/29/23 10:15
Matrix: Water
Date Received: 11/30/23 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	8260D		1	5 mL	5 mL	652698	12/04/23 10:04	WPD	EET PEN
Total/NA	Prep	3520C			248.6 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 18:12	S1B	EET PEN
Total/NA	Prep	3520C			248.6 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653195	12/06/23 16:45	TH	EET PEN
Total/NA	Prep	3520C	RERA		254 mL	1 mL	653912	12/13/23 09:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	654319	12/14/23 14:46	S1B	EET PEN
Total/NA	Prep	8011			35.5 mL	35 mL	652451	12/01/23 07:56	PG	EET PEN
Total/NA	Analysis	8011		1			652449	12/01/23 17:58	PG	EET PEN

Client Sample ID: MW-13-ROX-112923

Lab Sample ID: 400-247491-4
Date Collected: 11/29/23 12:05
Matrix: Water
Date Received: 11/30/23 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	8260D		1	5 mL	5 mL	652698	12/04/23 10:28	WPD	EET PEN
Total/NA	Prep	3520C			243 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 18:34	S1B	EET PEN
Total/NA	Prep	3520C	RERA		240.4 mL	1 mL	653912	12/13/23 09:48	BKL	EET PEN
Total/NA	Analysis	8270E	RERA	1	0.4 mL	0.4 mL	654340	12/14/23 21:18	S1B	EET PEN
Total/NA	Prep	3520C			243 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653195	12/06/23 17:05	TH	EET PEN
Total/NA	Prep	3520C	RERA		240.4 mL	1 mL	653912	12/13/23 09:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	654319	12/14/23 15:06	S1B	EET PEN
Total/NA	Prep	8011			35.9 mL	35 mL	652451	12/01/23 07:56	PG	EET PEN
Total/NA	Analysis	8011		1			652449	12/01/23 18:19	PG	EET PEN

Lab Chronicle

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

Job ID: 400-247491-1

Client Sample ID: P114R-ROX-112923

Lab Sample ID: 400-247491-5

Date Collected: 11/29/23 12:55

Matrix: Water

Date Received: 11/30/23 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	8260D		1	5 mL	5 mL	652698	12/04/23 10:51	WPD	EET PEN
Total/NA	Prep	3520C			244.6 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 18:54	S1B	EET PEN
Total/NA	Prep	3520C			244.6 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653195	12/06/23 17:26	TH	EET PEN
Total/NA	Prep	3520C			244.6 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E SIM		2	0.4 mL	0.4 mL	653388	12/07/23 17:01	S1B	EET PEN
Total/NA	Prep	3520C	RERA		242 mL	1 mL	653912	12/13/23 09:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	654319	12/14/23 15:27	S1B	EET PEN
Total/NA	Prep	3520C	RERA		242 mL	1 mL	653912	12/13/23 09:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	2	0.4 mL	0.4 mL	654774	12/19/23 09:10	KJA	EET PEN
Total/NA	Prep	8011			34.7 mL	35 mL	652451	12/01/23 07:56	PG	EET PEN
Total/NA	Analysis	8011		1			652449	12/01/23 19:01	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-652451/1-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	652451	12/01/23 07:56	PG	EET PEN
Total/NA	Analysis	8011		1			652449	12/01/23 11:17	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-652698/4

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	8260D		1	5 mL	5 mL	652698	12/04/23 09:17	WPD	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-652972/1-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 16:27	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653195	12/06/23 15:44	TH	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-653912/1-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	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654340	12/14/23 16:15	S1B	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-653912/1-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	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	654224	12/13/23 18:25	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652451/2-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	652451	12/01/23 07:56	PG	EET PEN
Total/NA	Analysis	8011		1			652449	12/01/23 11:38	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652698/1002

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	8260D		1	5 mL	5 mL	652698	12/04/23 08:32	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652972/2-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 16:48	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	653195	12/06/23 16:04	TH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652972/4-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 17:30	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653912/2-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	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654340	12/14/23 16:44	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	654224	12/13/23 18:45	KJA	EET PEN

Lab Chronicle

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

Job ID: 400-247491-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653912/6-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	653912	12/12/23 10:44	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654340	12/14/23 18:32	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-652451/3-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	652451	12/01/23 07:56	PG	EET PEN
Total/NA	Analysis	8011		1			652449	12/01/23 11:59	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-652972/3-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 17:09	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	653195	12/06/23 16:25	TH	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-652972/5-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 17:51	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653912/3-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	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654464	12/15/23 14:50	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	654224	12/13/23 19:06	KJA	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653912/7-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	653912	12/12/23 10:44	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654340	12/14/23 18:58	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-247491-1

Client Sample ID: MW-12-ROX-112923
Date Collected: 11/29/23 10:15
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247491-3 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	8260D		1	5 mL	5 mL	652698	12/04/23 13:36	WPD	EET PEN

Client Sample ID: MW-12-ROX-112923
Date Collected: 11/29/23 10:15
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247491-3 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	8260D		1	5 mL	5 mL	652698	12/04/23 14:01	WPD	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 652698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247491-1	TB-ROX-112923-8260	Total/NA	Water	8260D	
400-247491-3	MW-12-ROX-112923	Total/NA	Water	8260D	
400-247491-4	MW-13-ROX-112923	Total/NA	Water	8260D	
400-247491-5	P114R-ROX-112923	Total/NA	Water	8260D	
MB 400-652698/4	Method Blank	Total/NA	Water	8260D	
LCS 400-652698/1002	Lab Control Sample	Total/NA	Water	8260D	
400-247491-3 MS	MW-12-ROX-112923	Total/NA	Water	8260D	
400-247491-3 MSD	MW-12-ROX-112923	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 652972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247491-3	MW-12-ROX-112923	Total/NA	Water	3520C	
400-247491-4	MW-13-ROX-112923	Total/NA	Water	3520C	
400-247491-5	P114R-ROX-112923	Total/NA	Water	3520C	
MB 400-652972/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-652972/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-652972/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-652972/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-652972/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 653195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247491-3	MW-12-ROX-112923	Total/NA	Water	8270E SIM	652972
400-247491-4	MW-13-ROX-112923	Total/NA	Water	8270E SIM	652972
400-247491-5	P114R-ROX-112923	Total/NA	Water	8270E SIM	652972
MB 400-652972/1-A	Method Blank	Total/NA	Water	8270E SIM	652972
LCS 400-652972/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	652972
LCSD 400-652972/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	652972

Analysis Batch: 653218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247491-3	MW-12-ROX-112923	Total/NA	Water	8270E	652972
400-247491-4	MW-13-ROX-112923	Total/NA	Water	8270E	652972
400-247491-5	P114R-ROX-112923	Total/NA	Water	8270E	652972
MB 400-652972/1-A	Method Blank	Total/NA	Water	8270E	652972
LCS 400-652972/2-A	Lab Control Sample	Total/NA	Water	8270E	652972
LCS 400-652972/4-A	Lab Control Sample	Total/NA	Water	8270E	652972
LCSD 400-652972/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	652972
LCSD 400-652972/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	652972

Analysis Batch: 653388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247491-5	P114R-ROX-112923	Total/NA	Water	8270E SIM	652972

Prep Batch: 653912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247491-3 - RERA	MW-12-ROX-112923	Total/NA	Water	3520C	
400-247491-4 - RERA	MW-13-ROX-112923	Total/NA	Water	3520C	
400-247491-5 - RERA	P114R-ROX-112923	Total/NA	Water	3520C	

GC/MS Semi VOA (Continued)

Prep Batch: 653912 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-653912/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-653912/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-653912/6-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-653912/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-653912/7-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 654224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-653912/1-A	Method Blank	Total/NA	Water	8270E SIM	653912
LCS 400-653912/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	653912
LCSD 400-653912/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	653912

Analysis Batch: 654319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247491-3 - RERA	MW-12-ROX-112923	Total/NA	Water	8270E SIM	653912
400-247491-4 - RERA	MW-13-ROX-112923	Total/NA	Water	8270E SIM	653912
400-247491-5 - RERA	P114R-ROX-112923	Total/NA	Water	8270E SIM	653912

Analysis Batch: 654340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247491-4 - RERA	MW-13-ROX-112923	Total/NA	Water	8270E	653912
MB 400-653912/1-A	Method Blank	Total/NA	Water	8270E	653912
LCS 400-653912/2-A	Lab Control Sample	Total/NA	Water	8270E	653912
LCS 400-653912/6-A	Lab Control Sample	Total/NA	Water	8270E	653912
LCSD 400-653912/7-A	Lab Control Sample Dup	Total/NA	Water	8270E	653912

Analysis Batch: 654464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 400-653912/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	653912

Analysis Batch: 654774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247491-5 - RERA	P114R-ROX-112923	Total/NA	Water	8270E SIM	653912

GC Semi VOA

Analysis Batch: 652449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247491-2	TB-ROX-112923-8011	Total/NA	Water	8011	652451
400-247491-3	MW-12-ROX-112923	Total/NA	Water	8011	652451
400-247491-4	MW-13-ROX-112923	Total/NA	Water	8011	652451
400-247491-5	P114R-ROX-112923	Total/NA	Water	8011	652451
MB 400-652451/1-A	Method Blank	Total/NA	Water	8011	652451
LCS 400-652451/2-A	Lab Control Sample	Total/NA	Water	8011	652451
LCSD 400-652451/3-A	Lab Control Sample Dup	Total/NA	Water	8011	652451

Prep Batch: 652451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247491-2	TB-ROX-112923-8011	Total/NA	Water	8011	
400-247491-3	MW-12-ROX-112923	Total/NA	Water	8011	
400-247491-4	MW-13-ROX-112923	Total/NA	Water	8011	

GC Semi VOA (Continued)

Prep Batch: 652451 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247491-5	P114R-ROX-112923	Total/NA	Water	8011	
MB 400-652451/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-652451/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-652451/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-652698/4
Matrix: Water
Analysis Batch: 652698

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			12/04/23 09:17	1
Acrolein	ND		20	3.3	ug/L			12/04/23 09:17	1
Acrylonitrile	ND		10	2.8	ug/L			12/04/23 09:17	1
Benzene	ND		1.0	0.50	ug/L			12/04/23 09:17	1
Bromobenzene	ND		1.0	0.54	ug/L			12/04/23 09:17	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/04/23 09:17	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/04/23 09:17	1
Bromoform	ND		5.0	0.25	ug/L			12/04/23 09:17	1
Bromomethane	ND		1.0	0.98	ug/L			12/04/23 09:17	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/04/23 09:17	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/04/23 09:17	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/04/23 09:17	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/04/23 09:17	1
Chloroethane	ND		1.0	0.76	ug/L			12/04/23 09:17	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/04/23 09:17	1
Chloroform	ND		1.0	0.90	ug/L			12/04/23 09:17	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/04/23 09:17	1
Chloromethane	ND		1.0	0.90	ug/L			12/04/23 09:17	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/04/23 09:17	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/04/23 09:17	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/04/23 09:17	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/04/23 09:17	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/04/23 09:17	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/04/23 09:17	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/04/23 09:17	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/04/23 09:17	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/04/23 09:17	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/04/23 09:17	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/04/23 09:17	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/04/23 09:17	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/04/23 09:17	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/04/23 09:17	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/04/23 09:17	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/04/23 09:17	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/04/23 09:17	1
2-Hexanone	ND		25	1.4	ug/L			12/04/23 09:17	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/04/23 09:17	1
Methylene bromide	ND		5.0	0.22	ug/L			12/04/23 09:17	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/04/23 09:17	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/04/23 09:17	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/04/23 09:17	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/04/23 09:17	1
Naphthalene	ND		5.0	3.0	ug/L			12/04/23 09:17	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/04/23 09:17	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/04/23 09:17	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/04/23 09:17	1
o-Xylene	ND		5.0	0.60	ug/L			12/04/23 09:17	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/04/23 09:17	1

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

Lab Sample ID: MB 400-652698/4
Matrix: Water
Analysis Batch: 652698

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			12/04/23 09:17	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/04/23 09:17	1
Styrene	ND		1.0	1.0	ug/L			12/04/23 09:17	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/04/23 09:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/04/23 09:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/04/23 09:17	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/04/23 09:17	1
Toluene	ND		1.0	0.90	ug/L			12/04/23 09:17	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/04/23 09:17	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/04/23 09:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/04/23 09:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/04/23 09:17	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/04/23 09:17	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/04/23 09:17	1
Trichloroethene	ND		1.0	0.15	ug/L			12/04/23 09:17	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/04/23 09:17	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/04/23 09:17	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/04/23 09:17	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/04/23 09:17	1
Vinyl acetate	ND		25	0.93	ug/L			12/04/23 09:17	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/04/23 09:17	1
Xylenes, Total	ND		10	1.6	ug/L			12/04/23 09:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*12/04/23 09:17*	*1*
Dibromofluoromethane	*95*		*75 - 126*		*12/04/23 09:17*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*12/04/23 09:17*	*1*

Lab Sample ID: LCS 400-652698/1002
Matrix: Water
Analysis Batch: 652698

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	217		ug/L		109	43 - 160
Acrolein	250	223		ug/L		89	38 - 160
Acrylonitrile	500	493		ug/L		99	64 - 142
Benzene	50.0	46.5		ug/L		93	70 - 130
Bromobenzene	50.0	47.9		ug/L		96	70 - 132
Bromochloromethane	50.0	43.3		ug/L		87	70 - 130
Bromodichloromethane	50.0	48.0		ug/L		96	67 - 133
Bromoform	50.0	56.1		ug/L		112	57 - 140
Bromomethane	25.0	18.9		ug/L		76	10 - 160
2-Butanone (MEK)	200	227		ug/L		114	61 - 145
Carbon disulfide	50.0	43.1		ug/L		86	61 - 137
Carbon tetrachloride	50.0	46.7		ug/L		93	61 - 137
Chlorobenzene	50.0	47.0		ug/L		94	70 - 130
Chloroethane	25.0	18.1		ug/L		72	55 - 141
2-Chloroethyl vinyl ether	25.0	17.6		ug/L		70	10 - 160

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

Lab Sample ID: LCS 400-652698/1002
Matrix: Water
Analysis Batch: 652698

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	44.7		ug/L		89	69 - 130
1-Chlorohexane	50.0	50.2		ug/L		100	69 - 130
Chloromethane	25.0	24.0		ug/L		96	58 - 137
cis-1,2-Dichloroethene	50.0	46.8		ug/L		94	68 - 130
cis-1,3-Dichloropropene	50.0	48.7		ug/L		97	69 - 132
Dibromochloromethane	50.0	50.7		ug/L		101	67 - 135
1,2-Dichlorobenzene	50.0	46.2		ug/L		92	67 - 130
1,3-Dichlorobenzene	50.0	47.9		ug/L		96	70 - 130
1,4-Dichlorobenzene	50.0	46.7		ug/L		93	70 - 130
Dichlorodifluoromethane	25.0	16.6		ug/L		66	41 - 146
1,1-Dichloroethane	50.0	45.9		ug/L		92	70 - 130
1,2-Dichloroethane	50.0	42.6		ug/L		85	69 - 130
1,1-Dichloroethene	50.0	44.0		ug/L		88	63 - 134
1,2-Dichloropropane	50.0	49.0		ug/L		98	70 - 130
1,3-Dichloropropane	50.0	48.8		ug/L		98	70 - 130
2,2-Dichloropropane	50.0	45.7		ug/L		91	52 - 135
1,1-Dichloropropene	50.0	46.6		ug/L		93	70 - 130
Ethylbenzene	50.0	48.1		ug/L		96	70 - 130
Ethyl methacrylate	50.0	48.2		ug/L		96	68 - 130
Hexachlorobutadiene	50.0	57.1		ug/L		114	53 - 140
2-Hexanone	200	230		ug/L		115	65 - 137
Isopropylbenzene	50.0	47.2		ug/L		94	70 - 130
Methylene bromide	50.0	44.3		ug/L		89	70 - 130
Methylene Chloride	50.0	44.8		ug/L		90	66 - 135
4-Methyl-2-pentanone (MIBK)	200	188		ug/L		94	69 - 138
Methyl tert-butyl ether	50.0	45.8		ug/L		92	66 - 130
m-Xylene & p-Xylene	50.0	48.0		ug/L		96	70 - 130
Naphthalene	50.0	44.1		ug/L		88	47 - 149
n-Butylbenzene	50.0	45.7		ug/L		91	67 - 130
N-Propylbenzene	50.0	48.4		ug/L		97	70 - 130
o-Chlorotoluene	50.0	46.3		ug/L		93	70 - 130
o-Xylene	50.0	47.9		ug/L		96	70 - 130
p-Chlorotoluene	50.0	47.7		ug/L		95	70 - 130
p-Isopropyltoluene	50.0	47.8		ug/L		96	65 - 130
sec-Butylbenzene	50.0	47.9		ug/L		96	66 - 130
Styrene	50.0	45.1		ug/L		90	70 - 130
tert-Butylbenzene	50.0	53.6		ug/L		107	64 - 139
1,1,1,2-Tetrachloroethane	50.0	50.3		ug/L		101	67 - 131
1,1,2,2-Tetrachloroethane	50.0	47.0		ug/L		94	70 - 131
Tetrachloroethene	50.0	47.5		ug/L		95	65 - 130
Toluene	50.0	48.3		ug/L		97	70 - 130
trans-1,2-Dichloroethene	50.0	45.8		ug/L		92	70 - 130
trans-1,3-Dichloropropene	50.0	49.1		ug/L		98	63 - 130
1,2,3-Trichlorobenzene	50.0	48.7		ug/L		97	60 - 138
1,2,4-Trichlorobenzene	50.0	48.9		ug/L		98	60 - 140
1,1,1-Trichloroethane	50.0	45.5		ug/L		91	68 - 130
1,1,2-Trichloroethane	50.0	49.5		ug/L		99	70 - 130
Trichloroethene	50.0	46.2		ug/L		92	70 - 130
Trichlorofluoromethane	25.0	18.8		ug/L		75	65 - 138

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

Lab Sample ID: LCS 400-652698/1002
Matrix: Water
Analysis Batch: 652698

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	46.5		ug/L		93	70 - 130
1,2,4-Trimethylbenzene	50.0	46.4		ug/L		93	70 - 130
1,3,5-Trimethylbenzene	50.0	47.8		ug/L		96	69 - 130
Vinyl acetate	50.0	40.1		ug/L		80	26 - 160
Vinyl chloride	25.0	21.1		ug/L		84	59 - 136
Xylenes, Total	100	95.9		ug/L		96	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*72 - 130*
Dibromofluoromethane	*93*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

Lab Sample ID: 400-247491-3 MS
Matrix: Water
Analysis Batch: 652698

Client Sample ID: MW-12-ROX-112923
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND	F1	200	58.5	F1	ug/L		29	43 - 150
Acrolein	ND		250	192		ug/L		77	38 - 150
Acrylonitrile	ND		500	385		ug/L		77	62 - 149
Benzene	ND		50.0	34.1		ug/L		68	56 - 142
Bromobenzene	ND		50.0	32.5		ug/L		65	59 - 136
Bromochloromethane	ND		50.0	32.1		ug/L		64	64 - 140
Bromodichloromethane	ND		50.0	34.4		ug/L		69	59 - 143
Bromoform	ND		50.0	38.1		ug/L		76	50 - 140
Bromomethane	ND		25.0	13.9		ug/L		55	10 - 150
2-Butanone (MEK)	ND	F1	200	95.9	F1	ug/L		48	55 - 150
Carbon disulfide	ND		50.0	31.0		ug/L		62	48 - 150
Carbon tetrachloride	ND		50.0	34.1		ug/L		68	55 - 145
Chlorobenzene	ND		50.0	32.0		ug/L		64	64 - 130
Chloroethane	ND		25.0	15.6		ug/L		62	50 - 150
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	32.5		ug/L		65	60 - 141
1-Chlorohexane	ND		50.0	33.2		ug/L		66	56 - 136
Chloromethane	ND		25.0	19.5		ug/L		78	49 - 148
cis-1,2-Dichloroethene	ND		50.0	34.0		ug/L		68	59 - 143
cis-1,3-Dichloropropene	ND		50.0	35.0		ug/L		70	57 - 140
Dibromochloromethane	ND		50.0	35.7		ug/L		71	56 - 143
1,2-Dichlorobenzene	ND		50.0	31.6		ug/L		63	52 - 137
1,3-Dichlorobenzene	ND		50.0	31.8		ug/L		64	54 - 135
1,4-Dichlorobenzene	ND		50.0	31.4		ug/L		63	53 - 135
Dichlorodifluoromethane	ND		25.0	13.4		ug/L		53	16 - 150
1,1-Dichloroethane	ND		50.0	35.1		ug/L		70	61 - 144
1,2-Dichloroethane	ND		50.0	31.9		ug/L		64	60 - 141
1,1-Dichloroethene	ND		50.0	31.8		ug/L		64	54 - 147
1,2-Dichloropropane	ND		50.0	36.3		ug/L		73	66 - 137
1,3-Dichloropropane	ND		50.0	34.4		ug/L		69	66 - 133
2,2-Dichloropropane	ND		50.0	33.2		ug/L		66	42 - 144

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

Lab Sample ID: 400-247491-3 MS
Matrix: Water
Analysis Batch: 652698

Client Sample ID: MW-12-ROX-112923
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	33.8		ug/L		68	65 - 136
Ethylbenzene	ND		50.0	32.7		ug/L		65	58 - 131
Ethyl methacrylate	ND		50.0	34.1		ug/L		68	64 - 130
Hexachlorobutadiene	ND		50.0	38.0		ug/L		76	31 - 149
2-Hexanone	ND	F1	200	107	F1	ug/L		53	65 - 140
Isopropylbenzene	ND		50.0	31.7		ug/L		63	56 - 133
Methylene bromide	ND		50.0	32.5		ug/L		65	63 - 138
Methylene Chloride	ND		50.0	31.0		ug/L		62	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	132		ug/L		66	63 - 146
Methyl tert-butyl ether	ND		50.0	34.2		ug/L		68	59 - 137
m-Xylene & p-Xylene	ND		50.0	32.5		ug/L		65	57 - 130
Naphthalene	ND		50.0	31.4		ug/L		63	25 - 150
n-Butylbenzene	ND		50.0	29.3		ug/L		59	41 - 142
N-Propylbenzene	ND		50.0	30.5		ug/L		61	51 - 138
o-Chlorotoluene	ND		50.0	31.3		ug/L		63	53 - 134
o-Xylene	ND		50.0	32.5		ug/L		65	61 - 130
p-Chlorotoluene	ND		50.0	30.8		ug/L		62	54 - 133
p-Isopropyltoluene	ND		50.0	30.5		ug/L		61	48 - 139
sec-Butylbenzene	ND		50.0	31.1		ug/L		62	50 - 138
Styrene	ND		50.0	30.5		ug/L		61	58 - 131
tert-Butylbenzene	ND		50.0	35.0		ug/L		70	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	35.0		ug/L		70	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	33.8		ug/L		68	66 - 135
Tetrachloroethene	ND		50.0	32.1		ug/L		64	52 - 133
Toluene	ND		50.0	33.6		ug/L		67	65 - 130
trans-1,2-Dichloroethene	ND		50.0	33.0		ug/L		66	61 - 143
trans-1,3-Dichloropropene	ND		50.0	34.4		ug/L		69	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	33.9		ug/L		68	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	34.0		ug/L		68	39 - 148
1,1,1-Trichloroethane	ND		50.0	33.2		ug/L		66	57 - 142
1,1,2-Trichloroethane	ND		50.0	35.4		ug/L		71	66 - 131
Trichloroethene	ND		50.0	32.4		ug/L		65	64 - 136
Trichlorofluoromethane	ND		25.0	15.6		ug/L		62	54 - 150
1,2,3-Trichloropropane	ND		50.0	32.8		ug/L		66	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	30.4		ug/L		61	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	31.2		ug/L		62	52 - 135
Vinyl acetate	ND		50.0	35.2		ug/L		70	26 - 150
Vinyl chloride	ND		25.0	17.2		ug/L		69	46 - 150
Xylenes, Total	ND		100	64.9		ug/L		65	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*72 - 130*
Dibromofluoromethane	*94*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

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

Lab Sample ID: 400-247491-3 MSD
Matrix: Water
Analysis Batch: 652698

Client Sample ID: MW-12-ROX-112923
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	200	69.6	F1	ug/L		35	43 - 150	17	30
Acrolein	ND		250	199		ug/L		79	38 - 150	3	31
Acrylonitrile	ND		500	455		ug/L		91	62 - 149	17	30
Benzene	ND		50.0	40.3		ug/L		81	56 - 142	17	30
Bromobenzene	ND		50.0	40.4		ug/L		81	59 - 136	22	30
Bromochloromethane	ND		50.0	39.3		ug/L		79	64 - 140	20	30
Bromodichloromethane	ND		50.0	41.7		ug/L		83	59 - 143	19	30
Bromoform	ND		50.0	47.9		ug/L		96	50 - 140	23	30
Bromomethane	ND		25.0	14.4		ug/L		58	10 - 150	4	50
2-Butanone (MEK)	ND	F1	200	115		ug/L		58	55 - 150	18	30
Carbon disulfide	ND		50.0	37.5		ug/L		75	48 - 150	19	30
Carbon tetrachloride	ND		50.0	41.3		ug/L		83	55 - 145	19	30
Chlorobenzene	ND		50.0	40.1		ug/L		80	64 - 130	23	30
Chloroethane	ND		25.0	15.5		ug/L		62	50 - 150	1	30
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	39.2		ug/L		78	60 - 141	19	30
1-Chlorohexane	ND		50.0	42.6		ug/L		85	56 - 136	25	30
Chloromethane	ND		25.0	20.4		ug/L		82	49 - 148	5	31
cis-1,2-Dichloroethene	ND		50.0	40.5		ug/L		81	59 - 143	17	30
cis-1,3-Dichloropropene	ND		50.0	42.9		ug/L		86	57 - 140	20	30
Dibromochloromethane	ND		50.0	43.9		ug/L		88	56 - 143	21	30
1,2-Dichlorobenzene	ND		50.0	39.0		ug/L		78	52 - 137	21	30
1,3-Dichlorobenzene	ND		50.0	39.9		ug/L		80	54 - 135	23	30
1,4-Dichlorobenzene	ND		50.0	39.7		ug/L		79	53 - 135	23	30
Dichlorodifluoromethane	ND		25.0	13.8		ug/L		55	16 - 150	3	31
1,1-Dichloroethane	ND		50.0	42.3		ug/L		85	61 - 144	18	30
1,2-Dichloroethane	ND		50.0	37.6		ug/L		75	60 - 141	17	30
1,1-Dichloroethene	ND		50.0	39.2		ug/L		78	54 - 147	21	30
1,2-Dichloropropane	ND		50.0	43.1		ug/L		86	66 - 137	17	30
1,3-Dichloropropane	ND		50.0	43.0		ug/L		86	66 - 133	22	30
2,2-Dichloropropane	ND		50.0	40.1		ug/L		80	42 - 144	19	31
1,1-Dichloropropene	ND		50.0	40.4		ug/L		81	65 - 136	18	30
Ethylbenzene	ND		50.0	41.2		ug/L		82	58 - 131	23	30
Ethyl methacrylate	ND		50.0	42.8		ug/L		86	64 - 130	22	30
Hexachlorobutadiene	ND		50.0	47.5		ug/L		95	31 - 149	22	36
2-Hexanone	ND	F1	200	128	F1	ug/L		64	65 - 140	18	30
Isopropylbenzene	ND		50.0	40.1		ug/L		80	56 - 133	23	30
Methylene bromide	ND		50.0	39.3		ug/L		79	63 - 138	19	30
Methylene Chloride	ND		50.0	38.1		ug/L		76	60 - 146	20	32
4-Methyl-2-pentanone (MIBK)	ND		200	158		ug/L		79	63 - 146	18	30
Methyl tert-butyl ether	ND		50.0	41.2		ug/L		82	59 - 137	18	30
m-Xylene & p-Xylene	ND		50.0	40.8		ug/L		82	57 - 130	23	30
Naphthalene	ND		50.0	38.8		ug/L		78	25 - 150	21	30
n-Butylbenzene	ND		50.0	38.0		ug/L		76	41 - 142	26	31
N-Propylbenzene	ND		50.0	40.4		ug/L		81	51 - 138	28	30
o-Chlorotoluene	ND		50.0	38.3		ug/L		77	53 - 134	20	30
o-Xylene	ND		50.0	40.5		ug/L		81	61 - 130	22	30
p-Chlorotoluene	ND		50.0	39.6		ug/L		79	54 - 133	25	30

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

Lab Sample ID: 400-247491-3 MSD
Matrix: Water
Analysis Batch: 652698

Client Sample ID: MW-12-ROX-112923
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	39.5		ug/L		79	48 - 139	26	30
sec-Butylbenzene	ND		50.0	40.2		ug/L		80	50 - 138	26	30
Styrene	ND		50.0	38.7		ug/L		77	58 - 131	24	30
tert-Butylbenzene	ND		50.0	44.9		ug/L		90	54 - 146	25	30
1,1,1,2-Tetrachloroethane	ND		50.0	42.9		ug/L		86	59 - 137	20	30
1,1,2,2-Tetrachloroethane	ND		50.0	41.8		ug/L		84	66 - 135	21	30
Tetrachloroethene	ND		50.0	39.7		ug/L		79	52 - 133	21	30
Toluene	ND		50.0	41.3		ug/L		83	65 - 130	21	30
trans-1,2-Dichloroethene	ND		50.0	40.4		ug/L		81	61 - 143	20	30
trans-1,3-Dichloropropene	ND		50.0	41.5		ug/L		83	53 - 133	19	30
1,2,3-Trichlorobenzene	ND		50.0	41.7		ug/L		83	43 - 145	21	30
1,2,4-Trichlorobenzene	ND		50.0	40.8		ug/L		82	39 - 148	18	30
1,1,1-Trichloroethane	ND		50.0	39.8		ug/L		80	57 - 142	18	30
1,1,2-Trichloroethane	ND		50.0	42.5		ug/L		85	66 - 131	18	30
Trichloroethene	ND		50.0	39.6		ug/L		79	64 - 136	20	30
Trichlorofluoromethane	ND		25.0	16.4		ug/L		66	54 - 150	5	30
1,2,3-Trichloropropane	ND		50.0	41.7		ug/L		83	65 - 133	24	30
1,2,4-Trimethylbenzene	ND		50.0	39.4		ug/L		79	50 - 139	26	30
1,3,5-Trimethylbenzene	ND		50.0	39.8		ug/L		80	52 - 135	24	30
Vinyl acetate	ND		50.0	35.3		ug/L		71	26 - 150	0	33
Vinyl chloride	ND		25.0	18.3		ug/L		73	46 - 150	6	30
Xylenes, Total	ND		100	81.3		ug/L		81	59 - 130	22	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*72 - 130*
Dibromofluoromethane	*94*		*75 - 126*
Toluene-d8 (Surr)	*99*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-652972/1-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		12/05/23 09:56	12/06/23 16:27	1
Benzenethiol	ND		10	1.7	ug/L		12/05/23 09:56	12/06/23 16:27	1
Benzoic acid	ND		30	7.3	ug/L		12/05/23 09:56	12/06/23 16:27	1
Benzyl alcohol	ND		10	2.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/05/23 09:56	12/06/23 16:27	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		12/05/23 09:56	12/06/23 16:27	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		12/05/23 09:56	12/06/23 16:27	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/05/23 09:56	12/06/23 16:27	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Chloroaniline	ND		10	3.4	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		12/05/23 09:56	12/06/23 16:27	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/05/23 09:56	12/06/23 16:27	1
2-Chlorophenol	ND		10	2.2	ug/L		12/05/23 09:56	12/06/23 16:27	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-652972/1-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Dibenzofuran	ND		10	0.17	ug/L		12/05/23 09:56	12/06/23 16:27	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Diethyl phthalate	ND		10	0.24	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		12/05/23 09:56	12/06/23 16:27	1
Dimethyl phthalate	ND		10	0.17	ug/L		12/05/23 09:56	12/06/23 16:27	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		12/05/23 09:56	12/06/23 16:27	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/05/23 09:56	12/06/23 16:27	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/05/23 09:56	12/06/23 16:27	1
1,4-Dioxane	ND		10	1.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/05/23 09:56	12/06/23 16:27	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/05/23 09:56	12/06/23 16:27	1
Hexachloroethane	ND		10	4.2	ug/L		12/05/23 09:56	12/06/23 16:27	1
Indene	ND		10	1.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Isophorone	ND		10	0.14	ug/L		12/05/23 09:56	12/06/23 16:27	1
2-Methylphenol	ND		10	1.8	ug/L		12/05/23 09:56	12/06/23 16:27	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		12/05/23 09:56	12/06/23 16:27	1
2-Nitroaniline	ND		10	2.2	ug/L		12/05/23 09:56	12/06/23 16:27	1
3-Nitroaniline	ND		10	1.8	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Nitroaniline	ND		10	1.5	ug/L		12/05/23 09:56	12/06/23 16:27	1
Nitrobenzene	ND		10	0.13	ug/L		12/05/23 09:56	12/06/23 16:27	1
2-Nitrophenol	ND		10	5.2	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Nitrophenol	ND		10	2.1	ug/L		12/05/23 09:56	12/06/23 16:27	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		12/05/23 09:56	12/06/23 16:27	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		12/05/23 09:56	12/06/23 16:27	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/05/23 09:56	12/06/23 16:27	1
Pentachlorophenol	ND		20	1.4	ug/L		12/05/23 09:56	12/06/23 16:27	1
Phenol	ND		10	2.6	ug/L		12/05/23 09:56	12/06/23 16:27	1
Pyridine	ND		10	3.2	ug/L		12/05/23 09:56	12/06/23 16:27	1
Quinoline	ND		10	4.5	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		12/05/23 09:56	12/06/23 16:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*46 - 124*	*12/05/23 09:56*	*12/06/23 16:27*	*1*
2-Fluorophenol	*23*		*13 - 113*	*12/05/23 09:56*	*12/06/23 16:27*	*1*
Nitrobenzene-d5	*71*		*36 - 126*	*12/05/23 09:56*	*12/06/23 16:27*	*1*
Phenol-d5	*46*		*17 - 127*	*12/05/23 09:56*	*12/06/23 16:27*	*1*
Terphenyl-d14	*83*		*44 - 149*	*12/05/23 09:56*	*12/06/23 16:27*	*1*
2,4,6-Tribromophenol	*48*		*26 - 150*	*12/05/23 09:56*	*12/06/23 16:27*	*1*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-652972/2-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	74.9		ug/L		62	21 - 120
Benzoic acid	120	56.5		ug/L		47	10 - 144
Benzyl alcohol	120	85.0		ug/L		71	28 - 120
Bis(2-chloroethoxy)methane	120	77.7		ug/L		65	47 - 120
Bis(2-chloroethyl)ether	120	80.0		ug/L		67	44 - 120
bis (2-chloroisopropyl) ether	120	76.0		ug/L		63	33 - 121
Bis(2-ethylhexyl) phthalate	120	95.0		ug/L		79	52 - 147
4-Bromophenyl phenyl ether	120	96.4		ug/L		80	54 - 122
Butyl benzyl phthalate	120	96.8		ug/L		81	54 - 133
4-Chloroaniline	120	68.5		ug/L		57	26 - 120
4-Chloro-3-methylphenol	120	89.8		ug/L		75	48 - 131
2-Chloronaphthalene	120	90.3		ug/L		75	52 - 121
2-Chlorophenol	120	77.2		ug/L		64	40 - 120
4-Chlorophenyl phenyl ether	120	96.9		ug/L		81	56 - 125
Dibenz[a,h]acridine	120	113		ug/L		94	31 - 150
Dibenzofuran	120	95.3		ug/L		79	56 - 122
3,3'-Dichlorobenzidine	160	112		ug/L		70	36 - 132
2,4-Dichlorophenol	120	81.8		ug/L		68	49 - 120
Diethyl phthalate	120	95.6		ug/L		80	50 - 137
2,4-Dimethylphenol	120	80.3		ug/L		67	48 - 120
Dimethyl phthalate	120	91.2		ug/L		76	57 - 124
Di-n-butyl phthalate	120	105		ug/L		88	58 - 126
4,6-Dinitro-ortho-cresol	240	153		ug/L		64	23 - 148
2,4-Dinitrophenol	240	131		ug/L		55	10 - 150
2,4-Dinitrotoluene	120	96.6		ug/L		80	54 - 142
2,6-Dinitrotoluene	120	91.1		ug/L		76	55 - 130
Di-n-octyl phthalate	120	99.4		ug/L		83	57 - 138
1,4-Dioxane	120	60.6		ug/L		50	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	87.5		ug/L		73	45 - 124
Hexachlorobenzene	120	110		ug/L		91	52 - 129
Hexachlorocyclopentadiene	120	57.9		ug/L		48	10 - 134
Hexachloroethane	120	74.6		ug/L		62	20 - 120
Indene	120	93.2		ug/L		78	49 - 120
Isophorone	120	76.7		ug/L		64	48 - 120
2-Methylphenol	120	84.1		ug/L		70	46 - 124
3 & 4 Methylphenol	120	82.5		ug/L		69	45 - 120
2-Nitroaniline	120	89.3		ug/L		74	51 - 145
3-Nitroaniline	120	76.0		ug/L		63	37 - 127
4-Nitroaniline	120	89.1		ug/L		74	36 - 137
Nitrobenzene	120	76.8		ug/L		64	45 - 120
2-Nitrophenol	120	73.8		ug/L		62	40 - 124
4-Nitrophenol	240	189		ug/L		79	23 - 146
N-Nitrosodimethylamine	120	78.4		ug/L		65	29 - 137
N-Nitrosodi-n-propylamine	120	82.1		ug/L		68	45 - 120
N-Nitrosodiphenylamine	119	91.5		ug/L		77	54 - 120
Pentachlorophenol	240	212		ug/L		88	31 - 130
Phenol	120	79.0		ug/L		66	11 - 120
Pyridine	240	126		ug/L		52	16 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-652972/2-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Quinoline			120	98.7		ug/L		82	49 - 130		
2,4,5-Trichlorophenol			120	93.6		ug/L		78	51 - 136		
2,4,6-Trichlorophenol			120	91.2		ug/L		76	50 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*46 - 124*
2-Fluorophenol	*53*		*13 - 113*
Nitrobenzene-d5	*73*		*36 - 126*
Phenol-d5	*71*		*17 - 127*
Terphenyl-d14	*91*		*44 - 149*
2,4,6-Tribromophenol	*79*		*26 - 150*

Lab Sample ID: LCS 400-652972/4-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	5.12	J *-	ug/L		4	10 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*89*		*46 - 124*
2-Fluorophenol	*67*		*13 - 113*
Nitrobenzene-d5	*79*		*36 - 126*
Phenol-d5	*80*		*17 - 127*
Terphenyl-d14	*100*		*44 - 149*
2,4,6-Tribromophenol	*68*		*26 - 150*

Lab Sample ID: LCSD 400-652972/3-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	94.4		ug/L		79	21 - 120	23	30
Benzoic acid			120	61.8		ug/L		51	10 - 144	9	30
Benzyl alcohol			120	98.0		ug/L		82	28 - 120	14	30
Bis(2-chloroethoxy)methane			120	86.9		ug/L		72	47 - 120	11	30
Bis(2-chloroethyl)ether			120	89.8		ug/L		75	44 - 120	12	30
bis (2-chloroisopropyl) ether			120	84.8		ug/L		71	33 - 121	11	30
Bis(2-ethylhexyl) phthalate			120	101		ug/L		84	52 - 147	6	30
4-Bromophenyl phenyl ether			120	105		ug/L		87	54 - 122	8	30
Butyl benzyl phthalate			120	104		ug/L		87	54 - 133	7	30
4-Chloroaniline			120	83.2		ug/L		69	26 - 120	19	30
4-Chloro-3-methylphenol			120	100		ug/L		83	48 - 131	11	30
2-Chloronaphthalene			120	99.8		ug/L		83	52 - 121	10	30
2-Chlorophenol			120	87.5		ug/L		73	40 - 120	12	30
4-Chlorophenyl phenyl ether			120	106		ug/L		88	56 - 125	9	30
Dibenz[a,h]acridine			120	120		ug/L		101	31 - 150	6	30
Dibenzofuran			120	104		ug/L		87	56 - 122	9	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-652972/3-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine			160	131		ug/L		82	36 - 132	16	30
2,4-Dichlorophenol			120	93.5		ug/L		78	49 - 120	13	30
Diethyl phthalate			120	101		ug/L		84	50 - 137	6	30
2,4-Dimethylphenol			120	87.1		ug/L		73	48 - 120	8	30
Dimethyl phthalate			120	98.0		ug/L		82	57 - 124	7	30
Di-n-butyl phthalate			120	111		ug/L		92	58 - 126	5	30
4,6-Dinitro-ortho-cresol			240	173		ug/L		72	23 - 148	12	30
2,4-Dinitrophenol			240	144		ug/L		60	10 - 150	9	30
2,4-Dinitrotoluene			120	103		ug/L		86	54 - 142	7	30
2,6-Dinitrotoluene			120	98.5		ug/L		82	55 - 130	8	30
Di-n-octyl phthalate			120	103		ug/L		86	57 - 138	4	30
1,4-Dioxane			120	53.7		ug/L		45	31 - 120	12	30
1,2-Diphenylhydrazine (as Azobenzene)			120	93.9		ug/L		78	45 - 124	7	30
Hexachlorobenzene			120	119		ug/L		99	52 - 129	8	30
Hexachlorocyclopentadiene			120	68.3		ug/L		57	10 - 134	16	30
Hexachloroethane			120	88.3		ug/L		74	20 - 120	17	30
Indene			120	108		ug/L		90	49 - 120	14	30
Isophorone			120	84.9		ug/L		71	48 - 120	10	30
2-Methylphenol			120	91.8		ug/L		76	46 - 124	9	30
3 & 4 Methylphenol			120	91.8		ug/L		77	45 - 120	11	30
2-Nitroaniline			120	97.4		ug/L		81	51 - 145	9	30
3-Nitroaniline			120	89.4		ug/L		74	37 - 127	16	30
4-Nitroaniline			120	100		ug/L		83	36 - 137	12	30
Nitrobenzene			120	87.7		ug/L		73	45 - 120	13	30
2-Nitrophenol			120	91.3		ug/L		76	40 - 124	21	30
4-Nitrophenol			240	205		ug/L		85	23 - 146	8	30
N-Nitrosodimethylamine			120	87.2		ug/L		73	29 - 137	11	30
N-Nitrosodi-n-propylamine			120	92.4		ug/L		77	45 - 120	12	30
N-Nitrosodiphenylamine			119	99.0		ug/L		83	54 - 120	8	30
Pentachlorophenol			240	228		ug/L		95	31 - 130	7	30
Phenol			120	88.5		ug/L		74	11 - 120	11	30
Pyridine			240	131		ug/L		55	16 - 120	4	30
Quinoline			120	111		ug/L		93	49 - 130	12	30
2,4,5-Trichlorophenol			120	104		ug/L		87	51 - 136	11	30
2,4,6-Trichlorophenol			120	105		ug/L		87	50 - 127	14	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*89*		*46 - 124*
2-Fluorophenol	*55*		*13 - 113*
Nitrobenzene-d5	*81*		*36 - 126*
Phenol-d5	*77*		*17 - 127*
Terphenyl-d14	*94*		*44 - 149*
2,4,6-Tribromophenol	*82*		*26 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-652972/5-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	116	*1	ug/L		97	10 - 120	183	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*94*		*46 - 124*
2-Fluorophenol	*72*		*13 - 113*
Nitrobenzene-d5	*85*		*36 - 126*
Phenol-d5	*84*		*17 - 127*
Terphenyl-d14	*98*		*44 - 149*
2,4,6-Tribromophenol	*72*		*26 - 150*

Lab Sample ID: MB 400-653912/1-A
Matrix: Water
Analysis Batch: 654340

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		12/12/23 10:43	12/14/23 16:15	1
Benzenethiol	ND		10	1.7	ug/L		12/12/23 10:43	12/14/23 16:15	1
Benzoic acid	ND		30	7.3	ug/L		12/12/23 10:43	12/14/23 16:15	1
Benzyl alcohol	ND		10	2.0	ug/L		12/12/23 10:43	12/14/23 16:15	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/12/23 10:43	12/14/23 16:15	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		12/12/23 10:43	12/14/23 16:15	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		12/12/23 10:43	12/14/23 16:15	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		12/12/23 10:43	12/14/23 16:15	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/12/23 10:43	12/14/23 16:15	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/12/23 10:43	12/14/23 16:15	1
4-Chloroaniline	ND		10	3.4	ug/L		12/12/23 10:43	12/14/23 16:15	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		12/12/23 10:43	12/14/23 16:15	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/12/23 10:43	12/14/23 16:15	1
2-Chlorophenol	ND		10	2.2	ug/L		12/12/23 10:43	12/14/23 16:15	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/12/23 10:43	12/14/23 16:15	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/12/23 10:43	12/14/23 16:15	1
Dibenzofuran	ND		10	0.17	ug/L		12/12/23 10:43	12/14/23 16:15	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		12/12/23 10:43	12/14/23 16:15	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		12/12/23 10:43	12/14/23 16:15	1
Diethyl phthalate	ND		10	0.24	ug/L		12/12/23 10:43	12/14/23 16:15	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		12/12/23 10:43	12/14/23 16:15	1
Dimethyl phthalate	ND		10	0.17	ug/L		12/12/23 10:43	12/14/23 16:15	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		12/12/23 10:43	12/14/23 16:15	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/12/23 10:43	12/14/23 16:15	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		12/12/23 10:43	12/14/23 16:15	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/12/23 10:43	12/14/23 16:15	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/12/23 10:43	12/14/23 16:15	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/12/23 10:43	12/14/23 16:15	1
1,4-Dioxane	ND		10	1.0	ug/L		12/12/23 10:43	12/14/23 16:15	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/12/23 10:43	12/14/23 16:15	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/12/23 10:43	12/14/23 16:15	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/12/23 10:43	12/14/23 16:15	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-653912/1-A
Matrix: Water
Analysis Batch: 654340

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		10	4.2	ug/L		12/12/23 10:43	12/14/23 16:15	1
Indene	ND		10	1.0	ug/L		12/12/23 10:43	12/14/23 16:15	1
Isophorone	ND		10	0.14	ug/L		12/12/23 10:43	12/14/23 16:15	1
2-Methylphenol	ND		10	1.8	ug/L		12/12/23 10:43	12/14/23 16:15	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		12/12/23 10:43	12/14/23 16:15	1
2-Nitroaniline	ND		10	2.2	ug/L		12/12/23 10:43	12/14/23 16:15	1
3-Nitroaniline	ND		10	1.8	ug/L		12/12/23 10:43	12/14/23 16:15	1
4-Nitroaniline	ND		10	1.5	ug/L		12/12/23 10:43	12/14/23 16:15	1
Nitrobenzene	ND		10	0.13	ug/L		12/12/23 10:43	12/14/23 16:15	1
2-Nitrophenol	ND		10	5.2	ug/L		12/12/23 10:43	12/14/23 16:15	1
4-Nitrophenol	ND		10	2.1	ug/L		12/12/23 10:43	12/14/23 16:15	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		12/12/23 10:43	12/14/23 16:15	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		12/12/23 10:43	12/14/23 16:15	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/12/23 10:43	12/14/23 16:15	1
Pentachlorophenol	ND		20	1.4	ug/L		12/12/23 10:43	12/14/23 16:15	1
Phenol	ND		10	2.6	ug/L		12/12/23 10:43	12/14/23 16:15	1
Pyridine	ND		10	3.2	ug/L		12/12/23 10:43	12/14/23 16:15	1
Quinoline	ND		10	4.5	ug/L		12/12/23 10:43	12/14/23 16:15	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		12/12/23 10:43	12/14/23 16:15	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		12/12/23 10:43	12/14/23 16:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*46 - 124*	*12/12/23 10:43*	*12/14/23 16:15*	*1*
2-Fluorophenol	*11*	*S1-*	*13 - 113*	*12/12/23 10:43*	*12/14/23 16:15*	*1*
Nitrobenzene-d5	*68*		*36 - 126*	*12/12/23 10:43*	*12/14/23 16:15*	*1*
Phenol-d5	*50*		*17 - 127*	*12/12/23 10:43*	*12/14/23 16:15*	*1*
Terphenyl-d14	*88*		*44 - 149*	*12/12/23 10:43*	*12/14/23 16:15*	*1*
2,4,6-Tribromophenol	*84*		*26 - 150*	*12/12/23 10:43*	*12/14/23 16:15*	*1*

Lab Sample ID: LCS 400-653912/2-A
Matrix: Water
Analysis Batch: 654340

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653912

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	58.6		ug/L		49	21 - 120
Benzoic acid	120	88.0		ug/L		73	10 - 144
Benzyl alcohol	120	97.5		ug/L		81	28 - 120
Bis(2-chloroethoxy)methane	120	82.6		ug/L		69	47 - 120
Bis(2-chloroethyl)ether	120	108		ug/L		90	44 - 120
bis (2-chloroisopropyl) ether	120	77.7		ug/L		65	33 - 121
Bis(2-ethylhexyl) phthalate	120	103		ug/L		86	52 - 147
4-Bromophenyl phenyl ether	120	102		ug/L		85	54 - 122
Butyl benzyl phthalate	120	106		ug/L		88	54 - 133
4-Chloroaniline	120	79.1		ug/L		66	26 - 120
4-Chloro-3-methylphenol	120	97.0		ug/L		81	48 - 131
2-Chloronaphthalene	120	98.6		ug/L		82	52 - 121
2-Chlorophenol	120	74.8		ug/L		62	40 - 120
4-Chlorophenyl phenyl ether	120	109		ug/L		91	56 - 125

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-653912/2-A
Matrix: Water
Analysis Batch: 654340

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653912

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dibenz[a,h]acridine	120	125		ug/L		104	31 - 150
Dibenzofuran	120	104		ug/L		86	56 - 122
3,3'-Dichlorobenzidine	160	144		ug/L		90	36 - 132
2,4-Dichlorophenol	120	91.6		ug/L		76	49 - 120
Diethyl phthalate	120	109		ug/L		91	50 - 137
2,4-Dimethylphenol	120	92.1		ug/L		77	48 - 120
Dimethyl phthalate	120	103		ug/L		86	57 - 124
Di-n-butyl phthalate	120	111		ug/L		92	58 - 126
4,6-Dinitro-ortho-cresol	240	204		ug/L		85	23 - 148
2,4-Dinitrophenol	240	191		ug/L		79	10 - 150
2,4-Dinitrotoluene	120	114		ug/L		95	54 - 142
2,6-Dinitrotoluene	120	102		ug/L		85	55 - 130
Di-n-octyl phthalate	120	105		ug/L		87	57 - 138
1,4-Dioxane	120	67.8		ug/L		56	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	93.9		ug/L		78	45 - 124
Hexachlorobenzene	120	114		ug/L		95	52 - 129
Hexachlorocyclopentadiene	120	74.8		ug/L		62	10 - 134
Hexachloroethane	120	78.0		ug/L		65	20 - 120
Indene	120	98.1		ug/L		82	49 - 120
Isophorone	120	86.7		ug/L		72	48 - 120
2-Methylphenol	120	89.3		ug/L		74	46 - 124
3 & 4 Methylphenol	120	90.6		ug/L		76	45 - 120
2-Nitroaniline	120	87.8		ug/L		73	51 - 145
3-Nitroaniline	120	88.0		ug/L		73	37 - 127
4-Nitroaniline	120	107		ug/L		89	36 - 137
Nitrobenzene	120	81.5		ug/L		68	45 - 120
2-Nitrophenol	120	95.8		ug/L		80	40 - 124
4-Nitrophenol	240	229		ug/L		96	23 - 146
N-Nitrosodimethylamine	120	92.8		ug/L		77	29 - 137
N-Nitrosodi-n-propylamine	120	91.3		ug/L		76	45 - 120
N-Nitrosodiphenylamine	119	101		ug/L		85	54 - 120
Pentachlorophenol	240	205		ug/L		86	31 - 130
Phenol	120	77.0		ug/L		64	11 - 120
Pyridine	240	131		ug/L		55	16 - 120
Quinoline	120	121		ug/L		101	49 - 130
2,4,5-Trichlorophenol	120	104		ug/L		87	51 - 136
2,4,6-Trichlorophenol	120	106		ug/L		88	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*46 - 124*
2-Fluorophenol	*35*		*13 - 113*
Nitrobenzene-d5	*76*		*36 - 126*
Phenol-d5	*63*		*17 - 127*
Terphenyl-d14	*92*		*44 - 149*
2,4,6-Tribromophenol	*97*		*26 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-653912/6-A
Matrix: Water
Analysis Batch: 654340

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653912

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	5.63	J *-	ug/L		5	10 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*74*		*46 - 124*
2-Fluorophenol	*31*		*13 - 113*
Nitrobenzene-d5	*61*		*36 - 126*
Phenol-d5	*55*		*17 - 127*
Terphenyl-d14	*83*		*44 - 149*
2,4,6-Tribromophenol	*77*		*26 - 150*

Lab Sample ID: LCSD 400-653912/3-A
Matrix: Water
Analysis Batch: 654464

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653912

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	63.2		ug/L		53	21 - 120	7	30
Benzoic acid			120	34.4	*1	ug/L		29	10 - 144	88	30
Benzyl alcohol			120	93.6		ug/L		78	28 - 120	4	30
Bis(2-chloroethoxy)methane			120	68.4		ug/L		57	47 - 120	19	30
Bis(2-chloroethyl)ether			120	83.4		ug/L		69	44 - 120	26	30
bis (2-chloroisopropyl) ether			120	63.7		ug/L		53	33 - 121	20	30
Bis(2-ethylhexyl) phthalate			120	130		ug/L		109	52 - 147	24	30
4-Bromophenyl phenyl ether			120	111		ug/L		93	54 - 122	9	30
Butyl benzyl phthalate			120	116		ug/L		97	54 - 133	9	30
4-Chloroaniline			120	70.1		ug/L		58	26 - 120	12	30
4-Chloro-3-methylphenol			120	69.5	*1	ug/L		58	48 - 131	33	30
2-Chloronaphthalene			120	91.4		ug/L		76	52 - 121	8	30
2-Chlorophenol			120	35.8	*- *1	ug/L		30	40 - 120	71	30
4-Chlorophenyl phenyl ether			120	103		ug/L		86	56 - 125	6	30
Dibenz[a,h]acridine			120	132		ug/L		110	31 - 150	6	30
Dibenzofuran			120	94.3		ug/L		79	56 - 122	9	30
3,3'-Dichlorobenzidine			160	170		ug/L		106	36 - 132	16	30
2,4-Dichlorophenol			120	49.5	*- *1	ug/L		41	49 - 120	60	30
Diethyl phthalate			120	117		ug/L		97	50 - 137	7	30
2,4-Dimethylphenol			120	70.9		ug/L		59	48 - 120	26	30
Dimethyl phthalate			120	103		ug/L		86	57 - 124	0	30
Di-n-butyl phthalate			120	126		ug/L		105	58 - 126	13	30
4,6-Dinitro-ortho-cresol			240	209		ug/L		87	23 - 148	2	30
2,4-Dinitrophenol			240	131	*1	ug/L		55	10 - 150	37	30
2,4-Dinitrotoluene			120	99.8		ug/L		83	54 - 142	13	30
2,6-Dinitrotoluene			120	103		ug/L		86	55 - 130	1	30
Di-n-octyl phthalate			120	125		ug/L		104	57 - 138	18	30
1,4-Dioxane			120	58.0		ug/L		48	31 - 120	16	30
1,2-Diphenylhydrazine (as Azobenzene)			120	87.5		ug/L		73	45 - 124	7	30
Hexachlorobenzene			120	129		ug/L		107	52 - 129	12	30
Hexachlorocyclopentadiene			120	7.53	J *- *1	ug/L		6	10 - 134	163	30
Hexachloroethane			120	80.1		ug/L		67	20 - 120	3	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-653912/3-A
Matrix: Water
Analysis Batch: 654464

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653912

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Indene			120	98.7		ug/L		82	49 - 120	1	30
Isophorone			120	76.6		ug/L		64	48 - 120	12	30
2-Methylphenol			120	61.5	*1	ug/L		51	46 - 124	37	30
3 & 4 Methylphenol			120	59.4	*1	ug/L		49	45 - 120	42	30
2-Nitroaniline			120	96.4		ug/L		80	51 - 145	9	30
3-Nitroaniline			120	82.8		ug/L		69	37 - 127	6	30
4-Nitroaniline			120	112		ug/L		93	36 - 137	5	30
Nitrobenzene			120	75.0		ug/L		63	45 - 120	8	30
2-Nitrophenol			120	45.8	*- *1	ug/L		38	40 - 124	71	30
4-Nitrophenol			240	187		ug/L		78	23 - 146	20	30
N-Nitrosodimethylamine			120	90.1		ug/L		75	29 - 137	3	30
N-Nitrosodi-n-propylamine			120	86.0		ug/L		72	45 - 120	6	30
N-Nitrosodiphenylamine			119	97.1		ug/L		82	54 - 120	4	30
Pentachlorophenol			240	139	*1	ug/L		58	31 - 130	39	30
Phenol			120	45.5	*1	ug/L		38	11 - 120	51	30
Pyridine			240	97.7		ug/L		41	16 - 120	29	30
Quinoline			120	83.3	*1	ug/L		70	49 - 130	37	30
2,4,5-Trichlorophenol			120	72.4	*1	ug/L		60	51 - 136	36	30
2,4,6-Trichlorophenol			120	69.5	*1	ug/L		58	50 - 127	41	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*71*		*46 - 124*
2-Fluorophenol	*14*		*13 - 113*
Nitrobenzene-d5	*62*		*36 - 126*
Phenol-d5	*32*		*17 - 127*
Terphenyl-d14	*99*		*44 - 149*
2,4,6-Tribromophenol	*71*		*26 - 150*

Lab Sample ID: LCSD 400-653912/7-A
Matrix: Water
Analysis Batch: 654340

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653912

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	15.9	*1	ug/L		13	10 - 120	95	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*79*		*46 - 124*
2-Fluorophenol	*36*		*13 - 113*
Nitrobenzene-d5	*62*		*36 - 126*
Phenol-d5	*57*		*17 - 127*
Terphenyl-d14	*87*		*44 - 149*
2,4,6-Tribromophenol	*82*		*26 - 150*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-652972/1-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		12/05/23 09:56	12/06/23 15:44	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/05/23 09:56	12/06/23 15:44	1
Anthracene	ND		0.20	0.047	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/05/23 09:56	12/06/23 15:44	1
Chrysene	ND		0.20	0.033	ug/L		12/05/23 09:56	12/06/23 15:44	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/05/23 09:56	12/06/23 15:44	1
Fluoranthene	ND		0.20	0.034	ug/L		12/05/23 09:56	12/06/23 15:44	1
Fluorene	ND		0.20	0.089	ug/L		12/05/23 09:56	12/06/23 15:44	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/05/23 09:56	12/06/23 15:44	1
Phenanthrene	ND		0.20	0.090	ug/L		12/05/23 09:56	12/06/23 15:44	1
Pyrene	ND		0.20	0.039	ug/L		12/05/23 09:56	12/06/23 15:44	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		12/05/23 09:56	12/06/23 15:44	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		12/05/23 09:56	12/06/23 15:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*158*	*S1+*	*18 - 147*	*12/05/23 09:56*	*12/06/23 15:44*	*1*
2-Fluorobiphenyl	*73*		*15 - 128*	*12/05/23 09:56*	*12/06/23 15:44*	*1*
Nitrobenzene-d5	*71*		*10 - 144*	*12/05/23 09:56*	*12/06/23 15:44*	*1*

Lab Sample ID: LCS 400-652972/2-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	88.4		ug/L		74	40 - 140
Acenaphthylene	120	91.3		ug/L		76	40 - 140
Anthracene	120	88.7		ug/L		74	40 - 140
Benzo[a]anthracene	120	105		ug/L		87	40 - 140
Benzo[a]pyrene	120	80.7		ug/L		67	40 - 140
Benzo[b]fluoranthene	120	98.2		ug/L		82	40 - 140
Benzo[g,h,i]perylene	120	94.9		ug/L		79	40 - 140
Benzo[k]fluoranthene	120	97.7		ug/L		81	40 - 140
Chrysene	120	88.1		ug/L		73	40 - 140
Dibenz(a,h)anthracene	120	89.2		ug/L		74	40 - 140
Fluoranthene	120	93.2		ug/L		78	40 - 140
Fluorene	120	90.6		ug/L		75	40 - 140
Indeno[1,2,3-cd]pyrene	120	89.3		ug/L		74	40 - 140
Phenanthrene	120	86.7		ug/L		72	40 - 140
Pyrene	120	121		ug/L		101	40 - 140
1-Methylnaphthalene	120	70.8		ug/L		59	40 - 140
2-Methylnaphthalene	120	71.9		ug/L		60	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*93*		*18 - 147*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 400-652972/2-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	70		15 - 128
Nitrobenzene-d5	72		10 - 144

Lab Sample ID: LCSD 400-652972/3-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	84.4		ug/L		70	40 - 140	5	40
Acenaphthylene			120	88.3		ug/L		74	40 - 140	3	40
Anthracene			120	81.9		ug/L		68	40 - 140	8	40
Benzo[a]anthracene			120	97.7		ug/L		81	40 - 140	7	40
Benzo[a]pyrene			120	74.5		ug/L		62	40 - 140	8	40
Benzo[b]fluoranthene			120	95.1		ug/L		79	40 - 140	3	40
Benzo[g,h,i]perylene			120	84.2		ug/L		70	40 - 140	12	40
Benzo[k]fluoranthene			120	90.9		ug/L		76	40 - 140	7	40
Chrysene			120	80.6		ug/L		67	40 - 140	9	40
Dibenz(a,h)anthracene			120	80.5		ug/L		67	40 - 140	10	40
Fluoranthene			120	82.9		ug/L		69	40 - 140	12	40
Fluorene			120	84.8		ug/L		71	40 - 140	7	40
Indeno[1,2,3-cd]pyrene			120	80.3		ug/L		67	40 - 140	11	40
Phenanthrene			120	79.3		ug/L		66	40 - 140	9	40
Pyrene			120	117		ug/L		98	40 - 140	3	40
1-Methylnaphthalene			120	71.2		ug/L		59	40 - 140	1	40
2-Methylnaphthalene			120	72.7		ug/L		61	40 - 140	1	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	87		18 - 147
2-Fluorobiphenyl	67		15 - 128
Nitrobenzene-d5	76		10 - 144

Lab Sample ID: MB 400-653912/1-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		12/12/23 10:43	12/13/23 18:25	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/12/23 10:43	12/13/23 18:25	1
Anthracene	ND		0.20	0.047	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/12/23 10:43	12/13/23 18:25	1
Chrysene	ND		0.20	0.033	ug/L		12/12/23 10:43	12/13/23 18:25	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/12/23 10:43	12/13/23 18:25	1
Fluoranthene	ND		0.20	0.034	ug/L		12/12/23 10:43	12/13/23 18:25	1
Fluorene	ND		0.20	0.089	ug/L		12/12/23 10:43	12/13/23 18:25	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 400-653912/1-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/12/23 10:43	12/13/23 18:25	1
Phenanthrene	ND		0.20	0.090	ug/L		12/12/23 10:43	12/13/23 18:25	1
Pyrene	ND		0.20	0.039	ug/L		12/12/23 10:43	12/13/23 18:25	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		12/12/23 10:43	12/13/23 18:25	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		12/12/23 10:43	12/13/23 18:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*75*		*18 - 147*	*12/12/23 10:43*	*12/13/23 18:25*	*1*
2-Fluorobiphenyl	*73*		*15 - 128*	*12/12/23 10:43*	*12/13/23 18:25*	*1*
Nitrobenzene-d5	*68*		*10 - 144*	*12/12/23 10:43*	*12/13/23 18:25*	*1*

Lab Sample ID: LCS 400-653912/2-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653912

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	105		ug/L		87	40 - 140
Acenaphthylene	120	120		ug/L		100	40 - 140
Anthracene	120	121		ug/L		101	40 - 140
Benzo[a]anthracene	120	149	E	ug/L		124	40 - 140
Benzo[a]pyrene	120	118		ug/L		98	40 - 140
Benzo[b]fluoranthene	120	119		ug/L		99	40 - 140
Benzo[g,h,i]perylene	120	92.6		ug/L		77	40 - 140
Benzo[k]fluoranthene	120	104		ug/L		86	40 - 140
Chrysene	120	104		ug/L		87	40 - 140
Dibenz(a,h)anthracene	120	108		ug/L		90	40 - 140
Fluoranthene	120	118		ug/L		98	40 - 140
Fluorene	120	109		ug/L		91	40 - 140
Indeno[1,2,3-cd]pyrene	120	106		ug/L		88	40 - 140
Phenanthrene	120	103		ug/L		86	40 - 140
Pyrene	120	97.0		ug/L		81	40 - 140
1-Methylnaphthalene	120	86.9		ug/L		72	40 - 140
2-Methylnaphthalene	120	90.7		ug/L		76	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*70*		*18 - 147*
2-Fluorobiphenyl	*74*		*15 - 128*
Nitrobenzene-d5	*73*		*10 - 144*

Lab Sample ID: LCSD 400-653912/3-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653912

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	120	99.9		ug/L		83	40 - 140	5	40
Acenaphthylene	120	114		ug/L		95	40 - 140	6	40
Anthracene	120	115		ug/L		96	40 - 140	5	40
Benzo[a]anthracene	120	139	E	ug/L		115	40 - 140	7	40

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 400-653912/3-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653912

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[a]pyrene			120	114		ug/L		95	40 - 140	3	40
Benzo[b]fluoranthene			120	120		ug/L		100	40 - 140	1	40
Benzo[g,h,i]perylene			120	89.1		ug/L		74	40 - 140	4	40
Benzo[k]fluoranthene			120	105		ug/L		87	40 - 140	1	40
Chrysene			120	99.1		ug/L		83	40 - 140	5	40
Dibenz(a,h)anthracene			120	103		ug/L		86	40 - 140	5	40
Fluoranthene			120	113		ug/L		94	40 - 140	4	40
Fluorene			120	105		ug/L		87	40 - 140	5	40
Indeno[1,2,3-cd]pyrene			120	101		ug/L		84	40 - 140	4	40
Phenanthrene			120	99.0		ug/L		82	40 - 140	4	40
Pyrene			120	90.5		ug/L		75	40 - 140	7	40
1-Methylnaphthalene			120	81.5		ug/L		68	40 - 140	6	40
2-Methylnaphthalene			120	84.3		ug/L		70	40 - 140	7	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*64*		*18 - 147*
2-Fluorobiphenyl	*71*		*15 - 128*
Nitrobenzene-d5	*68*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-652451/1-A
Matrix: Water
Analysis Batch: 652449

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652451

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		12/01/23 07:56	12/01/23 11:17	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/01/23 07:56	12/01/23 11:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*12/01/23 07:56*	*12/01/23 11:17*	*1*

Lab Sample ID: LCS 400-652451/2-A
Matrix: Water
Analysis Batch: 652449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652451

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane			0.101	0.0910		ug/L		90	60 - 140
1,2-Dibromoethane			0.100	0.0894		ug/L		89	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*65*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-652451/3-A
Matrix: Water
Analysis Batch: 652449

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652451

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0951		ug/L		94	60 - 140	4	30
1,2-Dibromoethane			0.100	0.0922		ug/L		92	60 - 140	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*82*		*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
Melissa Remiger	25278	DATE: 11/29/2023
PO #	**GSAP Project ID**	PAGE: 1 of 1
60697537 – 3.4.2	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 Monthly GW 60697537 – 3.4.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

SAMPLER NAME(S) (Print): C. McDavid, J. Mayer

LAB USE ONLY

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C° | Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

- **Please include "J" values on Reports.**
- **Please provide sample receipt upon login.**
- **Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com**

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°
0.0 IR8

Container PID Readings or Laboratory Notes:

400-247491 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 8270 SIMS
	TB-ROX-112923-8260	11/29/2023	0000	Water	2					2	X			
	TB-ROX-112923-8011	11/29/2023	0000	Water	2					2		X		
	MW12-ROX-112923	11/29/2023	1015	Water	6			2		8	X	X	X	X
	MW13-ROX-112923	11/29/2023	1205	Water	6			2		8	X	X	X	X
	P114R-ROX-112923	11/29/2023	1255	Water	6			2		8	X	X	X	X

COURTNEY MCDAVID 11-29-23

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 6339 6597 5551	11/29/2023	1600
	LB	11.30.23	9:28

CUSTODY SEALS: 1599795, 1599794

Version: 27Sept23

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-247491-1

Login Number: 247491
List Number: 1
Creator: Roberts, Alexis J

List Source: Eurofins 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	0.0°C IR8
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: 400-247491-1
Project/Site: ROXANA MONTHLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Roxana Groundwater Monthly – November/December 2023 Data Review

Laboratory SDG: 400-247492-1

Data Reviewer: Adelina Gita

Peer Reviewer: Cheyana Cokley

Date Reviewed: 1/5/2024

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

Sample Identification	Sample Identification
TB-ROX-112923-8260-BP	TB-ROX-112923-8011-BP
MW23-ROX-112923	

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 case narrative stated that PAHs in sample MW23-ROX-112923 were re-extracted outside extraction time criteria. LCS/LCSD recoveries and LCS/LCSD RPD for benzenethiol were outside evaluation criteria. The surrogate recovery for terphenyl-d_{14} was outside criteria in a PAH method blank. The continuing calibration verification (CCV) for benzo[g,h,i]perylene was outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (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, PAHs in sample MW23-ROX-112923 were re-extracted 7 days outside of extraction time criteria (7 days) and then re-analyzed as the initial analysis results were not consistent with historical data; the samples were re-extracted out of hold time with significantly lower results. Holding time exceedances were not greater than two times (2X) criteria; both sets of data are reported.

With regard to initial MW23-ROX-112923 PAH data, the laboratory previously issued a Corrective Action Report (CAR) stating that through confirmation analyses, many previous detections were not confirmed and were therefore deemed laboratory contamination. Based on professional judgement, the results from the re-analysis were used for the purposes of this report. Data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW23-ROX-112923 -RERA	PAHs	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/LCSD 400-652972/4-A/5-A	SVOCs	Benzenethiol	**4**/97	**183**	10-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol below evaluation criteria; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW23-ROX-112923	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MB 400-652972/1-A	PAHs	Terphenyl-d_{14}	**158**	18-147

Qualifications due to surrogate recoveries were not required if only one of three base/neutral and/or acid 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?

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 (CCV) for benzo[g,h,i]perylene was outside evaluation criteria, biased low. Benzo[g,h,i]perylene in sample MW23-ROX-112923 RERA was previously qualified in Section 3.0 of this data review due to hold time exceedances; no further qualification is required.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 12/15/2023 10:15:53 AM

JOB DESCRIPTION

ROXANA MONTHLY GW

JOB NUMBER

400-247492-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



Generated
12/15/2023 10:15:53 AM

Authorized for release by
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Designee for
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Job ID: 400-247492-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-247492-1

Receipt
The samples were received on 11/30/2023 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 0.0º C.

GC/MS VOA
Method 8260D: 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-112923-8260-BP (400-247492-1) and MW23-ROX-112923 (400-247492-3). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260D: The initial calibration verification (ICV) analyzed in batch 400-633903 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

GC/MS Semi VOA
Method 8270E: The laboratory control sample (LCS) for preparation batch 400-652972 and analytical batch 400-653218 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 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-652972 and analytical batch 400-653218 recovered outside control limits for the following analyte: Benzenethiol.

Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-652774 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E SIM: The continuing calibration verification (CCV) associated with batch 400-653195 recovered above the upper control limit for Benzo[g,h,i]perylene. The samples associated with this CCV were below the reporting limit for the affected analytes; therefore, the data have been reported.

Method 8270E SIM: The continuing calibration verification (CCV) associated with batch 400-654224 recovered above the upper control limit for Benzo[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene and Dibenz(a,h)anthracene. The samples associated with this CCV were below the reporting limit for the affected analytes; therefore, the data have been reported.

Method 8270E SIM: The continuing calibration verification (CCV) associated with batch 400-654319 recovered above the upper control limit for Benzo[a]anthracene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E SIM: The continuing calibration verification (CCV) associated with batch 400-654319 recovered outside acceptance criteria, low biased, for Benzo[g,h,i]perylene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E SIM: The following sample was re-prepared outside of preparation holding time for confirmation: MW23-ROX-112923 (400-247492-3). Both sets of data are reported.

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

Sample Summary

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

Job ID: 400-247492-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-247492-1	TB-ROX-112923-8260-BP	Water	11/29/23 12:00	11/30/23 09:28
400-247492-2	TB-ROX-112923-8011-BP	Water	11/29/23 12:00	11/30/23 09:28
400-247492-3	MW23-ROX-112923	Water	11/29/23 09:20	11/30/23 09:28

Detection Summary

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

Job ID: 400-247492-1

Client Sample ID: TB-ROX-112923-8260-BP — Lab Sample ID: 400-247492-1

No Detections.

Client Sample ID: TB-ROX-112923-8011-BP — Lab Sample ID: 400-247492-2

No Detections.

Client Sample ID: MW23-ROX-112923 — Lab Sample ID: 400-247492-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.90	J	1.0	0.22	ug/L	1		8260D	Total/NA
Anthracene	0.077	J	0.20	0.048	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.079	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Benzo[a]pyrene	0.13	J	0.20	0.065	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.074	J	0.20	0.038	ug/L	1		8270E SIM	Total/NA
Benzo[g,h,i]perylene	0.049	J	0.20	0.027	ug/L	1		8270E SIM	Total/NA
Dibenz(a,h)anthracene	0.074	J	0.20	0.049	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.092	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-247492-1

Client Sample ID: TB-ROX-112923-8260-BP
Date Collected: 11/29/23 12:00
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247492-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/05/23 12:44	1
Acrolein	ND		20	3.3	ug/L			12/05/23 12:44	1
Acrylonitrile	ND		10	2.8	ug/L			12/05/23 12:44	1
Benzene	ND		1.0	0.50	ug/L			12/05/23 12:44	1
Bromobenzene	ND		1.0	0.54	ug/L			12/05/23 12:44	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/05/23 12:44	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/05/23 12:44	1
Bromoform	ND		5.0	0.25	ug/L			12/05/23 12:44	1
Bromomethane	ND		1.0	0.98	ug/L			12/05/23 12:44	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/05/23 12:44	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/05/23 12:44	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/05/23 12:44	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/05/23 12:44	1
Chloroethane	ND		1.0	0.76	ug/L			12/05/23 12:44	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/05/23 12:44	1
Chloroform	ND		1.0	0.90	ug/L			12/05/23 12:44	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/05/23 12:44	1
Chloromethane	ND		1.0	0.90	ug/L			12/05/23 12:44	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/05/23 12:44	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/05/23 12:44	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/05/23 12:44	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/05/23 12:44	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/05/23 12:44	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/05/23 12:44	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/05/23 12:44	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/05/23 12:44	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/05/23 12:44	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 12:44	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 12:44	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 12:44	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 12:44	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/05/23 12:44	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/05/23 12:44	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/05/23 12:44	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/05/23 12:44	1
2-Hexanone	ND		25	1.4	ug/L			12/05/23 12:44	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/05/23 12:44	1
Methylene bromide	ND		5.0	0.22	ug/L			12/05/23 12:44	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/05/23 12:44	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/05/23 12:44	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/05/23 12:44	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/05/23 12:44	1
Naphthalene	ND		5.0	3.0	ug/L			12/05/23 12:44	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/05/23 12:44	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/05/23 12:44	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/05/23 12:44	1
o-Xylene	ND		5.0	0.60	ug/L			12/05/23 12:44	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/05/23 12:44	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/05/23 12:44	1

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

Job ID: 400-247492-1

Client Sample ID: TB-ROX-112923-8260-BP
Date Collected: 11/29/23 12:00
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247492-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/05/23 12:44	1
Styrene	ND		1.0	1.0	ug/L			12/05/23 12:44	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/05/23 12:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/05/23 12:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/05/23 12:44	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/05/23 12:44	1
Toluene	ND		1.0	0.90	ug/L			12/05/23 12:44	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 12:44	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/05/23 12:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/05/23 12:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/05/23 12:44	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/05/23 12:44	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/05/23 12:44	1
Trichloroethene	ND		1.0	0.15	ug/L			12/05/23 12:44	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/05/23 12:44	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/05/23 12:44	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/05/23 12:44	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/05/23 12:44	1
Vinyl acetate	ND		25	0.93	ug/L			12/05/23 12:44	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/05/23 12:44	1
Xylenes, Total	ND		10	1.6	ug/L			12/05/23 12:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*12/05/23 12:44*	*1*
Dibromofluoromethane	*96*		*75 - 126*		*12/05/23 12:44*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*12/05/23 12:44*	*1*

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

Job ID: 400-247492-1

Client Sample ID: TB-ROX-112923-8011-BP
Date Collected: 11/29/23 12:00
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247492-2
Matrix: Water

Method: EPA 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	0.016	ug/L		12/01/23 07:56	12/01/23 19:22	1
1,2-Dibromoethane	ND		0.019	0.014	ug/L		12/01/23 07:56	12/01/23 19:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*51 - 149*	*12/01/23 07:56*	*12/01/23 19:22*	*1*

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

Job ID: 400-247492-1

Client Sample ID: MW23-ROX-112923
Date Collected: 11/29/23 09:20
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247492-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/05/23 13:08	1
Acrolein	ND		20	3.3	ug/L			12/05/23 13:08	1
Acrylonitrile	ND		10	2.8	ug/L			12/05/23 13:08	1
Benzene	ND		1.0	0.50	ug/L			12/05/23 13:08	1
Bromobenzene	ND		1.0	0.54	ug/L			12/05/23 13:08	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/05/23 13:08	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/05/23 13:08	1
Bromoform	ND		5.0	0.25	ug/L			12/05/23 13:08	1
Bromomethane	ND		1.0	0.98	ug/L			12/05/23 13:08	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/05/23 13:08	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/05/23 13:08	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/05/23 13:08	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/05/23 13:08	1
Chloroethane	ND		1.0	0.76	ug/L			12/05/23 13:08	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/05/23 13:08	1
Chloroform	ND		1.0	0.90	ug/L			12/05/23 13:08	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/05/23 13:08	1
Chloromethane	ND		1.0	0.90	ug/L			12/05/23 13:08	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/05/23 13:08	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/05/23 13:08	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/05/23 13:08	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/05/23 13:08	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/05/23 13:08	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/05/23 13:08	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/05/23 13:08	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/05/23 13:08	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/05/23 13:08	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 13:08	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 13:08	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 13:08	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 13:08	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/05/23 13:08	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/05/23 13:08	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/05/23 13:08	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/05/23 13:08	1
2-Hexanone	ND		25	1.4	ug/L			12/05/23 13:08	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/05/23 13:08	1
Methylene bromide	ND		5.0	0.22	ug/L			12/05/23 13:08	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/05/23 13:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/05/23 13:08	1
Methyl tert-butyl ether	**0.90**	**J**	1.0	0.22	ug/L			12/05/23 13:08	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/05/23 13:08	1
Naphthalene	ND		5.0	3.0	ug/L			12/05/23 13:08	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/05/23 13:08	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/05/23 13:08	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/05/23 13:08	1
o-Xylene	ND		5.0	0.60	ug/L			12/05/23 13:08	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/05/23 13:08	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/05/23 13:08	1

Client Sample ID: MW23-ROX-112923
Date Collected: 11/29/23 09:20
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247492-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/05/23 13:08	1
Styrene	ND		1.0	1.0	ug/L			12/05/23 13:08	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/05/23 13:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/05/23 13:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/05/23 13:08	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/05/23 13:08	1
Toluene	ND		1.0	0.90	ug/L			12/05/23 13:08	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 13:08	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/05/23 13:08	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/05/23 13:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/05/23 13:08	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/05/23 13:08	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/05/23 13:08	1
Trichloroethene	ND		1.0	0.15	ug/L			12/05/23 13:08	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/05/23 13:08	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/05/23 13:08	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/05/23 13:08	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/05/23 13:08	1
Vinyl acetate	ND		25	0.93	ug/L			12/05/23 13:08	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/05/23 13:08	1
Xylenes, Total	ND		10	1.6	ug/L			12/05/23 13:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*12/05/23 13:08*	*1*
Dibromofluoromethane	*99*		*75 - 126*		*12/05/23 13:08*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*12/05/23 13:08*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		12/05/23 09:57	12/06/23 17:46	1
Acenaphthylene	ND		0.20	0.045	ug/L		12/05/23 09:57	12/06/23 17:46	1
Anthracene	**0.077**	**J**	0.20	0.048	ug/L		12/05/23 09:57	12/06/23 17:46	1
Benzo[a]anthracene	**0.079**	**J**	0.20	0.034	ug/L		12/05/23 09:57	12/06/23 17:46	1
Benzo[a]pyrene	**0.13**	**J**	0.20	0.065	ug/L		12/05/23 09:57	12/06/23 17:46	1
Benzo[b]fluoranthene	**0.074**	**J**	0.20	0.038	ug/L		12/05/23 09:57	12/06/23 17:46	1
Benzo[g,h,i]perylene	**0.049**	**J**	0.20	0.027	ug/L		12/05/23 09:57	12/06/23 17:46	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		12/05/23 09:57	12/06/23 17:46	1
Chrysene	ND		0.20	0.033	ug/L		12/05/23 09:57	12/06/23 17:46	1
Dibenz(a,h)anthracene	**0.074**	**J**	0.20	0.049	ug/L		12/05/23 09:57	12/06/23 17:46	1
Fluoranthene	ND		0.20	0.034	ug/L		12/05/23 09:57	12/06/23 17:46	1
Fluorene	ND		0.20	0.090	ug/L		12/05/23 09:57	12/06/23 17:46	1
Indeno[1,2,3-cd]pyrene	**0.092**	**J**	0.20	0.034	ug/L		12/05/23 09:57	12/06/23 17:46	1
Phenanthrene	ND		0.20	0.091	ug/L		12/05/23 09:57	12/06/23 17:46	1
Pyrene	ND		0.20	0.040	ug/L		12/05/23 09:57	12/06/23 17:46	1
1-Methylnaphthalene	ND		0.20	0.081	ug/L		12/05/23 09:57	12/06/23 17:46	1
2-Methylnaphthalene	ND		0.20	0.067	ug/L		12/05/23 09:57	12/06/23 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*90*		*18 - 147*	*12/05/23 09:57*	*12/06/23 17:46*	*1*
2-Fluorobiphenyl	*82*		*15 - 128*	*12/05/23 09:57*	*12/06/23 17:46*	*1*

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

Job ID: 400-247492-1

Client Sample ID: MW23-ROX-112923

Date Collected: 11/29/23 09:20
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247492-3

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*90*		*10 - 144*	*12/05/23 09:57*	*12/06/23 17:46*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.20	0.10	ug/L		12/13/23 09:48	12/14/23 15:47	1
Acenaphthylene	ND	H	0.20	0.045	ug/L		12/13/23 09:48	12/14/23 15:47	1
Anthracene	ND	H	0.20	0.048	ug/L		12/13/23 09:48	12/14/23 15:47	1
Benzo[a]anthracene	ND	H	0.20	0.035	ug/L		12/13/23 09:48	12/14/23 15:47	1
Benzo[a]pyrene	ND	H	0.20	0.065	ug/L		12/13/23 09:48	12/14/23 15:47	1
Benzo[b]fluoranthene	ND	H	0.20	0.038	ug/L		12/13/23 09:48	12/14/23 15:47	1
Benzo[g,h,i]perylene	ND	H	0.20	0.028	ug/L		12/13/23 09:48	12/14/23 15:47	1
Benzo[k]fluoranthene	ND	H	0.20	0.063	ug/L		12/13/23 09:48	12/14/23 15:47	1
Chrysene	ND	H	0.20	0.034	ug/L		12/13/23 09:48	12/14/23 15:47	1
Dibenz(a,h)anthracene	ND	H	0.20	0.049	ug/L		12/13/23 09:48	12/14/23 15:47	1
Fluoranthene	ND	H	0.20	0.035	ug/L		12/13/23 09:48	12/14/23 15:47	1
Fluorene	ND	H	0.20	0.091	ug/L		12/13/23 09:48	12/14/23 15:47	1
Indeno[1,2,3-cd]pyrene	ND	H	0.20	0.035	ug/L		12/13/23 09:48	12/14/23 15:47	1
Phenanthrene	ND	H	0.20	0.092	ug/L		12/13/23 09:48	12/14/23 15:47	1
Pyrene	ND	H	0.20	0.040	ug/L		12/13/23 09:48	12/14/23 15:47	1
1-Methylnaphthalene	ND	H	0.20	0.082	ug/L		12/13/23 09:48	12/14/23 15:47	1
2-Methylnaphthalene	ND	H	0.20	0.067	ug/L		12/13/23 09:48	12/14/23 15:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*60*		*18 - 147*	*12/13/23 09:48*	*12/14/23 15:47*	*1*
2-Fluorobiphenyl	*65*		*15 - 128*	*12/13/23 09:48*	*12/14/23 15:47*	*1*
Nitrobenzene-d5	*63*		*10 - 144*	*12/13/23 09:48*	*12/14/23 15:47*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		12/05/23 09:57	12/06/23 19:15	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		12/05/23 09:57	12/06/23 19:15	1
Benzoic acid	ND		30	7.4	ug/L		12/05/23 09:57	12/06/23 19:15	1
Benzyl alcohol	ND		10	2.0	ug/L		12/05/23 09:57	12/06/23 19:15	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/05/23 09:57	12/06/23 19:15	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		12/05/23 09:57	12/06/23 19:15	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		12/05/23 09:57	12/06/23 19:15	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		12/05/23 09:57	12/06/23 19:15	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/05/23 09:57	12/06/23 19:15	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/05/23 09:57	12/06/23 19:15	1
4-Chloroaniline	ND		10	3.4	ug/L		12/05/23 09:57	12/06/23 19:15	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		12/05/23 09:57	12/06/23 19:15	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/05/23 09:57	12/06/23 19:15	1
2-Chlorophenol	ND		10	2.2	ug/L		12/05/23 09:57	12/06/23 19:15	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/05/23 09:57	12/06/23 19:15	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 19:15	1
Dibenzofuran	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 19:15	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		12/05/23 09:57	12/06/23 19:15	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		12/05/23 09:57	12/06/23 19:15	1
Diethyl phthalate	ND		10	0.24	ug/L		12/05/23 09:57	12/06/23 19:15	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		12/05/23 09:57	12/06/23 19:15	1

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

Job ID: 400-247492-1

Client Sample ID: MW23-ROX-112923
Date Collected: 11/29/23 09:20
Date Received: 11/30/23 09:28

Lab Sample ID: 400-247492-3
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 19:15	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		12/05/23 09:57	12/06/23 19:15	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/05/23 09:57	12/06/23 19:15	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		12/05/23 09:57	12/06/23 19:15	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/05/23 09:57	12/06/23 19:15	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/05/23 09:57	12/06/23 19:15	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 19:15	1
1,4-Dioxane	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 19:15	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 19:15	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 19:15	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/05/23 09:57	12/06/23 19:15	1
Hexachloroethane	ND		10	4.3	ug/L		12/05/23 09:57	12/06/23 19:15	1
Indene	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 19:15	1
Isophorone	ND		10	0.14	ug/L		12/05/23 09:57	12/06/23 19:15	1
2-Methylphenol	ND		10	1.8	ug/L		12/05/23 09:57	12/06/23 19:15	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		12/05/23 09:57	12/06/23 19:15	1
2-Nitroaniline	ND		10	2.2	ug/L		12/05/23 09:57	12/06/23 19:15	1
3-Nitroaniline	ND		10	1.8	ug/L		12/05/23 09:57	12/06/23 19:15	1
4-Nitroaniline	ND		10	1.5	ug/L		12/05/23 09:57	12/06/23 19:15	1
Nitrobenzene	ND		10	0.13	ug/L		12/05/23 09:57	12/06/23 19:15	1
2-Nitrophenol	ND		10	5.3	ug/L		12/05/23 09:57	12/06/23 19:15	1
4-Nitrophenol	ND		10	2.1	ug/L		12/05/23 09:57	12/06/23 19:15	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		12/05/23 09:57	12/06/23 19:15	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		12/05/23 09:57	12/06/23 19:15	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/05/23 09:57	12/06/23 19:15	1
Pentachlorophenol	ND		20	1.4	ug/L		12/05/23 09:57	12/06/23 19:15	1
Phenol	ND		10	2.6	ug/L		12/05/23 09:57	12/06/23 19:15	1
Pyridine	ND		10	3.2	ug/L		12/05/23 09:57	12/06/23 19:15	1
Quinoline	ND		10	4.6	ug/L		12/05/23 09:57	12/06/23 19:15	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		12/05/23 09:57	12/06/23 19:15	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		12/05/23 09:57	12/06/23 19:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*92*		*46 - 124*	*12/05/23 09:57*	*12/06/23 19:15*	*1*
2-Fluorophenol	*67*		*13 - 113*	*12/05/23 09:57*	*12/06/23 19:15*	*1*
Nitrobenzene-d5	*86*		*36 - 126*	*12/05/23 09:57*	*12/06/23 19:15*	*1*
Phenol-d5	*83*		*17 - 127*	*12/05/23 09:57*	*12/06/23 19:15*	*1*
Terphenyl-d14	*67*		*44 - 149*	*12/05/23 09:57*	*12/06/23 19:15*	*1*
2,4,6-Tribromophenol	*85*		*26 - 150*	*12/05/23 09:57*	*12/06/23 19:15*	*1*

Method: EPA 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		12/01/23 07:56	12/01/23 19:43	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/01/23 07:56	12/01/23 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*51 - 149*	*12/01/23 07:56*	*12/01/23 19:43*	*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, low biased.
*1	LCS/LCSD RPD exceeds control limits.
E	Result exceeded calibration range.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
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.

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 MONTHLY GW

Job ID: 400-247492-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-130)	(75-126)	(64-132)
400-247492-1	TB-ROX-112923-8260-BP	104	96	96
400-247492-3	MW23-ROX-112923	104	99	98
LCS 400-652928/1002	Lab Control Sample	106	93	100
MB 400-652928/4	Method Blank	103	94	99

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - 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)
400-247492-3	MW23-ROX-112923	92	67	86	83	67	85
LCS 400-652972/2-A	Lab Control Sample	83	53	73	71	91	79
LCS 400-652972/4-A	Lab Control Sample	89	67	79	80	100	68
LCSD 400-652972/3-A	Lab Control Sample Dup	89	55	81	77	94	82
LCSD 400-652972/5-A	Lab Control Sample Dup	94	72	85	84	98	72
MB 400-652972/1-A	Method Blank	80	23	71	46	83	48

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-247492-3	MW23-ROX-112923	90	82	90
400-247492-3 - RERA	MW23-ROX-112923	60	65	63
LCS 400-652972/2-A	Lab Control Sample	93	70	72
LCS 400-653912/2-A	Lab Control Sample	70	74	73
LCSD 400-652972/3-A	Lab Control Sample Dup	87	67	76
LCSD 400-653912/3-A	Lab Control Sample Dup	64	71	68
MB 400-652972/1-A	Method Blank	158 S1+	73	71
MB 400-653912/1-A	Method Blank	75	73	68

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Surrogate Summary

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

Job ID: 400-247492-1

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-247492-2	TB-ROX-112923-8011-BP	100
400-247492-3	MW23-ROX-112923	113
LCS 400-652451/2-A	Lab Control Sample	65
LCSD 400-652451/3-A	Lab Control Sample Dup	82
MB 400-652451/1-A	Method Blank	94

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-247492-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

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

Job ID: 400-247492-1

Client Sample ID: TB-ROX-112923-8260-BP
Lab Sample ID: 400-247492-1
Date Collected: 11/29/23 12:00
Matrix: Water
Date Received: 11/30/23 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	8260D		1	5 mL	5 mL	652928	12/05/23 12:44	WPD	EET PEN

Client Sample ID: TB-ROX-112923-8011-BP
Lab Sample ID: 400-247492-2
Date Collected: 11/29/23 12:00
Matrix: Water
Date Received: 11/30/23 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			36.5 mL	35 mL	652451	12/01/23 07:56	PG	EET PEN
Total/NA	Analysis	8011		1			652449	12/01/23 19:22	PG	EET PEN

Client Sample ID: MW23-ROX-112923
Lab Sample ID: 400-247492-3
Date Collected: 11/29/23 09:20
Matrix: Water
Date Received: 11/30/23 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	8260D		1	5 mL	5 mL	652928	12/05/23 13:08	WPD	EET PEN
Total/NA	Prep	3520C			246.6 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 19:15	S1B	EET PEN
Total/NA	Prep	3520C			246.6 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653195	12/06/23 17:46	TH	EET PEN
Total/NA	Prep	3520C	RERA		244.6 mL	1 mL	653912	12/13/23 09:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	654319	12/14/23 15:47	S1B	EET PEN
Total/NA	Prep	8011			34.7 mL	35 mL	652451	12/01/23 07:56	PG	EET PEN
Total/NA	Analysis	8011		1			652449	12/01/23 19:43	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-652451/1-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	652451	12/01/23 07:56	PG	EET PEN
Total/NA	Analysis	8011		1			652449	12/01/23 11:17	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-652928/4
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	8260D		1	5 mL	5 mL	652928	12/05/23 07:57	WPD	EET PEN

Lab Chronicle

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

Job ID: 400-247492-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-652972/1-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 16:27	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653195	12/06/23 15:44	TH	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-653912/1-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	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	654224	12/13/23 18:25	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652451/2-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	652451	12/01/23 07:56	PG	EET PEN
Total/NA	Analysis	8011		1			652449	12/01/23 11:38	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652928/1002
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	8260D		1	5 mL	5 mL	652928	12/05/23 07:13	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652972/2-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 16:48	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	653195	12/06/23 16:04	TH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652972/4-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 17:30	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-247492-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653912/2-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	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	654224	12/13/23 18:45	KJA	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-652451/3-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	652451	12/01/23 07:56	PG	EET PEN
Total/NA	Analysis	8011		1			652449	12/01/23 11:59	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-652972/3-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 17:09	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	653195	12/06/23 16:25	TH	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-652972/5-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 17:51	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653912/3-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	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	654224	12/13/23 19:06	KJA	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

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

Job ID: 400-247492-1

GC/MS VOA

Analysis Batch: 652928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247492-1	TB-ROX-112923-8260-BP	Total/NA	Water	8260D	
400-247492-3	MW23-ROX-112923	Total/NA	Water	8260D	
MB 400-652928/4	Method Blank	Total/NA	Water	8260D	
LCS 400-652928/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 652972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247492-3	MW23-ROX-112923	Total/NA	Water	3520C	
MB 400-652972/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-652972/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-652972/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-652972/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-652972/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 653195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247492-3	MW23-ROX-112923	Total/NA	Water	8270E SIM	652972
MB 400-652972/1-A	Method Blank	Total/NA	Water	8270E SIM	652972
LCS 400-652972/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	652972
LCSD 400-652972/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	652972

Analysis Batch: 653218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247492-3	MW23-ROX-112923	Total/NA	Water	8270E	652972
MB 400-652972/1-A	Method Blank	Total/NA	Water	8270E	652972
LCS 400-652972/2-A	Lab Control Sample	Total/NA	Water	8270E	652972
LCS 400-652972/4-A	Lab Control Sample	Total/NA	Water	8270E	652972
LCSD 400-652972/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	652972
LCSD 400-652972/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	652972

Prep Batch: 653912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247492-3 - RERA	MW23-ROX-112923	Total/NA	Water	3520C	
MB 400-653912/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-653912/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-653912/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 654224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-653912/1-A	Method Blank	Total/NA	Water	8270E SIM	653912
LCS 400-653912/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	653912
LCSD 400-653912/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	653912

Analysis Batch: 654319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247492-3 - RERA	MW23-ROX-112923	Total/NA	Water	8270E SIM	653912

QC Association Summary

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

Job ID: 400-247492-1

GC Semi VOA

Analysis Batch: 652449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247492-2	TB-ROX-112923-8011-BP	Total/NA	Water	8011	652451
400-247492-3	MW23-ROX-112923	Total/NA	Water	8011	652451
MB 400-652451/1-A	Method Blank	Total/NA	Water	8011	652451
LCS 400-652451/2-A	Lab Control Sample	Total/NA	Water	8011	652451
LCSD 400-652451/3-A	Lab Control Sample Dup	Total/NA	Water	8011	652451

Prep Batch: 652451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247492-2	TB-ROX-112923-8011-BP	Total/NA	Water	8011	
400-247492-3	MW23-ROX-112923	Total/NA	Water	8011	
MB 400-652451/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-652451/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-652451/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

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

Job ID: 400-247492-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-652928/4
Matrix: Water
Analysis Batch: 652928

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			12/05/23 07:57	1
Acrolein	ND		20	3.3	ug/L			12/05/23 07:57	1
Acrylonitrile	ND		10	2.8	ug/L			12/05/23 07:57	1
Benzene	ND		1.0	0.50	ug/L			12/05/23 07:57	1
Bromobenzene	ND		1.0	0.54	ug/L			12/05/23 07:57	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/05/23 07:57	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/05/23 07:57	1
Bromoform	ND		5.0	0.25	ug/L			12/05/23 07:57	1
Bromomethane	ND		1.0	0.98	ug/L			12/05/23 07:57	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/05/23 07:57	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/05/23 07:57	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/05/23 07:57	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/05/23 07:57	1
Chloroethane	ND		1.0	0.76	ug/L			12/05/23 07:57	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/05/23 07:57	1
Chloroform	ND		1.0	0.90	ug/L			12/05/23 07:57	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/05/23 07:57	1
Chloromethane	ND		1.0	0.90	ug/L			12/05/23 07:57	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/05/23 07:57	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/05/23 07:57	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/05/23 07:57	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/05/23 07:57	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/05/23 07:57	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/05/23 07:57	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/05/23 07:57	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/05/23 07:57	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/05/23 07:57	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 07:57	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 07:57	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 07:57	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 07:57	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/05/23 07:57	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/05/23 07:57	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/05/23 07:57	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/05/23 07:57	1
2-Hexanone	ND		25	1.4	ug/L			12/05/23 07:57	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/05/23 07:57	1
Methylene bromide	ND		5.0	0.22	ug/L			12/05/23 07:57	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/05/23 07:57	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/05/23 07:57	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/05/23 07:57	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/05/23 07:57	1
Naphthalene	ND		5.0	3.0	ug/L			12/05/23 07:57	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/05/23 07:57	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/05/23 07:57	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/05/23 07:57	1
o-Xylene	ND		5.0	0.60	ug/L			12/05/23 07:57	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/05/23 07:57	1

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

Lab Sample ID: MB 400-652928/4
Matrix: Water
Analysis Batch: 652928

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			12/05/23 07:57	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/05/23 07:57	1
Styrene	ND		1.0	1.0	ug/L			12/05/23 07:57	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/05/23 07:57	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/05/23 07:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/05/23 07:57	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/05/23 07:57	1
Toluene	ND		1.0	0.90	ug/L			12/05/23 07:57	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 07:57	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/05/23 07:57	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/05/23 07:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/05/23 07:57	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/05/23 07:57	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/05/23 07:57	1
Trichloroethene	ND		1.0	0.15	ug/L			12/05/23 07:57	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/05/23 07:57	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/05/23 07:57	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/05/23 07:57	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/05/23 07:57	1
Vinyl acetate	ND		25	0.93	ug/L			12/05/23 07:57	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/05/23 07:57	1
Xylenes, Total	ND		10	1.6	ug/L			12/05/23 07:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*12/05/23 07:57*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*12/05/23 07:57*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*12/05/23 07:57*	*1*

Lab Sample ID: LCS 400-652928/1002
Matrix: Water
Analysis Batch: 652928

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	178		ug/L		89	43 - 160
Acrolein	250	206		ug/L		83	38 - 160
Acrylonitrile	500	412		ug/L		82	64 - 142
Benzene	50.0	45.1		ug/L		90	70 - 130
Bromobenzene	50.0	46.7		ug/L		93	70 - 132
Bromochloromethane	50.0	41.5		ug/L		83	70 - 130
Bromodichloromethane	50.0	45.9		ug/L		92	67 - 133
Bromoform	50.0	49.3		ug/L		99	57 - 140
Bromomethane	25.0	20.8		ug/L		83	10 - 160
2-Butanone (MEK)	200	191		ug/L		95	61 - 145
Carbon disulfide	50.0	41.3		ug/L		83	61 - 137
Carbon tetrachloride	50.0	45.2		ug/L		90	61 - 137
Chlorobenzene	50.0	45.3		ug/L		91	70 - 130
Chloroethane	25.0	20.1		ug/L		80	55 - 141
2-Chloroethyl vinyl ether	25.0	17.3		ug/L		69	10 - 160

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

Lab Sample ID: LCS 400-652928/1002
Matrix: Water
Analysis Batch: 652928

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	42.9		ug/L		86	69 - 130
1-Chlorohexane	50.0	50.0		ug/L		100	69 - 130
Chloromethane	25.0	24.0		ug/L		96	58 - 137
cis-1,2-Dichloroethene	50.0	44.4		ug/L		89	68 - 130
cis-1,3-Dichloropropene	50.0	47.0		ug/L		94	69 - 132
Dibromochloromethane	50.0	46.2		ug/L		92	67 - 135
1,2-Dichlorobenzene	50.0	45.6		ug/L		91	67 - 130
1,3-Dichlorobenzene	50.0	48.4		ug/L		97	70 - 130
1,4-Dichlorobenzene	50.0	47.4		ug/L		95	70 - 130
Dichlorodifluoromethane	25.0	17.3		ug/L		69	41 - 146
1,1-Dichloroethane	50.0	44.7		ug/L		89	70 - 130
1,2-Dichloroethane	50.0	40.2		ug/L		80	69 - 130
1,1-Dichloroethene	50.0	42.3		ug/L		85	63 - 134
1,2-Dichloropropane	50.0	47.3		ug/L		95	70 - 130
1,3-Dichloropropane	50.0	44.3		ug/L		89	70 - 130
2,2-Dichloropropane	50.0	45.4		ug/L		91	52 - 135
1,1-Dichloropropene	50.0	44.5		ug/L		89	70 - 130
Ethylbenzene	50.0	47.4		ug/L		95	70 - 130
Ethyl methacrylate	50.0	42.6		ug/L		85	68 - 130
Hexachlorobutadiene	50.0	59.8		ug/L		120	53 - 140
2-Hexanone	200	190		ug/L		95	65 - 137
Isopropylbenzene	50.0	46.6		ug/L		93	70 - 130
Methylene bromide	50.0	40.9		ug/L		82	70 - 130
Methylene Chloride	50.0	42.4		ug/L		85	66 - 135
4-Methyl-2-pentanone (MIBK)	200	158		ug/L		79	69 - 138
Methyl tert-butyl ether	50.0	41.2		ug/L		82	66 - 130
m-Xylene & p-Xylene	50.0	47.5		ug/L		95	70 - 130
Naphthalene	50.0	40.7		ug/L		81	47 - 149
n-Butylbenzene	50.0	47.5		ug/L		95	67 - 130
N-Propylbenzene	50.0	47.8		ug/L		96	70 - 130
o-Chlorotoluene	50.0	47.7		ug/L		95	70 - 130
o-Xylene	50.0	46.8		ug/L		94	70 - 130
p-Chlorotoluene	50.0	47.1		ug/L		94	70 - 130
p-Isopropyltoluene	50.0	48.7		ug/L		97	65 - 130
sec-Butylbenzene	50.0	48.4		ug/L		97	66 - 130
Styrene	50.0	44.2		ug/L		88	70 - 130
tert-Butylbenzene	50.0	53.5		ug/L		107	64 - 139
1,1,1,2-Tetrachloroethane	50.0	47.5		ug/L		95	67 - 131
1,1,2,2-Tetrachloroethane	50.0	40.4		ug/L		81	70 - 131
Tetrachloroethene	50.0	45.8		ug/L		92	65 - 130
Toluene	50.0	46.0		ug/L		92	70 - 130
trans-1,2-Dichloroethene	50.0	45.0		ug/L		90	70 - 130
trans-1,3-Dichloropropene	50.0	45.0		ug/L		90	63 - 130
1,2,3-Trichlorobenzene	50.0	49.5		ug/L		99	60 - 138
1,2,4-Trichlorobenzene	50.0	50.3		ug/L		101	60 - 140
1,1,1-Trichloroethane	50.0	43.7		ug/L		87	68 - 130
1,1,2-Trichloroethane	50.0	44.0		ug/L		88	70 - 130
Trichloroethene	50.0	44.2		ug/L		88	70 - 130
Trichlorofluoromethane	25.0	20.7		ug/L		83	65 - 138

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

Lab Sample ID: LCS 400-652928/1002
Matrix: Water
Analysis Batch: 652928

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	40.0		ug/L		80	70 - 130
1,2,4-Trimethylbenzene	50.0	47.2		ug/L		94	70 - 130
1,3,5-Trimethylbenzene	50.0	47.5		ug/L		95	69 - 130
Vinyl acetate	50.0	40.0		ug/L		80	26 - 160
Vinyl chloride	25.0	22.1		ug/L		89	59 - 136
Xylenes, Total	100	94.3		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*72 - 130*
Dibromofluoromethane	*93*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-652972/1-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		12/05/23 09:56	12/06/23 16:27	1
Benzenethiol	ND		10	1.7	ug/L		12/05/23 09:56	12/06/23 16:27	1
Benzoic acid	ND		30	7.3	ug/L		12/05/23 09:56	12/06/23 16:27	1
Benzyl alcohol	ND		10	2.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/05/23 09:56	12/06/23 16:27	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		12/05/23 09:56	12/06/23 16:27	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		12/05/23 09:56	12/06/23 16:27	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/05/23 09:56	12/06/23 16:27	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Chloroaniline	ND		10	3.4	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		12/05/23 09:56	12/06/23 16:27	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/05/23 09:56	12/06/23 16:27	1
2-Chlorophenol	ND		10	2.2	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Dibenzofuran	ND		10	0.17	ug/L		12/05/23 09:56	12/06/23 16:27	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Diethyl phthalate	ND		10	0.24	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		12/05/23 09:56	12/06/23 16:27	1
Dimethyl phthalate	ND		10	0.17	ug/L		12/05/23 09:56	12/06/23 16:27	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		12/05/23 09:56	12/06/23 16:27	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/05/23 09:56	12/06/23 16:27	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/05/23 09:56	12/06/23 16:27	1
1,4-Dioxane	ND		10	1.0	ug/L		12/05/23 09:56	12/06/23 16:27	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-652972/1-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/05/23 09:56	12/06/23 16:27	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/05/23 09:56	12/06/23 16:27	1
Hexachloroethane	ND		10	4.2	ug/L		12/05/23 09:56	12/06/23 16:27	1
Indene	ND		10	1.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Isophorone	ND		10	0.14	ug/L		12/05/23 09:56	12/06/23 16:27	1
2-Methylphenol	ND		10	1.8	ug/L		12/05/23 09:56	12/06/23 16:27	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		12/05/23 09:56	12/06/23 16:27	1
2-Nitroaniline	ND		10	2.2	ug/L		12/05/23 09:56	12/06/23 16:27	1
3-Nitroaniline	ND		10	1.8	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Nitroaniline	ND		10	1.5	ug/L		12/05/23 09:56	12/06/23 16:27	1
Nitrobenzene	ND		10	0.13	ug/L		12/05/23 09:56	12/06/23 16:27	1
2-Nitrophenol	ND		10	5.2	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Nitrophenol	ND		10	2.1	ug/L		12/05/23 09:56	12/06/23 16:27	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		12/05/23 09:56	12/06/23 16:27	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		12/05/23 09:56	12/06/23 16:27	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/05/23 09:56	12/06/23 16:27	1
Pentachlorophenol	ND		20	1.4	ug/L		12/05/23 09:56	12/06/23 16:27	1
Phenol	ND		10	2.6	ug/L		12/05/23 09:56	12/06/23 16:27	1
Pyridine	ND		10	3.2	ug/L		12/05/23 09:56	12/06/23 16:27	1
Quinoline	ND		10	4.5	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		12/05/23 09:56	12/06/23 16:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*46 - 124*	*12/05/23 09:56*	*12/06/23 16:27*	*1*
2-Fluorophenol	*23*		*13 - 113*	*12/05/23 09:56*	*12/06/23 16:27*	*1*
Nitrobenzene-d5	*71*		*36 - 126*	*12/05/23 09:56*	*12/06/23 16:27*	*1*
Phenol-d5	*46*		*17 - 127*	*12/05/23 09:56*	*12/06/23 16:27*	*1*
Terphenyl-d14	*83*		*44 - 149*	*12/05/23 09:56*	*12/06/23 16:27*	*1*
2,4,6-Tribromophenol	*48*		*26 - 150*	*12/05/23 09:56*	*12/06/23 16:27*	*1*

Lab Sample ID: LCS 400-652972/2-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	74.9		ug/L		62	21 - 120
Benzoic acid	120	56.5		ug/L		47	10 - 144
Benzyl alcohol	120	85.0		ug/L		71	28 - 120
Bis(2-chloroethoxy)methane	120	77.7		ug/L		65	47 - 120
Bis(2-chloroethyl)ether	120	80.0		ug/L		67	44 - 120
bis (2-chloroisopropyl) ether	120	76.0		ug/L		63	33 - 121
Bis(2-ethylhexyl) phthalate	120	95.0		ug/L		79	52 - 147
4-Bromophenyl phenyl ether	120	96.4		ug/L		80	54 - 122
Butyl benzyl phthalate	120	96.8		ug/L		81	54 - 133
4-Chloroaniline	120	68.5		ug/L		57	26 - 120
4-Chloro-3-methylphenol	120	89.8		ug/L		75	48 - 131

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-652972/2-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chloronaphthalene	120	90.3		ug/L		75	52 - 121
2-Chlorophenol	120	77.2		ug/L		64	40 - 120
4-Chlorophenyl phenyl ether	120	96.9		ug/L		81	56 - 125
Dibenz[a,h]acridine	120	113		ug/L		94	31 - 150
Dibenzofuran	120	95.3		ug/L		79	56 - 122
3,3'-Dichlorobenzidine	160	112		ug/L		70	36 - 132
2,4-Dichlorophenol	120	81.8		ug/L		68	49 - 120
Diethyl phthalate	120	95.6		ug/L		80	50 - 137
2,4-Dimethylphenol	120	80.3		ug/L		67	48 - 120
Dimethyl phthalate	120	91.2		ug/L		76	57 - 124
Di-n-butyl phthalate	120	105		ug/L		88	58 - 126
4,6-Dinitro-ortho-cresol	240	153		ug/L		64	23 - 148
2,4-Dinitrophenol	240	131		ug/L		55	10 - 150
2,4-Dinitrotoluene	120	96.6		ug/L		80	54 - 142
2,6-Dinitrotoluene	120	91.1		ug/L		76	55 - 130
Di-n-octyl phthalate	120	99.4		ug/L		83	57 - 138
1,4-Dioxane	120	60.6		ug/L		50	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	87.5		ug/L		73	45 - 124
Hexachlorobenzene	120	110		ug/L		91	52 - 129
Hexachlorocyclopentadiene	120	57.9		ug/L		48	10 - 134
Hexachloroethane	120	74.6		ug/L		62	20 - 120
Indene	120	93.2		ug/L		78	49 - 120
Isophorone	120	76.7		ug/L		64	48 - 120
2-Methylphenol	120	84.1		ug/L		70	46 - 124
3 & 4 Methylphenol	120	82.5		ug/L		69	45 - 120
2-Nitroaniline	120	89.3		ug/L		74	51 - 145
3-Nitroaniline	120	76.0		ug/L		63	37 - 127
4-Nitroaniline	120	89.1		ug/L		74	36 - 137
Nitrobenzene	120	76.8		ug/L		64	45 - 120
2-Nitrophenol	120	73.8		ug/L		62	40 - 124
4-Nitrophenol	240	189		ug/L		79	23 - 146
N-Nitrosodimethylamine	120	78.4		ug/L		65	29 - 137
N-Nitrosodi-n-propylamine	120	82.1		ug/L		68	45 - 120
N-Nitrosodiphenylamine	119	91.5		ug/L		77	54 - 120
Pentachlorophenol	240	212		ug/L		88	31 - 130
Phenol	120	79.0		ug/L		66	11 - 120
Pyridine	240	126		ug/L		52	16 - 120
Quinoline	120	98.7		ug/L		82	49 - 130
2,4,5-Trichlorophenol	120	93.6		ug/L		78	51 - 136
2,4,6-Trichlorophenol	120	91.2		ug/L		76	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*46 - 124*
2-Fluorophenol	*53*		*13 - 113*
Nitrobenzene-d5	*73*		*36 - 126*
Phenol-d5	*71*		*17 - 127*
Terphenyl-d14	*91*		*44 - 149*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-652972/2-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*79*		*26 - 150*

Lab Sample ID: LCS 400-652972/4-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	5.12	J *-	ug/L		4	10 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*89*		*46 - 124*
2-Fluorophenol	*67*		*13 - 113*
Nitrobenzene-d5	*79*		*36 - 126*
Phenol-d5	*80*		*17 - 127*
Terphenyl-d14	*100*		*44 - 149*
2,4,6-Tribromophenol	*68*		*26 - 150*

Lab Sample ID: LCSD 400-652972/3-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	94.4		ug/L		79	21 - 120	23	30
Benzoic acid			120	61.8		ug/L		51	10 - 144	9	30
Benzyl alcohol			120	98.0		ug/L		82	28 - 120	14	30
Bis(2-chloroethoxy)methane			120	86.9		ug/L		72	47 - 120	11	30
Bis(2-chloroethyl)ether			120	89.8		ug/L		75	44 - 120	12	30
bis (2-chloroisopropyl) ether			120	84.8		ug/L		71	33 - 121	11	30
Bis(2-ethylhexyl) phthalate			120	101		ug/L		84	52 - 147	6	30
4-Bromophenyl phenyl ether			120	105		ug/L		87	54 - 122	8	30
Butyl benzyl phthalate			120	104		ug/L		87	54 - 133	7	30
4-Chloroaniline			120	83.2		ug/L		69	26 - 120	19	30
4-Chloro-3-methylphenol			120	100		ug/L		83	48 - 131	11	30
2-Chloronaphthalene			120	99.8		ug/L		83	52 - 121	10	30
2-Chlorophenol			120	87.5		ug/L		73	40 - 120	12	30
4-Chlorophenyl phenyl ether			120	106		ug/L		88	56 - 125	9	30
Dibenz[a,h]acridine			120	120		ug/L		101	31 - 150	6	30
Dibenzofuran			120	104		ug/L		87	56 - 122	9	30
3,3'-Dichlorobenzidine			160	131		ug/L		82	36 - 132	16	30
2,4-Dichlorophenol			120	93.5		ug/L		78	49 - 120	13	30
Diethyl phthalate			120	101		ug/L		84	50 - 137	6	30
2,4-Dimethylphenol			120	87.1		ug/L		73	48 - 120	8	30
Dimethyl phthalate			120	98.0		ug/L		82	57 - 124	7	30
Di-n-butyl phthalate			120	111		ug/L		92	58 - 126	5	30
4,6-Dinitro-ortho-cresol			240	173		ug/L		72	23 - 148	12	30
2,4-Dinitrophenol			240	144		ug/L		60	10 - 150	9	30
2,4-Dinitrotoluene			120	103		ug/L		86	54 - 142	7	30
2,6-Dinitrotoluene			120	98.5		ug/L		82	55 - 130	8	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-652972/3-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Di-n-octyl phthalate			120	103		ug/L		86	57 - 138	4	30
1,4-Dioxane			120	53.7		ug/L		45	31 - 120	12	30
1,2-Diphenylhydrazine (as Azobenzene)			120	93.9		ug/L		78	45 - 124	7	30
Hexachlorobenzene			120	119		ug/L		99	52 - 129	8	30
Hexachlorocyclopentadiene			120	68.3		ug/L		57	10 - 134	16	30
Hexachloroethane			120	88.3		ug/L		74	20 - 120	17	30
Indene			120	108		ug/L		90	49 - 120	14	30
Isophorone			120	84.9		ug/L		71	48 - 120	10	30
2-Methylphenol			120	91.8		ug/L		76	46 - 124	9	30
3 & 4 Methylphenol			120	91.8		ug/L		77	45 - 120	11	30
2-Nitroaniline			120	97.4		ug/L		81	51 - 145	9	30
3-Nitroaniline			120	89.4		ug/L		74	37 - 127	16	30
4-Nitroaniline			120	100		ug/L		83	36 - 137	12	30
Nitrobenzene			120	87.7		ug/L		73	45 - 120	13	30
2-Nitrophenol			120	91.3		ug/L		76	40 - 124	21	30
4-Nitrophenol			240	205		ug/L		85	23 - 146	8	30
N-Nitrosodimethylamine			120	87.2		ug/L		73	29 - 137	11	30
N-Nitrosodi-n-propylamine			120	92.4		ug/L		77	45 - 120	12	30
N-Nitrosodiphenylamine			119	99.0		ug/L		83	54 - 120	8	30
Pentachlorophenol			240	228		ug/L		95	31 - 130	7	30
Phenol			120	88.5		ug/L		74	11 - 120	11	30
Pyridine			240	131		ug/L		55	16 - 120	4	30
Quinoline			120	111		ug/L		93	49 - 130	12	30
2,4,5-Trichlorophenol			120	104		ug/L		87	51 - 136	11	30
2,4,6-Trichlorophenol			120	105		ug/L		87	50 - 127	14	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*89*		*46 - 124*
2-Fluorophenol	*55*		*13 - 113*
Nitrobenzene-d5	*81*		*36 - 126*
Phenol-d5	*77*		*17 - 127*
Terphenyl-d14	*94*		*44 - 149*
2,4,6-Tribromophenol	*82*		*26 - 150*

Lab Sample ID: LCSD 400-652972/5-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	116	*1	ug/L		97	10 - 120	183	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*94*		*46 - 124*
2-Fluorophenol	*72*		*13 - 113*
Nitrobenzene-d5	*85*		*36 - 126*
Phenol-d5	*84*		*17 - 127*
Terphenyl-d14	*98*		*44 - 149*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-652972/5-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652972

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol	72		26 - 150

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-652972/1-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		12/05/23 09:56	12/06/23 15:44	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/05/23 09:56	12/06/23 15:44	1
Anthracene	ND		0.20	0.047	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/05/23 09:56	12/06/23 15:44	1
Chrysene	ND		0.20	0.033	ug/L		12/05/23 09:56	12/06/23 15:44	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/05/23 09:56	12/06/23 15:44	1
Fluoranthene	ND		0.20	0.034	ug/L		12/05/23 09:56	12/06/23 15:44	1
Fluorene	ND		0.20	0.089	ug/L		12/05/23 09:56	12/06/23 15:44	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/05/23 09:56	12/06/23 15:44	1
Phenanthrene	ND		0.20	0.090	ug/L		12/05/23 09:56	12/06/23 15:44	1
Pyrene	ND		0.20	0.039	ug/L		12/05/23 09:56	12/06/23 15:44	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		12/05/23 09:56	12/06/23 15:44	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		12/05/23 09:56	12/06/23 15:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	158	S1+	18 - 147	12/05/23 09:56	12/06/23 15:44	1
2-Fluorobiphenyl	73		15 - 128	12/05/23 09:56	12/06/23 15:44	1
Nitrobenzene-d5	71		10 - 144	12/05/23 09:56	12/06/23 15:44	1

Lab Sample ID: LCS 400-652972/2-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	88.4		ug/L		74	40 - 140
Acenaphthylene	120	91.3		ug/L		76	40 - 140
Anthracene	120	88.7		ug/L		74	40 - 140
Benzo[a]anthracene	120	105		ug/L		87	40 - 140
Benzo[a]pyrene	120	80.7		ug/L		67	40 - 140
Benzo[b]fluoranthene	120	98.2		ug/L		82	40 - 140
Benzo[g,h,i]perylene	120	94.9		ug/L		79	40 - 140
Benzo[k]fluoranthene	120	97.7		ug/L		81	40 - 140
Chrysene	120	88.1		ug/L		73	40 - 140
Dibenz(a,h)anthracene	120	89.2		ug/L		74	40 - 140
Fluoranthene	120	93.2		ug/L		78	40 - 140

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 400-652972/2-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluorene	120	90.6		ug/L		75	40 - 140
Indeno[1,2,3-cd]pyrene	120	89.3		ug/L		74	40 - 140
Phenanthrene	120	86.7		ug/L		72	40 - 140
Pyrene	120	121		ug/L		101	40 - 140
1-Methylnaphthalene	120	70.8		ug/L		59	40 - 140
2-Methylnaphthalene	120	71.9		ug/L		60	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*93*		*18 - 147*
2-Fluorobiphenyl	*70*		*15 - 128*
Nitrobenzene-d5	*72*		*10 - 144*

Lab Sample ID: LCSD 400-652972/3-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652972

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	120	84.4		ug/L		70	40 - 140	5	40
Acenaphthylene	120	88.3		ug/L		74	40 - 140	3	40
Anthracene	120	81.9		ug/L		68	40 - 140	8	40
Benzo[a]anthracene	120	97.7		ug/L		81	40 - 140	7	40
Benzo[a]pyrene	120	74.5		ug/L		62	40 - 140	8	40
Benzo[b]fluoranthene	120	95.1		ug/L		79	40 - 140	3	40
Benzo[g,h,i]perylene	120	84.2		ug/L		70	40 - 140	12	40
Benzo[k]fluoranthene	120	90.9		ug/L		76	40 - 140	7	40
Chrysene	120	80.6		ug/L		67	40 - 140	9	40
Dibenz(a,h)anthracene	120	80.5		ug/L		67	40 - 140	10	40
Fluoranthene	120	82.9		ug/L		69	40 - 140	12	40
Fluorene	120	84.8		ug/L		71	40 - 140	7	40
Indeno[1,2,3-cd]pyrene	120	80.3		ug/L		67	40 - 140	11	40
Phenanthrene	120	79.3		ug/L		66	40 - 140	9	40
Pyrene	120	117		ug/L		98	40 - 140	3	40
1-Methylnaphthalene	120	71.2		ug/L		59	40 - 140	1	40
2-Methylnaphthalene	120	72.7		ug/L		61	40 - 140	1	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*87*		*18 - 147*
2-Fluorobiphenyl	*67*		*15 - 128*
Nitrobenzene-d5	*76*		*10 - 144*

Lab Sample ID: MB 400-653912/1-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		12/12/23 10:43	12/13/23 18:25	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/12/23 10:43	12/13/23 18:25	1
Anthracene	ND		0.20	0.047	ug/L		12/12/23 10:43	12/13/23 18:25	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 400-653912/1-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/12/23 10:43	12/13/23 18:25	1
Chrysene	ND		0.20	0.033	ug/L		12/12/23 10:43	12/13/23 18:25	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/12/23 10:43	12/13/23 18:25	1
Fluoranthene	ND		0.20	0.034	ug/L		12/12/23 10:43	12/13/23 18:25	1
Fluorene	ND		0.20	0.089	ug/L		12/12/23 10:43	12/13/23 18:25	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/12/23 10:43	12/13/23 18:25	1
Phenanthrene	ND		0.20	0.090	ug/L		12/12/23 10:43	12/13/23 18:25	1
Pyrene	ND		0.20	0.039	ug/L		12/12/23 10:43	12/13/23 18:25	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		12/12/23 10:43	12/13/23 18:25	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		12/12/23 10:43	12/13/23 18:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*75*		*18 - 147*	*12/12/23 10:43*	*12/13/23 18:25*	*1*
2-Fluorobiphenyl	*73*		*15 - 128*	*12/12/23 10:43*	*12/13/23 18:25*	*1*
Nitrobenzene-d5	*68*		*10 - 144*	*12/12/23 10:43*	*12/13/23 18:25*	*1*

Lab Sample ID: LCS 400-653912/2-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653912

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	105		ug/L		87	40 - 140
Acenaphthylene	120	120		ug/L		100	40 - 140
Anthracene	120	121		ug/L		101	40 - 140
Benzo[a]anthracene	120	149	E	ug/L		124	40 - 140
Benzo[a]pyrene	120	118		ug/L		98	40 - 140
Benzo[b]fluoranthene	120	119		ug/L		99	40 - 140
Benzo[g,h,i]perylene	120	92.6		ug/L		77	40 - 140
Benzo[k]fluoranthene	120	104		ug/L		86	40 - 140
Chrysene	120	104		ug/L		87	40 - 140
Dibenz(a,h)anthracene	120	108		ug/L		90	40 - 140
Fluoranthene	120	118		ug/L		98	40 - 140
Fluorene	120	109		ug/L		91	40 - 140
Indeno[1,2,3-cd]pyrene	120	106		ug/L		88	40 - 140
Phenanthrene	120	103		ug/L		86	40 - 140
Pyrene	120	97.0		ug/L		81	40 - 140
1-Methylnaphthalene	120	86.9		ug/L		72	40 - 140
2-Methylnaphthalene	120	90.7		ug/L		76	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*70*		*18 - 147*
2-Fluorobiphenyl	*74*		*15 - 128*
Nitrobenzene-d5	*73*		*10 - 144*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 400-653912/3-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653912

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	99.9		ug/L		83	40 - 140	5	40
Acenaphthylene			120	114		ug/L		95	40 - 140	6	40
Anthracene			120	115		ug/L		96	40 - 140	5	40
Benzo[a]anthracene			120	139	E	ug/L		115	40 - 140	7	40
Benzo[a]pyrene			120	114		ug/L		95	40 - 140	3	40
Benzo[b]fluoranthene			120	120		ug/L		100	40 - 140	1	40
Benzo[g,h,i]perylene			120	89.1		ug/L		74	40 - 140	4	40
Benzo[k]fluoranthene			120	105		ug/L		87	40 - 140	1	40
Chrysene			120	99.1		ug/L		83	40 - 140	5	40
Dibenz(a,h)anthracene			120	103		ug/L		86	40 - 140	5	40
Fluoranthene			120	113		ug/L		94	40 - 140	4	40
Fluorene			120	105		ug/L		87	40 - 140	5	40
Indeno[1,2,3-cd]pyrene			120	101		ug/L		84	40 - 140	4	40
Phenanthrene			120	99.0		ug/L		82	40 - 140	4	40
Pyrene			120	90.5		ug/L		75	40 - 140	7	40
1-Methylnaphthalene			120	81.5		ug/L		68	40 - 140	6	40
2-Methylnaphthalene			120	84.3		ug/L		70	40 - 140	7	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*64*		*18 - 147*
2-Fluorobiphenyl	*71*		*15 - 128*
Nitrobenzene-d5	*68*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-652451/1-A
Matrix: Water
Analysis Batch: 652449

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652451

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		12/01/23 07:56	12/01/23 11:17	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/01/23 07:56	12/01/23 11:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*12/01/23 07:56*	*12/01/23 11:17*	*1*

Lab Sample ID: LCS 400-652451/2-A
Matrix: Water
Analysis Batch: 652449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652451

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0910		ug/L		90	60 - 140		
1,2-Dibromoethane			0.100	0.0894		ug/L		89	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*65*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-652451/3-A
Matrix: Water
Analysis Batch: 652449

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652451

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0951		ug/L		94	60 - 140	4	30
1,2-Dibromoethane			0.100	0.0922		ug/L		92	60 - 140	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*82*		*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
Melissa Remiger	25278	DATE: 11/29/2023
PO #	**GSAP Project ID**	PAGE: __1__ of __1__
60697537 – 3.4.2	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 Monthly GW 60697537 – 3.4.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO.: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

SAMPLER NAME(S) (Print): C. McDavid, J. Mayer

LAB USE ONLY

TELEPHONE: 314-429-0100 | FAX: 314-429-0462 | Bill To Contact E-MAIL: melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C° | Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

- Please include "J" values on Reports.
- Please provide sample receipt upon login.
- Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°: 0.0 IR8

Container PID Readings or Laboratory Notes:

400-247492 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 8270 SIMS
	TB-ROX-112923-8260-BP	11/29/2023	0000	Water	2					2	X			
	TB-ROX-112923-8011-BP	11/29/2023	0000	Water	2					2		X		
	MW23-ROX-112923	11/29/2023	0920	Water	6			2		8	X	X	X	X

Page 36 of 38

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 6339 6597 5551	11/29/2023	1600
		11.30.23	9:28

Version: 27Sept23

CUSTODY SEALS: 1599795, 1599794

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc. Job Number: 400-247492-1

Login Number: 247492 **List Source: Eurofins Pensacola**
List Number: 1
Creator: Roberts, Alexis J

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	0.0°C IR8
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: 400-247492-1
Project/Site: ROXANA MONTHLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Roxana Monthly Groundwater – November/December 2023
Data Review

Laboratory SDG: 400-247591-1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 1/5/2024

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

Sample Identification	Sample Identification
TB-ROX-113023-8260-B	TB-ROX-113023-8011-B
MW6D-ROX-113023-EB	MW6D-ROX-113023
MW6C-ROX-113023	MW6A-ROX-113023
MW6B-ROX-113023	

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 case narrative indicated that PAHs in samples MW6D-ROX-113023, MW6C-ROX-113023, and MW6A-ROX-113023 were re-extracted 6 days outside extraction time criteria. LCS/LCSD recoveries and the LCS/LCSD RPD for benzenethiol were outside evaluation criteria. Several VOC MS/MSD recoveries, and/or MS/MSD RPDs, were outside evaluation criteria in sample MW6D-ROX-113023. The continuing calibration verification (CCV) for chloroethane was outside evaluation criteria, biased low. The continuing calibration verification (CCV) for benzo[g,h,i]perylene was outside evaluation criteria, biased high. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (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, PAHs in samples MW6D-ROX-113023, MW6C-ROX-113023, and MW6A-ROX-113023 were re-extracted 6 days outside of extraction time criteria (7 days) for confirmation; the samples were re-extracted out of hold time and the results for samples MW6D-ROX-113023 and MW6C-ROX-113023 were non-detect. Holding time exceedances were not greater than two times (2X) criteria; both sets of data are reported.

The results for the re-extracted and re-analyzed sample MW6A-ROX-113023 were

comparable to the initial results; based on professional judgement, the results from the initial analysis were used for the purposes of this report.

With regard to initial MW6D-ROX-113023 and MW6C-ROX-113023 PAH data, the laboratory previously issued a Corrective Action Report (CAR) stating that through confirmation analyses, many previous detections were not confirmed and were therefore deemed laboratory contamination. Based on professional judgement, the results from the re-analysis were used for the purposes of this report. Data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW6D-ROX-113023-RERA	PAHs	All non-detects	**UJ**
MW6C-ROX-113023-RERA	PAHs	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/LCSD 400-652972/4-A/5-A	SVOCs	Benzenethiol	**4**/97	**183**	10-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol below evaluation criteria; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW6D-ROX-113023	SVOCs	Benzenethiol	**UJ**
MW6C-ROX-113023	SVOCs	Benzenethiol	**UJ**
MW6A-ROX-113023	SVOCs	Benzenethiol	**UJ**
MW6B-ROX-113023	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MB 400-652972/1-A	PAHs	Terphenyl-d_{14}	**158**	18-147

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, although not requested, sample MW6D-ROX-113023 was spiked and duplicated for Method 8260D VOCs.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW6D-ROX-113023 MS/MSD	VOCs	Acetone	**33/36**	8	43-150/30
MW6D-ROX-113023 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW6D-ROX-113023 MS/MSD	VOCs	2-Hexanone	**55/61**	10	65-140/30
MW6D-ROX-113023 MS/MSD	VOCs	1,1,2,2-Tetrachloroethane	**65**/77	17	66-135/30
MW6D-ROX-113023 MS/MSD	VOCs	1,3-Dichlorobenzene	60/83	**31**	54-135/30
MW6D-ROX-113023 MS/MSD	VOCs	1,4-Dichlorobenzene	59/81	**32**	53-135/30
MW6D-ROX-113023 MS/MSD	VOCs	n-Butylbenzene	55/78	**35**	41-142/31
MW6D-ROX-113023 MS/MSD	VOCs	n-Propylbenzene	61/84	**33**	51-138/30
MW6D-ROX-113023 MS/MSD	VOCs	p-Chlorotoluene	60/82	**31**	54/133/30
MW6D-ROX-113023 MS/MSD	VOCs	p-Isopropyltoluene	58/82	**34**	48-139/30
MW6D-ROX-113023 MS/MSD	VOCs	sec-Butylbenzene	60/84	**33**	50-138/30
MW6D-ROX-113023 MS/MSD	VOCs	tert-Butylbenzene	69/95	**32**	54-146/30
MW6D-ROX-113023 MS/MSD	VOCs	1,2,4-Trimethylbenzene	59/82	**33**	50-139/30
MW6D-ROX-113023 MS/MSD	VOCs	1,3,5-Trimethylbenzene	60/82	**32**	52-135/30

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. Analytical data associated with MS/MSD RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW6D-ROX-113023	VOCs	Acetone	**UJ**
MW6D-ROX-113023	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW6D-ROX-113023	VOCs	2-Hexanone	**UJ**
MW6D-ROX-113023	VOCs	1,1,2,2-Tetrachloroethane	**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 (CCV) for chloroethane was outside evaluation criteria, biased low. The continuing calibration verification (CCV) for benzo[g,h,i]perylene was outside evaluation criteria, biased high. Benzo[a]anthracene, benzo[g,h,i]perylene and benzo[a]pyrene in samples MW6D-ROX-113023 and MW6C-ROX-113023 were previously qualified in Section 3.0 of this data review due to hold time exceedances; no further qualification is required. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW6D-ROX-113023	VOCs	Chloroethane	**UJ**
MW6C-ROX-113023	VOCs	Chloroethane	**UJ**
MW6A-ROX-113023	VOCs	Chloroethane	**UJ**
MW6B-ROX-113023	VOCs	Chloroethane	**UJ**
MW6A-ROX-113023	PAHs	Benzo[g,h,i]perylene	**J**

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 12/15/2023 10:14:20 AM

JOB DESCRIPTION

ROXANA MONTHLY GW

JOB NUMBER

400-247591-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



Generated
12/15/2023 10:14:20 AM

Authorized for release by
Mark Swafford, Project Manager II
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Designee for
Leah Klingensmith, Senior Project Manager
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(615)301-5038

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Job ID: 400-247591-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-247591-1

Receipt
The samples were received on 12/1/2023 9:26 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 0.0º C.

GC/MS VOA
Methods 8260D, SM6200-B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-653096 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Methods 8260D, SM6200-B: The matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 400-653096 was outside control limits. Sample matrix interference is suspected.

Methods 8260D, SM6200-B: The continuing calibration verification (CCV) associated with batch 400-653096 recovered outside acceptance criteria, low biased, for Chloroethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: 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-113023-8260-B (400-247591-1), MW6D-ROX-113023-EB (400-247591-3), MW6D-ROX-113023 (400-247591-4), MW6C-ROX-113023 (400-247591-5), MW6A-ROX-113023 (400-247591-6) and MW6B-ROX-113023 (400-247591-7). 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 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-653096 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260D: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-653096 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: The initial calibration verification (ICV) analyzed in batch 400-633903 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

GC/MS Semi VOA
Method 8270E: The laboratory control sample (LCS) for preparation batch 400-652972 and analytical batch 400-653218 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 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-652972 and analytical batch 400-653218 recovered outside control limits for the following analyte: Benzenethiol.

Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-652774 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E SIM: The continuing calibration verification (CCV) associated with batch 400-653195 recovered above the upper control limit for Benzo[g,h,i]perylene. The samples associated with this CCV were below the reporting limit for the affected analytes; therefore, the data have been reported.

Method 8270E SIM: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside

Job ID: 400-247591-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (MB 400-652972/1-A). These results have been reported and qualified.

Method 8270E SIM: The continuing calibration verification (CCV) associated with batch 400-654224 recovered above the upper control limit for Benzo[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene and Dibenz(a,h)anthracene. The samples associated with this CCV were below the reporting limit for the affected analytes; therefore, the data have been reported.

Method 8270E SIM: The continuing calibration verification (CCV) associated with batch 400-654319 recovered above the upper control limit for Benzo[a]anthracene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E SIM: The continuing calibration verification (CCV) associated with batch 400-654319 recovered outside acceptance criteria, low biased, for Benzo[g,h,i]perylene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E SIM: The following samples were re-prepared outside of preparation holding time for confirmation: MW6D-ROX-113023 (400-247591-4), MW6C-ROX-113023 (400-247591-5) and MW6A-ROX-113023 (400-247591-6). Both sets of data are reported.

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

Sample Summary

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

Job ID: 400-247591-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-247591-1	TB-ROX-113023-8260-B	Water	11/30/23 00:00	12/01/23 09:26
400-247591-2	TB-ROX-113023-8011-B	Water	11/30/23 00:00	12/01/23 09:26
400-247591-3	MW6D-ROX-113023-EB	Water	11/30/23 08:10	12/01/23 09:26
400-247591-4	MW6D-ROX-113023	Water	11/30/23 09:20	12/01/23 09:26
400-247591-5	MW6C-ROX-113023	Water	11/30/23 10:10	12/01/23 09:26
400-247591-6	MW6A-ROX-113023	Water	11/30/23 11:05	12/01/23 09:26
400-247591-7	MW6B-ROX-113023	Water	11/30/23 12:00	12/01/23 09:26

Detection Summary

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

Job ID: 400-247591-1

Client Sample ID: TB-ROX-113023-8260-B — Lab Sample ID: 400-247591-1

No Detections.

Client Sample ID: TB-ROX-113023-8011-B — Lab Sample ID: 400-247591-2

No Detections.

Client Sample ID: MW6D-ROX-113023-EB — Lab Sample ID: 400-247591-3

No Detections.

Client Sample ID: MW6D-ROX-113023 — Lab Sample ID: 400-247591-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.057	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Benzo[a]pyrene	0.11	J	0.19	0.061	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.072	J	0.19	0.035	ug/L	1		8270E SIM	Total/NA
Benzo[g,h,i]perylene	0.069	J	0.19	0.026	ug/L	1		8270E SIM	Total/NA
Benzo[k]fluoranthene	0.060	J	0.19	0.059	ug/L	1		8270E SIM	Total/NA
Dibenz(a,h)anthracene	0.10	J	0.19	0.045	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.11	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW6C-ROX-113023 — Lab Sample ID: 400-247591-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.10	J	0.19	0.042	ug/L	1		8270E SIM	Total/NA
Anthracene	0.070	J	0.19	0.044	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.048	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Benzo[a]pyrene	0.10	J	0.19	0.060	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.044	J	0.19	0.035	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.061	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	0.069	J	0.19	0.062	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW6A-ROX-113023 — Lab Sample ID: 400-247591-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.26	J	1.0	0.22	ug/L	1		8260D	Total/NA
Benzo[a]anthracene	0.062	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Benzo[a]pyrene	0.11	J	0.19	0.061	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.064	J	0.19	0.035	ug/L	1		8270E SIM	Total/NA
Benzo[g,h,i]perylene	0.030	J	0.19	0.026	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.073	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Pyrene	0.046	J	0.19	0.037	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene - RERA	0.037	J H	0.19	0.035	ug/L	1		8270E SIM	Total/NA
Chrysene - RERA	0.038	J H	0.19	0.031	ug/L	1		8270E SIM	Total/NA
Fluoranthene - RERA	0.042	J H	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Pyrene - RERA	0.049	J H	0.19	0.037	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW6B-ROX-113023 — Lab Sample ID: 400-247591-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.32	J	1.0	0.22	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-247591-1

Client Sample ID: TB-ROX-113023-8260-B
Date Collected: 11/30/23 00:00
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247591-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/06/23 09:35	1
Acrolein	ND		20	3.3	ug/L			12/06/23 09:35	1
Acrylonitrile	ND		10	2.8	ug/L			12/06/23 09:35	1
Benzene	ND		1.0	0.50	ug/L			12/06/23 09:35	1
Bromobenzene	ND		1.0	0.54	ug/L			12/06/23 09:35	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/06/23 09:35	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/06/23 09:35	1
Bromoform	ND		5.0	0.25	ug/L			12/06/23 09:35	1
Bromomethane	ND		1.0	0.98	ug/L			12/06/23 09:35	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/06/23 09:35	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/06/23 09:35	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/06/23 09:35	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/06/23 09:35	1
Chloroethane	ND		1.0	0.76	ug/L			12/06/23 09:35	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/06/23 09:35	1
Chloroform	ND		1.0	0.90	ug/L			12/06/23 09:35	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/06/23 09:35	1
Chloromethane	ND		1.0	0.90	ug/L			12/06/23 09:35	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/06/23 09:35	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/06/23 09:35	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/06/23 09:35	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/06/23 09:35	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/06/23 09:35	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/06/23 09:35	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/06/23 09:35	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/06/23 09:35	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/06/23 09:35	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 09:35	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 09:35	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 09:35	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 09:35	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/06/23 09:35	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/06/23 09:35	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/06/23 09:35	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/06/23 09:35	1
2-Hexanone	ND		25	1.4	ug/L			12/06/23 09:35	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/06/23 09:35	1
Methylene bromide	ND		5.0	0.22	ug/L			12/06/23 09:35	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/06/23 09:35	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/06/23 09:35	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/06/23 09:35	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/06/23 09:35	1
Naphthalene	ND		5.0	3.0	ug/L			12/06/23 09:35	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/06/23 09:35	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/06/23 09:35	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/06/23 09:35	1
o-Xylene	ND		5.0	0.60	ug/L			12/06/23 09:35	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/06/23 09:35	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/06/23 09:35	1

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

Job ID: 400-247591-1

Client Sample ID: TB-ROX-113023-8260-B
Date Collected: 11/30/23 00:00
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247591-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/06/23 09:35	1
Styrene	ND		1.0	1.0	ug/L			12/06/23 09:35	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/06/23 09:35	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/06/23 09:35	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/06/23 09:35	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/06/23 09:35	1
Toluene	ND		1.0	0.90	ug/L			12/06/23 09:35	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 09:35	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/06/23 09:35	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/06/23 09:35	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/06/23 09:35	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/06/23 09:35	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/06/23 09:35	1
Trichloroethene	ND		1.0	0.15	ug/L			12/06/23 09:35	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/06/23 09:35	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/06/23 09:35	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/06/23 09:35	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/06/23 09:35	1
Vinyl acetate	ND		25	0.93	ug/L			12/06/23 09:35	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/06/23 09:35	1
Xylenes, Total	ND		10	1.6	ug/L			12/06/23 09:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*12/06/23 09:35*	*1*
Dibromofluoromethane	*98*		*75 - 126*		*12/06/23 09:35*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*12/06/23 09:35*	*1*

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

Job ID: 400-247591-1

Client Sample ID: TB-ROX-113023-8011-B
Date Collected: 11/30/23 00:00
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247591-2
Matrix: Water

Method: EPA 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		12/05/23 11:19	12/05/23 18:04	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 11:19	12/05/23 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*12/05/23 11:19*	*12/05/23 18:04*	*1*

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

Job ID: 400-247591-1

Client Sample ID: MW6D-ROX-113023-EB
Date Collected: 11/30/23 08:10
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247591-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/06/23 09:12	1
Acrolein	ND		20	3.3	ug/L			12/06/23 09:12	1
Acrylonitrile	ND		10	2.8	ug/L			12/06/23 09:12	1
Benzene	ND		1.0	0.50	ug/L			12/06/23 09:12	1
Bromobenzene	ND		1.0	0.54	ug/L			12/06/23 09:12	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/06/23 09:12	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/06/23 09:12	1
Bromoform	ND		5.0	0.25	ug/L			12/06/23 09:12	1
Bromomethane	ND		1.0	0.98	ug/L			12/06/23 09:12	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/06/23 09:12	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/06/23 09:12	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/06/23 09:12	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/06/23 09:12	1
Chloroethane	ND		1.0	0.76	ug/L			12/06/23 09:12	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/06/23 09:12	1
Chloroform	ND		1.0	0.90	ug/L			12/06/23 09:12	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/06/23 09:12	1
Chloromethane	ND		1.0	0.90	ug/L			12/06/23 09:12	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/06/23 09:12	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/06/23 09:12	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/06/23 09:12	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/06/23 09:12	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/06/23 09:12	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/06/23 09:12	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/06/23 09:12	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/06/23 09:12	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/06/23 09:12	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 09:12	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 09:12	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 09:12	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 09:12	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/06/23 09:12	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/06/23 09:12	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/06/23 09:12	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/06/23 09:12	1
2-Hexanone	ND		25	1.4	ug/L			12/06/23 09:12	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/06/23 09:12	1
Methylene bromide	ND		5.0	0.22	ug/L			12/06/23 09:12	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/06/23 09:12	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/06/23 09:12	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/06/23 09:12	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/06/23 09:12	1
Naphthalene	ND		5.0	3.0	ug/L			12/06/23 09:12	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/06/23 09:12	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/06/23 09:12	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/06/23 09:12	1
o-Xylene	ND		5.0	0.60	ug/L			12/06/23 09:12	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/06/23 09:12	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/06/23 09:12	1

Client Sample ID: MW6D-ROX-113023-EB
Date Collected: 11/30/23 08:10
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247591-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/06/23 09:12	1
Styrene	ND		1.0	1.0	ug/L			12/06/23 09:12	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/06/23 09:12	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/06/23 09:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/06/23 09:12	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/06/23 09:12	1
Toluene	ND		1.0	0.90	ug/L			12/06/23 09:12	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 09:12	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/06/23 09:12	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/06/23 09:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/06/23 09:12	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/06/23 09:12	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/06/23 09:12	1
Trichloroethene	ND		1.0	0.15	ug/L			12/06/23 09:12	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/06/23 09:12	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/06/23 09:12	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/06/23 09:12	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/06/23 09:12	1
Vinyl acetate	ND		25	0.93	ug/L			12/06/23 09:12	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/06/23 09:12	1
Xylenes, Total	ND		10	1.6	ug/L			12/06/23 09:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*12/06/23 09:12*	*1*
Dibromofluoromethane	*95*		*75 - 126*		*12/06/23 09:12*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*12/06/23 09:12*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.094	ug/L		12/05/23 09:57	12/06/23 18:07	1
Acenaphthylene	ND		0.19	0.042	ug/L		12/05/23 09:57	12/06/23 18:07	1
Anthracene	ND		0.19	0.045	ug/L		12/05/23 09:57	12/06/23 18:07	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		12/05/23 09:57	12/06/23 18:07	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		12/05/23 09:57	12/06/23 18:07	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		12/05/23 09:57	12/06/23 18:07	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		12/05/23 09:57	12/06/23 18:07	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		12/05/23 09:57	12/06/23 18:07	1
Chrysene	ND		0.19	0.031	ug/L		12/05/23 09:57	12/06/23 18:07	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		12/05/23 09:57	12/06/23 18:07	1
Fluoranthene	ND		0.19	0.032	ug/L		12/05/23 09:57	12/06/23 18:07	1
Fluorene	ND		0.19	0.085	ug/L		12/05/23 09:57	12/06/23 18:07	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		12/05/23 09:57	12/06/23 18:07	1
Phenanthrene	ND		0.19	0.086	ug/L		12/05/23 09:57	12/06/23 18:07	1
Pyrene	ND		0.19	0.037	ug/L		12/05/23 09:57	12/06/23 18:07	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		12/05/23 09:57	12/06/23 18:07	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		12/05/23 09:57	12/06/23 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*143*		*18 - 147*	*12/05/23 09:57*	*12/06/23 18:07*	*1*
2-Fluorobiphenyl	*79*		*15 - 128*	*12/05/23 09:57*	*12/06/23 18:07*	*1*

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

Job ID: 400-247591-1

Client Sample ID: MW6D-ROX-113023-EB

Date Collected: 11/30/23 08:10
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247591-3

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*76*		*10 - 144*	*12/05/23 09:57*	*12/06/23 18:07*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		12/05/23 09:57	12/06/23 19:36	1
Benzenethiol	ND	*- *1	9.5	1.6	ug/L		12/05/23 09:57	12/06/23 19:36	1
Benzoic acid	ND		29	6.9	ug/L		12/05/23 09:57	12/06/23 19:36	1
Benzyl alcohol	ND		9.5	1.9	ug/L		12/05/23 09:57	12/06/23 19:36	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		12/05/23 09:57	12/06/23 19:36	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		12/05/23 09:57	12/06/23 19:36	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		12/05/23 09:57	12/06/23 19:36	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		12/05/23 09:57	12/06/23 19:36	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		12/05/23 09:57	12/06/23 19:36	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		12/05/23 09:57	12/06/23 19:36	1
4-Chloroaniline	ND		9.5	3.2	ug/L		12/05/23 09:57	12/06/23 19:36	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		12/05/23 09:57	12/06/23 19:36	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		12/05/23 09:57	12/06/23 19:36	1
2-Chlorophenol	ND		9.5	2.1	ug/L		12/05/23 09:57	12/06/23 19:36	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		12/05/23 09:57	12/06/23 19:36	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		12/05/23 09:57	12/06/23 19:36	1
Dibenzofuran	ND		9.5	0.16	ug/L		12/05/23 09:57	12/06/23 19:36	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		12/05/23 09:57	12/06/23 19:36	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		12/05/23 09:57	12/06/23 19:36	1
Diethyl phthalate	ND		9.5	0.23	ug/L		12/05/23 09:57	12/06/23 19:36	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		12/05/23 09:57	12/06/23 19:36	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		12/05/23 09:57	12/06/23 19:36	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		12/05/23 09:57	12/06/23 19:36	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		12/05/23 09:57	12/06/23 19:36	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		12/05/23 09:57	12/06/23 19:36	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		12/05/23 09:57	12/06/23 19:36	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		12/05/23 09:57	12/06/23 19:36	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		12/05/23 09:57	12/06/23 19:36	1
1,4-Dioxane	ND		9.5	0.95	ug/L		12/05/23 09:57	12/06/23 19:36	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		12/05/23 09:57	12/06/23 19:36	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		12/05/23 09:57	12/06/23 19:36	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		12/05/23 09:57	12/06/23 19:36	1
Hexachloroethane	ND		9.5	4.0	ug/L		12/05/23 09:57	12/06/23 19:36	1
Indene	ND		9.5	0.95	ug/L		12/05/23 09:57	12/06/23 19:36	1
Isophorone	ND		9.5	0.13	ug/L		12/05/23 09:57	12/06/23 19:36	1
2-Methylphenol	ND		9.5	1.7	ug/L		12/05/23 09:57	12/06/23 19:36	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		12/05/23 09:57	12/06/23 19:36	1
2-Nitroaniline	ND		9.5	2.1	ug/L		12/05/23 09:57	12/06/23 19:36	1
3-Nitroaniline	ND		9.5	1.7	ug/L		12/05/23 09:57	12/06/23 19:36	1
4-Nitroaniline	ND		9.5	1.4	ug/L		12/05/23 09:57	12/06/23 19:36	1
Nitrobenzene	ND		9.5	0.12	ug/L		12/05/23 09:57	12/06/23 19:36	1
2-Nitrophenol	ND		9.5	4.9	ug/L		12/05/23 09:57	12/06/23 19:36	1
4-Nitrophenol	ND		9.5	2.0	ug/L		12/05/23 09:57	12/06/23 19:36	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		12/05/23 09:57	12/06/23 19:36	1

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

Job ID: 400-247591-1

Client Sample ID: MW6D-ROX-113023-EB

Lab Sample ID: 400-247591-3

Date Collected: 11/30/23 08:10

Matrix: Water

Date Received: 12/01/23 09:26

Method: SW846 8270E - 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		12/05/23 09:57	12/06/23 19:36	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		12/05/23 09:57	12/06/23 19:36	1
Pentachlorophenol	ND		19	1.3	ug/L		12/05/23 09:57	12/06/23 19:36	1
Phenol	ND		9.5	2.5	ug/L		12/05/23 09:57	12/06/23 19:36	1
Pyridine	ND		9.5	3.0	ug/L		12/05/23 09:57	12/06/23 19:36	1
Quinoline	ND		9.5	4.3	ug/L		12/05/23 09:57	12/06/23 19:36	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		12/05/23 09:57	12/06/23 19:36	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		12/05/23 09:57	12/06/23 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*46 - 124*	*12/05/23 09:57*	*12/06/23 19:36*	*1*
2-Fluorophenol	*37*		*13 - 113*	*12/05/23 09:57*	*12/06/23 19:36*	*1*
Nitrobenzene-d5	*67*		*36 - 126*	*12/05/23 09:57*	*12/06/23 19:36*	*1*
Phenol-d5	*58*		*17 - 127*	*12/05/23 09:57*	*12/06/23 19:36*	*1*
Terphenyl-d14	*86*		*44 - 149*	*12/05/23 09:57*	*12/06/23 19:36*	*1*
2,4,6-Tribromophenol	*67*		*26 - 150*	*12/05/23 09:57*	*12/06/23 19:36*	*1*

Method: EPA 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		12/05/23 11:19	12/05/23 18:24	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		12/05/23 11:19	12/05/23 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*51 - 149*	*12/05/23 11:19*	*12/05/23 18:24*	*1*

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

Job ID: 400-247591-1

Client Sample ID: MW6D-ROX-113023
Date Collected: 11/30/23 09:20
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247591-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	F1	25	10	ug/L			12/06/23 09:57	1
Acrolein	ND		20	3.3	ug/L			12/06/23 09:57	1
Acrylonitrile	ND		10	2.8	ug/L			12/06/23 09:57	1
Benzene	ND		1.0	0.50	ug/L			12/06/23 09:57	1
Bromobenzene	ND		1.0	0.54	ug/L			12/06/23 09:57	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/06/23 09:57	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/06/23 09:57	1
Bromoform	ND		5.0	0.25	ug/L			12/06/23 09:57	1
Bromomethane	ND		1.0	0.98	ug/L			12/06/23 09:57	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/06/23 09:57	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/06/23 09:57	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/06/23 09:57	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/06/23 09:57	1
Chloroethane	ND		1.0	0.76	ug/L			12/06/23 09:57	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			12/06/23 09:57	1
Chloroform	ND		1.0	0.90	ug/L			12/06/23 09:57	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/06/23 09:57	1
Chloromethane	ND		1.0	0.90	ug/L			12/06/23 09:57	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/06/23 09:57	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/06/23 09:57	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/06/23 09:57	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/06/23 09:57	1
1,3-Dichlorobenzene	ND	F2	1.0	0.54	ug/L			12/06/23 09:57	1
1,4-Dichlorobenzene	ND	F2	1.0	0.64	ug/L			12/06/23 09:57	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/06/23 09:57	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/06/23 09:57	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/06/23 09:57	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 09:57	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 09:57	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 09:57	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 09:57	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/06/23 09:57	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/06/23 09:57	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/06/23 09:57	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/06/23 09:57	1
2-Hexanone	ND	F1	25	1.4	ug/L			12/06/23 09:57	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/06/23 09:57	1
Methylene bromide	ND		5.0	0.22	ug/L			12/06/23 09:57	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/06/23 09:57	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/06/23 09:57	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/06/23 09:57	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/06/23 09:57	1
Naphthalene	ND		5.0	3.0	ug/L			12/06/23 09:57	1
n-Butylbenzene	ND	F2	1.0	0.76	ug/L			12/06/23 09:57	1
N-Propylbenzene	ND	F2	1.0	0.69	ug/L			12/06/23 09:57	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/06/23 09:57	1
o-Xylene	ND		5.0	0.60	ug/L			12/06/23 09:57	1
p-Chlorotoluene	ND	F2	1.0	0.56	ug/L			12/06/23 09:57	1
p-Isopropyltoluene	ND	F2	1.0	0.71	ug/L			12/06/23 09:57	1

Client Sample ID: MW6D-ROX-113023
Date Collected: 11/30/23 09:20
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247591-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND	F2	1.0	0.70	ug/L			12/06/23 09:57	1
Styrene	ND		1.0	1.0	ug/L			12/06/23 09:57	1
tert-Butylbenzene	ND	F2	1.0	0.63	ug/L			12/06/23 09:57	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/06/23 09:57	1
1,1,2,2-Tetrachloroethane	ND	F1	1.0	0.50	ug/L			12/06/23 09:57	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/06/23 09:57	1
Toluene	ND		1.0	0.90	ug/L			12/06/23 09:57	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 09:57	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/06/23 09:57	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/06/23 09:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/06/23 09:57	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/06/23 09:57	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/06/23 09:57	1
Trichloroethene	ND		1.0	0.15	ug/L			12/06/23 09:57	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/06/23 09:57	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/06/23 09:57	1
1,2,4-Trimethylbenzene	ND	F2	1.0	0.82	ug/L			12/06/23 09:57	1
1,3,5-Trimethylbenzene	ND	F2	1.0	0.56	ug/L			12/06/23 09:57	1
Vinyl acetate	ND		25	0.93	ug/L			12/06/23 09:57	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/06/23 09:57	1
Xylenes, Total	ND		10	1.6	ug/L			12/06/23 09:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*12/06/23 09:57*	*1*
Dibromofluoromethane	*98*		*75 - 126*		*12/06/23 09:57*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*12/06/23 09:57*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.094	ug/L		12/05/23 09:57	12/06/23 18:27	1
Acenaphthylene	ND		0.19	0.042	ug/L		12/05/23 09:57	12/06/23 18:27	1
Anthracene	ND		0.19	0.045	ug/L		12/05/23 09:57	12/06/23 18:27	1
Benzo[a]anthracene	**0.057**	**J**	0.19	0.032	ug/L		12/05/23 09:57	12/06/23 18:27	1
Benzo[a]pyrene	**0.11**	**J**	0.19	0.061	ug/L		12/05/23 09:57	12/06/23 18:27	1
Benzo[b]fluoranthene	**0.072**	**J**	0.19	0.035	ug/L		12/05/23 09:57	12/06/23 18:27	1
Benzo[g,h,i]perylene	**0.069**	**J**	0.19	0.026	ug/L		12/05/23 09:57	12/06/23 18:27	1
Benzo[k]fluoranthene	**0.060**	**J**	0.19	0.059	ug/L		12/05/23 09:57	12/06/23 18:27	1
Chrysene	ND		0.19	0.031	ug/L		12/05/23 09:57	12/06/23 18:27	1
Dibenz(a,h)anthracene	**0.10**	**J**	0.19	0.045	ug/L		12/05/23 09:57	12/06/23 18:27	1
Fluoranthene	ND		0.19	0.032	ug/L		12/05/23 09:57	12/06/23 18:27	1
Fluorene	ND		0.19	0.084	ug/L		12/05/23 09:57	12/06/23 18:27	1
Indeno[1,2,3-cd]pyrene	**0.11**	**J**	0.19	0.032	ug/L		12/05/23 09:57	12/06/23 18:27	1
Phenanthrene	ND		0.19	0.085	ug/L		12/05/23 09:57	12/06/23 18:27	1
Pyrene	ND		0.19	0.037	ug/L		12/05/23 09:57	12/06/23 18:27	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		12/05/23 09:57	12/06/23 18:27	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		12/05/23 09:57	12/06/23 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*115*		*18 - 147*	*12/05/23 09:57*	*12/06/23 18:27*	*1*
2-Fluorobiphenyl	*64*		*15 - 128*	*12/05/23 09:57*	*12/06/23 18:27*	*1*

Client Sample ID: MW6D-ROX-113023
Date Collected: 11/30/23 09:20
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247591-4
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	62		10 - 144	12/05/23 09:57	12/06/23 18:27	1

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.19	0.093	ug/L		12/13/23 09:48	12/14/23 16:07	1
Acenaphthylene	ND	H	0.19	0.041	ug/L		12/13/23 09:48	12/14/23 16:07	1
Anthracene	ND	H	0.19	0.044	ug/L		12/13/23 09:48	12/14/23 16:07	1
Benzo[a]anthracene	ND	H	0.19	0.032	ug/L		12/13/23 09:48	12/14/23 16:07	1
Benzo[a]pyrene	ND	H	0.19	0.060	ug/L		12/13/23 09:48	12/14/23 16:07	1
Benzo[b]fluoranthene	ND	H	0.19	0.035	ug/L		12/13/23 09:48	12/14/23 16:07	1
Benzo[g,h,i]perylene	ND	H	0.19	0.025	ug/L		12/13/23 09:48	12/14/23 16:07	1
Benzo[k]fluoranthene	ND	H	0.19	0.058	ug/L		12/13/23 09:48	12/14/23 16:07	1
Chrysene	ND	H	0.19	0.031	ug/L		12/13/23 09:48	12/14/23 16:07	1
Dibenz(a,h)anthracene	ND	H	0.19	0.045	ug/L		12/13/23 09:48	12/14/23 16:07	1
Fluoranthene	ND	H	0.19	0.032	ug/L		12/13/23 09:48	12/14/23 16:07	1
Fluorene	ND	H	0.19	0.083	ug/L		12/13/23 09:48	12/14/23 16:07	1
Indeno[1,2,3-cd]pyrene	ND	H	0.19	0.032	ug/L		12/13/23 09:48	12/14/23 16:07	1
Phenanthrene	ND	H	0.19	0.084	ug/L		12/13/23 09:48	12/14/23 16:07	1
Pyrene	ND	H	0.19	0.036	ug/L		12/13/23 09:48	12/14/23 16:07	1
1-Methylnaphthalene	ND	H	0.19	0.075	ug/L		12/13/23 09:48	12/14/23 16:07	1
2-Methylnaphthalene	ND	H	0.19	0.062	ug/L		12/13/23 09:48	12/14/23 16:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	67		18 - 147	12/13/23 09:48	12/14/23 16:07	1
2-Fluorobiphenyl	67		15 - 128	12/13/23 09:48	12/14/23 16:07	1
Nitrobenzene-d5	64		10 - 144	12/13/23 09:48	12/14/23 16:07	1

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		12/05/23 09:57	12/06/23 19:57	1
Benzenethiol	ND	*- *1	9.5	1.6	ug/L		12/05/23 09:57	12/06/23 19:57	1
Benzoic acid	ND		28	6.9	ug/L		12/05/23 09:57	12/06/23 19:57	1
Benzyl alcohol	ND		9.5	1.9	ug/L		12/05/23 09:57	12/06/23 19:57	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		12/05/23 09:57	12/06/23 19:57	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		12/05/23 09:57	12/06/23 19:57	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		12/05/23 09:57	12/06/23 19:57	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		12/05/23 09:57	12/06/23 19:57	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		12/05/23 09:57	12/06/23 19:57	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		12/05/23 09:57	12/06/23 19:57	1
4-Chloroaniline	ND		9.5	3.2	ug/L		12/05/23 09:57	12/06/23 19:57	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		12/05/23 09:57	12/06/23 19:57	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		12/05/23 09:57	12/06/23 19:57	1
2-Chlorophenol	ND		9.5	2.1	ug/L		12/05/23 09:57	12/06/23 19:57	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		12/05/23 09:57	12/06/23 19:57	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		12/05/23 09:57	12/06/23 19:57	1
Dibenzofuran	ND		9.5	0.16	ug/L		12/05/23 09:57	12/06/23 19:57	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		12/05/23 09:57	12/06/23 19:57	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		12/05/23 09:57	12/06/23 19:57	1
Diethyl phthalate	ND		9.5	0.23	ug/L		12/05/23 09:57	12/06/23 19:57	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		12/05/23 09:57	12/06/23 19:57	1

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

Job ID: 400-247591-1

Client Sample ID: MW6D-ROX-113023
Date Collected: 11/30/23 09:20
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247591-4
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.5	0.16	ug/L		12/05/23 09:57	12/06/23 19:57	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		12/05/23 09:57	12/06/23 19:57	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		12/05/23 09:57	12/06/23 19:57	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		12/05/23 09:57	12/06/23 19:57	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		12/05/23 09:57	12/06/23 19:57	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		12/05/23 09:57	12/06/23 19:57	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		12/05/23 09:57	12/06/23 19:57	1
1,4-Dioxane	ND		9.5	0.95	ug/L		12/05/23 09:57	12/06/23 19:57	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		12/05/23 09:57	12/06/23 19:57	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		12/05/23 09:57	12/06/23 19:57	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		12/05/23 09:57	12/06/23 19:57	1
Hexachloroethane	ND		9.5	4.0	ug/L		12/05/23 09:57	12/06/23 19:57	1
Indene	ND		9.5	0.95	ug/L		12/05/23 09:57	12/06/23 19:57	1
Isophorone	ND		9.5	0.13	ug/L		12/05/23 09:57	12/06/23 19:57	1
2-Methylphenol	ND		9.5	1.7	ug/L		12/05/23 09:57	12/06/23 19:57	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		12/05/23 09:57	12/06/23 19:57	1
2-Nitroaniline	ND		9.5	2.1	ug/L		12/05/23 09:57	12/06/23 19:57	1
3-Nitroaniline	ND		9.5	1.7	ug/L		12/05/23 09:57	12/06/23 19:57	1
4-Nitroaniline	ND		9.5	1.4	ug/L		12/05/23 09:57	12/06/23 19:57	1
Nitrobenzene	ND		9.5	0.12	ug/L		12/05/23 09:57	12/06/23 19:57	1
2-Nitrophenol	ND		9.5	4.9	ug/L		12/05/23 09:57	12/06/23 19:57	1
4-Nitrophenol	ND		9.5	2.0	ug/L		12/05/23 09:57	12/06/23 19:57	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		12/05/23 09:57	12/06/23 19:57	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		12/05/23 09:57	12/06/23 19:57	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		12/05/23 09:57	12/06/23 19:57	1
Pentachlorophenol	ND		19	1.3	ug/L		12/05/23 09:57	12/06/23 19:57	1
Phenol	ND		9.5	2.5	ug/L		12/05/23 09:57	12/06/23 19:57	1
Pyridine	ND		9.5	3.0	ug/L		12/05/23 09:57	12/06/23 19:57	1
Quinoline	ND		9.5	4.3	ug/L		12/05/23 09:57	12/06/23 19:57	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		12/05/23 09:57	12/06/23 19:57	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		12/05/23 09:57	12/06/23 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*46 - 124*	*12/05/23 09:57*	*12/06/23 19:57*	*1*
2-Fluorophenol	*19*		*13 - 113*	*12/05/23 09:57*	*12/06/23 19:57*	*1*
Nitrobenzene-d5	*59*		*36 - 126*	*12/05/23 09:57*	*12/06/23 19:57*	*1*
Phenol-d5	*38*		*17 - 127*	*12/05/23 09:57*	*12/06/23 19:57*	*1*
Terphenyl-d14	*85*		*44 - 149*	*12/05/23 09:57*	*12/06/23 19:57*	*1*
2,4,6-Tribromophenol	*67*		*26 - 150*	*12/05/23 09:57*	*12/06/23 19:57*	*1*

Method: EPA 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		12/05/23 11:19	12/05/23 18:45	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 11:19	12/05/23 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*12/05/23 11:19*	*12/05/23 18:45*	*1*

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

Job ID: 400-247591-1

Client Sample ID: MW6C-ROX-113023
Date Collected: 11/30/23 10:10
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247591-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/06/23 10:21	1
Acrolein	ND		20	3.3	ug/L			12/06/23 10:21	1
Acrylonitrile	ND		10	2.8	ug/L			12/06/23 10:21	1
Benzene	ND		1.0	0.50	ug/L			12/06/23 10:21	1
Bromobenzene	ND		1.0	0.54	ug/L			12/06/23 10:21	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/06/23 10:21	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/06/23 10:21	1
Bromoform	ND		5.0	0.25	ug/L			12/06/23 10:21	1
Bromomethane	ND		1.0	0.98	ug/L			12/06/23 10:21	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/06/23 10:21	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/06/23 10:21	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/06/23 10:21	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/06/23 10:21	1
Chloroethane	ND		1.0	0.76	ug/L			12/06/23 10:21	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/06/23 10:21	1
Chloroform	ND		1.0	0.90	ug/L			12/06/23 10:21	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/06/23 10:21	1
Chloromethane	ND		1.0	0.90	ug/L			12/06/23 10:21	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/06/23 10:21	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/06/23 10:21	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/06/23 10:21	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/06/23 10:21	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/06/23 10:21	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/06/23 10:21	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/06/23 10:21	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/06/23 10:21	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/06/23 10:21	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 10:21	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 10:21	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 10:21	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 10:21	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/06/23 10:21	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/06/23 10:21	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/06/23 10:21	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/06/23 10:21	1
2-Hexanone	ND		25	1.4	ug/L			12/06/23 10:21	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/06/23 10:21	1
Methylene bromide	ND		5.0	0.22	ug/L			12/06/23 10:21	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/06/23 10:21	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/06/23 10:21	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/06/23 10:21	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/06/23 10:21	1
Naphthalene	ND		5.0	3.0	ug/L			12/06/23 10:21	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/06/23 10:21	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/06/23 10:21	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/06/23 10:21	1
o-Xylene	ND		5.0	0.60	ug/L			12/06/23 10:21	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/06/23 10:21	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/06/23 10:21	1

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

Job ID: 400-247591-1

Client Sample ID: MW6C-ROX-113023

Lab Sample ID: 400-247591-5

Date Collected: 11/30/23 10:10

Matrix: Water

Date Received: 12/01/23 09:26

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/06/23 10:21	1
Styrene	ND		1.0	1.0	ug/L			12/06/23 10:21	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/06/23 10:21	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/06/23 10:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/06/23 10:21	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/06/23 10:21	1
Toluene	ND		1.0	0.90	ug/L			12/06/23 10:21	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 10:21	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/06/23 10:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/06/23 10:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/06/23 10:21	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/06/23 10:21	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/06/23 10:21	1
Trichloroethene	ND		1.0	0.15	ug/L			12/06/23 10:21	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/06/23 10:21	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/06/23 10:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/06/23 10:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/06/23 10:21	1
Vinyl acetate	ND		25	0.93	ug/L			12/06/23 10:21	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/06/23 10:21	1
Xylenes, Total	ND		10	1.6	ug/L			12/06/23 10:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*12/06/23 10:21*	*1*
Dibromofluoromethane	*98*		*75 - 126*		*12/06/23 10:21*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*12/06/23 10:21*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.093	ug/L		12/05/23 09:57	12/06/23 18:47	1
Acenaphthylene	**0.10**	**J**	0.19	0.042	ug/L		12/05/23 09:57	12/06/23 18:47	1
Anthracene	**0.070**	**J**	0.19	0.044	ug/L		12/05/23 09:57	12/06/23 18:47	1
Benzo[a]anthracene	**0.048**	**J**	0.19	0.032	ug/L		12/05/23 09:57	12/06/23 18:47	1
Benzo[a]pyrene	**0.10**	**J**	0.19	0.060	ug/L		12/05/23 09:57	12/06/23 18:47	1
Benzo[b]fluoranthene	**0.044**	**J**	0.19	0.035	ug/L		12/05/23 09:57	12/06/23 18:47	1
Benzo[g,h,i]perylene	ND		0.19	0.025	ug/L		12/05/23 09:57	12/06/23 18:47	1
Benzo[k]fluoranthene	ND		0.19	0.058	ug/L		12/05/23 09:57	12/06/23 18:47	1
Chrysene	ND		0.19	0.031	ug/L		12/05/23 09:57	12/06/23 18:47	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		12/05/23 09:57	12/06/23 18:47	1
Fluoranthene	ND		0.19	0.032	ug/L		12/05/23 09:57	12/06/23 18:47	1
Fluorene	ND		0.19	0.084	ug/L		12/05/23 09:57	12/06/23 18:47	1
Indeno[1,2,3-cd]pyrene	**0.061**	**J**	0.19	0.032	ug/L		12/05/23 09:57	12/06/23 18:47	1
Phenanthrene	ND		0.19	0.085	ug/L		12/05/23 09:57	12/06/23 18:47	1
Pyrene	ND		0.19	0.037	ug/L		12/05/23 09:57	12/06/23 18:47	1
1-Methylnaphthalene	ND		0.19	0.075	ug/L		12/05/23 09:57	12/06/23 18:47	1
2-Methylnaphthalene	**0.069**	**J**	0.19	0.062	ug/L		12/05/23 09:57	12/06/23 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*87*		*18 - 147*	*12/05/23 09:57*	*12/06/23 18:47*	*1*
2-Fluorobiphenyl	*71*		*15 - 128*	*12/05/23 09:57*	*12/06/23 18:47*	*1*

Client Sample ID: MW6C-ROX-113023
Date Collected: 11/30/23 10:10
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247591-5
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*74*		*10 - 144*	*12/05/23 09:57*	*12/06/23 18:47*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.19	0.093	ug/L		12/13/23 09:48	12/14/23 16:28	1
Acenaphthylene	ND	H	0.19	0.042	ug/L		12/13/23 09:48	12/14/23 16:28	1
Anthracene	ND	H	0.19	0.044	ug/L		12/13/23 09:48	12/14/23 16:28	1
Benzo[a]anthracene	ND	H	0.19	0.032	ug/L		12/13/23 09:48	12/14/23 16:28	1
Benzo[a]pyrene	ND	H	0.19	0.060	ug/L		12/13/23 09:48	12/14/23 16:28	1
Benzo[b]fluoranthene	ND	H	0.19	0.035	ug/L		12/13/23 09:48	12/14/23 16:28	1
Benzo[g,h,i]perylene	ND	H	0.19	0.025	ug/L		12/13/23 09:48	12/14/23 16:28	1
Benzo[k]fluoranthene	ND	H	0.19	0.059	ug/L		12/13/23 09:48	12/14/23 16:28	1
Chrysene	ND	H	0.19	0.031	ug/L		12/13/23 09:48	12/14/23 16:28	1
Dibenz(a,h)anthracene	ND	H	0.19	0.045	ug/L		12/13/23 09:48	12/14/23 16:28	1
Fluoranthene	ND	H	0.19	0.032	ug/L		12/13/23 09:48	12/14/23 16:28	1
Fluorene	ND	H	0.19	0.084	ug/L		12/13/23 09:48	12/14/23 16:28	1
Indeno[1,2,3-cd]pyrene	ND	H	0.19	0.032	ug/L		12/13/23 09:48	12/14/23 16:28	1
Phenanthrene	ND	H	0.19	0.085	ug/L		12/13/23 09:48	12/14/23 16:28	1
Pyrene	ND	H	0.19	0.037	ug/L		12/13/23 09:48	12/14/23 16:28	1
1-Methylnaphthalene	ND	H	0.19	0.076	ug/L		12/13/23 09:48	12/14/23 16:28	1
2-Methylnaphthalene	ND	H	0.19	0.062	ug/L		12/13/23 09:48	12/14/23 16:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*68*		*18 - 147*	*12/13/23 09:48*	*12/14/23 16:28*	*1*
2-Fluorobiphenyl	*68*		*15 - 128*	*12/13/23 09:48*	*12/14/23 16:28*	*1*
Nitrobenzene-d5	*65*		*10 - 144*	*12/13/23 09:48*	*12/14/23 16:28*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.4	3.6	ug/L		12/05/23 09:57	12/06/23 20:18	1
Benzenethiol	ND	*- *1	9.4	1.6	ug/L		12/05/23 09:57	12/06/23 20:18	1
Benzoic acid	ND		28	6.9	ug/L		12/05/23 09:57	12/06/23 20:18	1
Benzyl alcohol	ND		9.4	1.9	ug/L		12/05/23 09:57	12/06/23 20:18	1
Bis(2-chloroethoxy)methane	ND		9.4	0.15	ug/L		12/05/23 09:57	12/06/23 20:18	1
Bis(2-chloroethyl)ether	ND		9.4	2.5	ug/L		12/05/23 09:57	12/06/23 20:18	1
bis (2-chloroisopropyl) ether	ND		9.4	0.15	ug/L		12/05/23 09:57	12/06/23 20:18	1
Bis(2-ethylhexyl) phthalate	ND		9.4	4.7	ug/L		12/05/23 09:57	12/06/23 20:18	1
4-Bromophenyl phenyl ether	ND		9.4	0.19	ug/L		12/05/23 09:57	12/06/23 20:18	1
Butyl benzyl phthalate	ND		9.4	0.18	ug/L		12/05/23 09:57	12/06/23 20:18	1
4-Chloroaniline	ND		9.4	3.2	ug/L		12/05/23 09:57	12/06/23 20:18	1
4-Chloro-3-methylphenol	ND		9.4	3.6	ug/L		12/05/23 09:57	12/06/23 20:18	1
2-Chloronaphthalene	ND		9.4	0.13	ug/L		12/05/23 09:57	12/06/23 20:18	1
2-Chlorophenol	ND		9.4	2.1	ug/L		12/05/23 09:57	12/06/23 20:18	1
4-Chlorophenyl phenyl ether	ND		9.4	1.9	ug/L		12/05/23 09:57	12/06/23 20:18	1
Dibenz[a,h]acridine	ND		9.4	0.94	ug/L		12/05/23 09:57	12/06/23 20:18	1
Dibenzofuran	ND		9.4	0.16	ug/L		12/05/23 09:57	12/06/23 20:18	1
3,3'-Dichlorobenzidine	ND		9.4	2.5	ug/L		12/05/23 09:57	12/06/23 20:18	1
2,4-Dichlorophenol	ND		9.4	2.8	ug/L		12/05/23 09:57	12/06/23 20:18	1
Diethyl phthalate	ND		9.4	0.23	ug/L		12/05/23 09:57	12/06/23 20:18	1
2,4-Dimethylphenol	ND		9.4	3.3	ug/L		12/05/23 09:57	12/06/23 20:18	1

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

Job ID: 400-247591-1

Client Sample ID: MW6C-ROX-113023

Lab Sample ID: 400-247591-5

Date Collected: 11/30/23 10:10

Matrix: Water

Date Received: 12/01/23 09:26

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.4	0.16	ug/L		12/05/23 09:57	12/06/23 20:18	1
Di-n-butyl phthalate	ND		9.4	2.5	ug/L		12/05/23 09:57	12/06/23 20:18	1
4,6-Dinitro-ortho-cresol	ND		9.4	1.5	ug/L		12/05/23 09:57	12/06/23 20:18	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		12/05/23 09:57	12/06/23 20:18	1
2,4-Dinitrotoluene	ND		9.4	1.8	ug/L		12/05/23 09:57	12/06/23 20:18	1
2,6-Dinitrotoluene	ND		9.4	1.8	ug/L		12/05/23 09:57	12/06/23 20:18	1
Di-n-octyl phthalate	ND		9.4	0.16	ug/L		12/05/23 09:57	12/06/23 20:18	1
1,4-Dioxane	ND		9.4	0.94	ug/L		12/05/23 09:57	12/06/23 20:18	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	0.94	ug/L		12/05/23 09:57	12/06/23 20:18	1
Hexachlorobenzene	ND		9.4	0.16	ug/L		12/05/23 09:57	12/06/23 20:18	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		12/05/23 09:57	12/06/23 20:18	1
Hexachloroethane	ND		9.4	4.0	ug/L		12/05/23 09:57	12/06/23 20:18	1
Indene	ND		9.4	0.94	ug/L		12/05/23 09:57	12/06/23 20:18	1
Isophorone	ND		9.4	0.13	ug/L		12/05/23 09:57	12/06/23 20:18	1
2-Methylphenol	ND		9.4	1.7	ug/L		12/05/23 09:57	12/06/23 20:18	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		12/05/23 09:57	12/06/23 20:18	1
2-Nitroaniline	ND		9.4	2.1	ug/L		12/05/23 09:57	12/06/23 20:18	1
3-Nitroaniline	ND		9.4	1.7	ug/L		12/05/23 09:57	12/06/23 20:18	1
4-Nitroaniline	ND		9.4	1.4	ug/L		12/05/23 09:57	12/06/23 20:18	1
Nitrobenzene	ND		9.4	0.12	ug/L		12/05/23 09:57	12/06/23 20:18	1
2-Nitrophenol	ND		9.4	4.9	ug/L		12/05/23 09:57	12/06/23 20:18	1
4-Nitrophenol	ND		9.4	2.0	ug/L		12/05/23 09:57	12/06/23 20:18	1
N-Nitrosodimethylamine	ND		9.4	3.3	ug/L		12/05/23 09:57	12/06/23 20:18	1
N-Nitrosodi-n-propylamine	ND		9.4	3.1	ug/L		12/05/23 09:57	12/06/23 20:18	1
N-Nitrosodiphenylamine	ND		9.4	0.17	ug/L		12/05/23 09:57	12/06/23 20:18	1
Pentachlorophenol	ND		19	1.3	ug/L		12/05/23 09:57	12/06/23 20:18	1
Phenol	ND		9.4	2.5	ug/L		12/05/23 09:57	12/06/23 20:18	1
Pyridine	ND		9.4	3.0	ug/L		12/05/23 09:57	12/06/23 20:18	1
Quinoline	ND		9.4	4.2	ug/L		12/05/23 09:57	12/06/23 20:18	1
2,4,5-Trichlorophenol	ND		9.4	3.5	ug/L		12/05/23 09:57	12/06/23 20:18	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		12/05/23 09:57	12/06/23 20:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*46 - 124*	*12/05/23 09:57*	*12/06/23 20:18*	*1*
2-Fluorophenol	*46*		*13 - 113*	*12/05/23 09:57*	*12/06/23 20:18*	*1*
Nitrobenzene-d5	*72*		*36 - 126*	*12/05/23 09:57*	*12/06/23 20:18*	*1*
Phenol-d5	*61*		*17 - 127*	*12/05/23 09:57*	*12/06/23 20:18*	*1*
Terphenyl-d14	*71*		*44 - 149*	*12/05/23 09:57*	*12/06/23 20:18*	*1*
2,4,6-Tribromophenol	*68*		*26 - 150*	*12/05/23 09:57*	*12/06/23 20:18*	*1*

Method: EPA 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		12/05/23 11:19	12/05/23 19:06	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 11:19	12/05/23 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*12/05/23 11:19*	*12/05/23 19:06*	*1*

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

Job ID: 400-247591-1

Client Sample ID: MW6A-ROX-113023
Date Collected: 11/30/23 11:05
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247591-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/06/23 10:45	1
Acrolein	ND		20	3.3	ug/L			12/06/23 10:45	1
Acrylonitrile	ND		10	2.8	ug/L			12/06/23 10:45	1
Benzene	ND		1.0	0.50	ug/L			12/06/23 10:45	1
Bromobenzene	ND		1.0	0.54	ug/L			12/06/23 10:45	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/06/23 10:45	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/06/23 10:45	1
Bromoform	ND		5.0	0.25	ug/L			12/06/23 10:45	1
Bromomethane	ND		1.0	0.98	ug/L			12/06/23 10:45	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/06/23 10:45	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/06/23 10:45	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/06/23 10:45	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/06/23 10:45	1
Chloroethane	ND		1.0	0.76	ug/L			12/06/23 10:45	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/06/23 10:45	1
Chloroform	ND		1.0	0.90	ug/L			12/06/23 10:45	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/06/23 10:45	1
Chloromethane	ND		1.0	0.90	ug/L			12/06/23 10:45	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/06/23 10:45	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/06/23 10:45	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/06/23 10:45	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/06/23 10:45	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/06/23 10:45	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/06/23 10:45	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/06/23 10:45	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/06/23 10:45	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/06/23 10:45	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 10:45	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 10:45	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 10:45	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 10:45	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/06/23 10:45	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/06/23 10:45	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/06/23 10:45	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/06/23 10:45	1
2-Hexanone	ND		25	1.4	ug/L			12/06/23 10:45	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/06/23 10:45	1
Methylene bromide	ND		5.0	0.22	ug/L			12/06/23 10:45	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/06/23 10:45	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/06/23 10:45	1
Methyl tert-butyl ether	**0.26**	**J**	1.0	0.22	ug/L			12/06/23 10:45	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/06/23 10:45	1
Naphthalene	ND		5.0	3.0	ug/L			12/06/23 10:45	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/06/23 10:45	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/06/23 10:45	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/06/23 10:45	1
o-Xylene	ND		5.0	0.60	ug/L			12/06/23 10:45	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/06/23 10:45	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/06/23 10:45	1

Client Sample ID: MW6A-ROX-113023

Lab Sample ID: 400-247591-6

Date Collected: 11/30/23 11:05

Matrix: Water

Date Received: 12/01/23 09:26

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/06/23 10:45	1
Styrene	ND		1.0	1.0	ug/L			12/06/23 10:45	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/06/23 10:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/06/23 10:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/06/23 10:45	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/06/23 10:45	1
Toluene	ND		1.0	0.90	ug/L			12/06/23 10:45	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 10:45	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/06/23 10:45	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/06/23 10:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/06/23 10:45	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/06/23 10:45	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/06/23 10:45	1
Trichloroethene	ND		1.0	0.15	ug/L			12/06/23 10:45	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/06/23 10:45	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/06/23 10:45	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/06/23 10:45	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/06/23 10:45	1
Vinyl acetate	ND		25	0.93	ug/L			12/06/23 10:45	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/06/23 10:45	1
Xylenes, Total	ND		10	1.6	ug/L			12/06/23 10:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*12/06/23 10:45*	*1*
Dibromofluoromethane	*99*		*75 - 126*		*12/06/23 10:45*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*12/06/23 10:45*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.094	ug/L		12/05/23 09:57	12/06/23 19:08	1
Acenaphthylene	ND		0.19	0.042	ug/L		12/05/23 09:57	12/06/23 19:08	1
Anthracene	ND		0.19	0.045	ug/L		12/05/23 09:57	12/06/23 19:08	1
Benzo[a]anthracene	**0.062**	**J**	0.19	0.032	ug/L		12/05/23 09:57	12/06/23 19:08	1
Benzo[a]pyrene	**0.11**	**J**	0.19	0.061	ug/L		12/05/23 09:57	12/06/23 19:08	1
Benzo[b]fluoranthene	**0.064**	**J**	0.19	0.035	ug/L		12/05/23 09:57	12/06/23 19:08	1
Benzo[g,h,i]perylene	**0.030**	**J**	0.19	0.026	ug/L		12/05/23 09:57	12/06/23 19:08	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		12/05/23 09:57	12/06/23 19:08	1
Chrysene	ND		0.19	0.031	ug/L		12/05/23 09:57	12/06/23 19:08	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		12/05/23 09:57	12/06/23 19:08	1
Fluoranthene	ND		0.19	0.032	ug/L		12/05/23 09:57	12/06/23 19:08	1
Fluorene	ND		0.19	0.084	ug/L		12/05/23 09:57	12/06/23 19:08	1
Indeno[1,2,3-cd]pyrene	**0.073**	**J**	0.19	0.032	ug/L		12/05/23 09:57	12/06/23 19:08	1
Phenanthrene	ND		0.19	0.085	ug/L		12/05/23 09:57	12/06/23 19:08	1
Pyrene	**0.046**	**J**	0.19	0.037	ug/L		12/05/23 09:57	12/06/23 19:08	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		12/05/23 09:57	12/06/23 19:08	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		12/05/23 09:57	12/06/23 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*62*		*18 - 147*	*12/05/23 09:57*	*12/06/23 19:08*	*1*
2-Fluorobiphenyl	*66*		*15 - 128*	*12/05/23 09:57*	*12/06/23 19:08*	*1*

Client Sample ID: MW6A-ROX-113023
Date Collected: 11/30/23 11:05
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247591-6
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*82*		*10 - 144*	*12/05/23 09:57*	*12/06/23 19:08*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.19	0.094	ug/L		12/13/23 09:48	12/14/23 16:48	1
Acenaphthylene	ND	H	0.19	0.042	ug/L		12/13/23 09:48	12/14/23 16:48	1
Anthracene	ND	H	0.19	0.044	ug/L		12/13/23 09:48	12/14/23 16:48	1
Benzo[a]anthracene	ND	H	0.19	0.032	ug/L		12/13/23 09:48	12/14/23 16:48	1
Benzo[a]pyrene	ND	H	0.19	0.060	ug/L		12/13/23 09:48	12/14/23 16:48	1
Benzo[b]fluoranthene	**0.037**	**J H**	0.19	0.035	ug/L		12/13/23 09:48	12/14/23 16:48	1
Benzo[g,h,i]perylene	ND	H	0.19	0.026	ug/L		12/13/23 09:48	12/14/23 16:48	1
Benzo[k]fluoranthene	ND	H	0.19	0.059	ug/L		12/13/23 09:48	12/14/23 16:48	1
Chrysene	**0.038**	**J H**	0.19	0.031	ug/L		12/13/23 09:48	12/14/23 16:48	1
Dibenz(a,h)anthracene	ND	H	0.19	0.045	ug/L		12/13/23 09:48	12/14/23 16:48	1
Fluoranthene	**0.042**	**J H**	0.19	0.032	ug/L		12/13/23 09:48	12/14/23 16:48	1
Fluorene	ND	H	0.19	0.084	ug/L		12/13/23 09:48	12/14/23 16:48	1
Indeno[1,2,3-cd]pyrene	ND	H	0.19	0.032	ug/L		12/13/23 09:48	12/14/23 16:48	1
Phenanthrene	ND	H	0.19	0.085	ug/L		12/13/23 09:48	12/14/23 16:48	1
Pyrene	**0.049**	**J H**	0.19	0.037	ug/L		12/13/23 09:48	12/14/23 16:48	1
1-Methylnaphthalene	ND	H	0.19	0.076	ug/L		12/13/23 09:48	12/14/23 16:48	1
2-Methylnaphthalene	ND	H	0.19	0.062	ug/L		12/13/23 09:48	12/14/23 16:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*63*		*18 - 147*	*12/13/23 09:48*	*12/14/23 16:48*	*1*
2-Fluorobiphenyl	*59*		*15 - 128*	*12/13/23 09:48*	*12/14/23 16:48*	*1*
Nitrobenzene-d5	*66*		*10 - 144*	*12/13/23 09:48*	*12/14/23 16:48*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		12/05/23 09:57	12/06/23 20:39	1
Benzenethiol	ND	*- *1	9.5	1.6	ug/L		12/05/23 09:57	12/06/23 20:39	1
Benzoic acid	ND		28	6.9	ug/L		12/05/23 09:57	12/06/23 20:39	1
Benzyl alcohol	ND		9.5	1.9	ug/L		12/05/23 09:57	12/06/23 20:39	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		12/05/23 09:57	12/06/23 20:39	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		12/05/23 09:57	12/06/23 20:39	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		12/05/23 09:57	12/06/23 20:39	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		12/05/23 09:57	12/06/23 20:39	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		12/05/23 09:57	12/06/23 20:39	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		12/05/23 09:57	12/06/23 20:39	1
4-Chloroaniline	ND		9.5	3.2	ug/L		12/05/23 09:57	12/06/23 20:39	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		12/05/23 09:57	12/06/23 20:39	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		12/05/23 09:57	12/06/23 20:39	1
2-Chlorophenol	ND		9.5	2.1	ug/L		12/05/23 09:57	12/06/23 20:39	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		12/05/23 09:57	12/06/23 20:39	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		12/05/23 09:57	12/06/23 20:39	1
Dibenzofuran	ND		9.5	0.16	ug/L		12/05/23 09:57	12/06/23 20:39	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		12/05/23 09:57	12/06/23 20:39	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		12/05/23 09:57	12/06/23 20:39	1
Diethyl phthalate	ND		9.5	0.23	ug/L		12/05/23 09:57	12/06/23 20:39	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		12/05/23 09:57	12/06/23 20:39	1

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

Job ID: 400-247591-1

Client Sample ID: MW6A-ROX-113023

Lab Sample ID: 400-247591-6

Date Collected: 11/30/23 11:05

Matrix: Water

Date Received: 12/01/23 09:26

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.5	0.16	ug/L		12/05/23 09:57	12/06/23 20:39	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		12/05/23 09:57	12/06/23 20:39	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		12/05/23 09:57	12/06/23 20:39	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		12/05/23 09:57	12/06/23 20:39	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		12/05/23 09:57	12/06/23 20:39	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		12/05/23 09:57	12/06/23 20:39	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		12/05/23 09:57	12/06/23 20:39	1
1,4-Dioxane	ND		9.5	0.95	ug/L		12/05/23 09:57	12/06/23 20:39	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		12/05/23 09:57	12/06/23 20:39	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		12/05/23 09:57	12/06/23 20:39	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		12/05/23 09:57	12/06/23 20:39	1
Hexachloroethane	ND		9.5	4.0	ug/L		12/05/23 09:57	12/06/23 20:39	1
Indene	ND		9.5	0.95	ug/L		12/05/23 09:57	12/06/23 20:39	1
Isophorone	ND		9.5	0.13	ug/L		12/05/23 09:57	12/06/23 20:39	1
2-Methylphenol	ND		9.5	1.7	ug/L		12/05/23 09:57	12/06/23 20:39	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		12/05/23 09:57	12/06/23 20:39	1
2-Nitroaniline	ND		9.5	2.1	ug/L		12/05/23 09:57	12/06/23 20:39	1
3-Nitroaniline	ND		9.5	1.7	ug/L		12/05/23 09:57	12/06/23 20:39	1
4-Nitroaniline	ND		9.5	1.4	ug/L		12/05/23 09:57	12/06/23 20:39	1
Nitrobenzene	ND		9.5	0.12	ug/L		12/05/23 09:57	12/06/23 20:39	1
2-Nitrophenol	ND		9.5	4.9	ug/L		12/05/23 09:57	12/06/23 20:39	1
4-Nitrophenol	ND		9.5	2.0	ug/L		12/05/23 09:57	12/06/23 20:39	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		12/05/23 09:57	12/06/23 20:39	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		12/05/23 09:57	12/06/23 20:39	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		12/05/23 09:57	12/06/23 20:39	1
Pentachlorophenol	ND		19	1.3	ug/L		12/05/23 09:57	12/06/23 20:39	1
Phenol	ND		9.5	2.5	ug/L		12/05/23 09:57	12/06/23 20:39	1
Pyridine	ND		9.5	3.0	ug/L		12/05/23 09:57	12/06/23 20:39	1
Quinoline	ND		9.5	4.3	ug/L		12/05/23 09:57	12/06/23 20:39	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		12/05/23 09:57	12/06/23 20:39	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		12/05/23 09:57	12/06/23 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*46 - 124*	*12/05/23 09:57*	*12/06/23 20:39*	*1*
2-Fluorophenol	*56*		*13 - 113*	*12/05/23 09:57*	*12/06/23 20:39*	*1*
Nitrobenzene-d5	*79*		*36 - 126*	*12/05/23 09:57*	*12/06/23 20:39*	*1*
Phenol-d5	*71*		*17 - 127*	*12/05/23 09:57*	*12/06/23 20:39*	*1*
Terphenyl-d14	*46*		*44 - 149*	*12/05/23 09:57*	*12/06/23 20:39*	*1*
2,4,6-Tribromophenol	*75*		*26 - 150*	*12/05/23 09:57*	*12/06/23 20:39*	*1*

Method: EPA 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		12/05/23 11:19	12/06/23 13:34	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 11:19	12/06/23 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*120*		*51 - 149*	*12/05/23 11:19*	*12/06/23 13:34*	*1*

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

Job ID: 400-247591-1

Client Sample ID: MW6B-ROX-113023
Date Collected: 11/30/23 12:00
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247591-7
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/06/23 11:09	1
Acrolein	ND		20	3.3	ug/L			12/06/23 11:09	1
Acrylonitrile	ND		10	2.8	ug/L			12/06/23 11:09	1
Benzene	ND		1.0	0.50	ug/L			12/06/23 11:09	1
Bromobenzene	ND		1.0	0.54	ug/L			12/06/23 11:09	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/06/23 11:09	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/06/23 11:09	1
Bromoform	ND		5.0	0.25	ug/L			12/06/23 11:09	1
Bromomethane	ND		1.0	0.98	ug/L			12/06/23 11:09	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/06/23 11:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/06/23 11:09	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/06/23 11:09	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/06/23 11:09	1
Chloroethane	ND		1.0	0.76	ug/L			12/06/23 11:09	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/06/23 11:09	1
Chloroform	ND		1.0	0.90	ug/L			12/06/23 11:09	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/06/23 11:09	1
Chloromethane	ND		1.0	0.90	ug/L			12/06/23 11:09	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/06/23 11:09	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/06/23 11:09	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/06/23 11:09	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/06/23 11:09	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/06/23 11:09	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/06/23 11:09	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/06/23 11:09	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/06/23 11:09	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/06/23 11:09	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 11:09	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 11:09	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 11:09	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 11:09	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/06/23 11:09	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/06/23 11:09	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/06/23 11:09	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/06/23 11:09	1
2-Hexanone	ND		25	1.4	ug/L			12/06/23 11:09	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/06/23 11:09	1
Methylene bromide	ND		5.0	0.22	ug/L			12/06/23 11:09	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/06/23 11:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/06/23 11:09	1
Methyl tert-butyl ether	**0.32**	**J**	1.0	0.22	ug/L			12/06/23 11:09	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/06/23 11:09	1
Naphthalene	ND		5.0	3.0	ug/L			12/06/23 11:09	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/06/23 11:09	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/06/23 11:09	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/06/23 11:09	1
o-Xylene	ND		5.0	0.60	ug/L			12/06/23 11:09	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/06/23 11:09	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/06/23 11:09	1

Client Sample ID: MW6B-ROX-113023
Date Collected: 11/30/23 12:00
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247591-7
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/06/23 11:09	1
Styrene	ND		1.0	1.0	ug/L			12/06/23 11:09	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/06/23 11:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/06/23 11:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/06/23 11:09	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/06/23 11:09	1
Toluene	ND		1.0	0.90	ug/L			12/06/23 11:09	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 11:09	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/06/23 11:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/06/23 11:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/06/23 11:09	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/06/23 11:09	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/06/23 11:09	1
Trichloroethene	ND		1.0	0.15	ug/L			12/06/23 11:09	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/06/23 11:09	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/06/23 11:09	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/06/23 11:09	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/06/23 11:09	1
Vinyl acetate	ND		25	0.93	ug/L			12/06/23 11:09	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/06/23 11:09	1
Xylenes, Total	ND		10	1.6	ug/L			12/06/23 11:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*12/06/23 11:09*	*1*
Dibromofluoromethane	*97*		*75 - 126*		*12/06/23 11:09*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*12/06/23 11:09*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.093	ug/L		12/05/23 09:57	12/06/23 19:28	1
Acenaphthylene	ND		0.19	0.042	ug/L		12/05/23 09:57	12/06/23 19:28	1
Anthracene	ND		0.19	0.044	ug/L		12/05/23 09:57	12/06/23 19:28	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		12/05/23 09:57	12/06/23 19:28	1
Benzo[a]pyrene	ND		0.19	0.060	ug/L		12/05/23 09:57	12/06/23 19:28	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		12/05/23 09:57	12/06/23 19:28	1
Benzo[g,h,i]perylene	ND		0.19	0.025	ug/L		12/05/23 09:57	12/06/23 19:28	1
Benzo[k]fluoranthene	ND		0.19	0.058	ug/L		12/05/23 09:57	12/06/23 19:28	1
Chrysene	ND		0.19	0.031	ug/L		12/05/23 09:57	12/06/23 19:28	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		12/05/23 09:57	12/06/23 19:28	1
Fluoranthene	ND		0.19	0.032	ug/L		12/05/23 09:57	12/06/23 19:28	1
Fluorene	ND		0.19	0.084	ug/L		12/05/23 09:57	12/06/23 19:28	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		12/05/23 09:57	12/06/23 19:28	1
Phenanthrene	ND		0.19	0.085	ug/L		12/05/23 09:57	12/06/23 19:28	1
Pyrene	ND		0.19	0.037	ug/L		12/05/23 09:57	12/06/23 19:28	1
1-Methylnaphthalene	ND		0.19	0.075	ug/L		12/05/23 09:57	12/06/23 19:28	1
2-Methylnaphthalene	ND		0.19	0.062	ug/L		12/05/23 09:57	12/06/23 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*93*		*18 - 147*	*12/05/23 09:57*	*12/06/23 19:28*	*1*
2-Fluorobiphenyl	*68*		*15 - 128*	*12/05/23 09:57*	*12/06/23 19:28*	*1*

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

Job ID: 400-247591-1

Client Sample ID: MW6B-ROX-113023
Date Collected: 11/30/23 12:00
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247591-7
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	70		10 - 144	12/05/23 09:57	12/06/23 19:28	1

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.4	3.6	ug/L		12/05/23 09:57	12/06/23 21:00	1
Benzenethiol	ND	*- *1	9.4	1.6	ug/L		12/05/23 09:57	12/06/23 21:00	1
Benzoic acid	ND		28	6.9	ug/L		12/05/23 09:57	12/06/23 21:00	1
Benzyl alcohol	ND		9.4	1.9	ug/L		12/05/23 09:57	12/06/23 21:00	1
Bis(2-chloroethoxy)methane	ND		9.4	0.15	ug/L		12/05/23 09:57	12/06/23 21:00	1
Bis(2-chloroethyl)ether	ND		9.4	2.5	ug/L		12/05/23 09:57	12/06/23 21:00	1
bis (2-chloroisopropyl) ether	ND		9.4	0.15	ug/L		12/05/23 09:57	12/06/23 21:00	1
Bis(2-ethylhexyl) phthalate	ND		9.4	4.7	ug/L		12/05/23 09:57	12/06/23 21:00	1
4-Bromophenyl phenyl ether	ND		9.4	0.19	ug/L		12/05/23 09:57	12/06/23 21:00	1
Butyl benzyl phthalate	ND		9.4	0.18	ug/L		12/05/23 09:57	12/06/23 21:00	1
4-Chloroaniline	ND		9.4	3.2	ug/L		12/05/23 09:57	12/06/23 21:00	1
4-Chloro-3-methylphenol	ND		9.4	3.6	ug/L		12/05/23 09:57	12/06/23 21:00	1
2-Chloronaphthalene	ND		9.4	0.13	ug/L		12/05/23 09:57	12/06/23 21:00	1
2-Chlorophenol	ND		9.4	2.1	ug/L		12/05/23 09:57	12/06/23 21:00	1
4-Chlorophenyl phenyl ether	ND		9.4	1.9	ug/L		12/05/23 09:57	12/06/23 21:00	1
Dibenz[a,h]acridine	ND		9.4	0.94	ug/L		12/05/23 09:57	12/06/23 21:00	1
Dibenzofuran	ND		9.4	0.16	ug/L		12/05/23 09:57	12/06/23 21:00	1
3,3'-Dichlorobenzidine	ND		9.4	2.5	ug/L		12/05/23 09:57	12/06/23 21:00	1
2,4-Dichlorophenol	ND		9.4	2.8	ug/L		12/05/23 09:57	12/06/23 21:00	1
Diethyl phthalate	ND		9.4	0.23	ug/L		12/05/23 09:57	12/06/23 21:00	1
2,4-Dimethylphenol	ND		9.4	3.3	ug/L		12/05/23 09:57	12/06/23 21:00	1
Dimethyl phthalate	ND		9.4	0.16	ug/L		12/05/23 09:57	12/06/23 21:00	1
Di-n-butyl phthalate	ND		9.4	2.5	ug/L		12/05/23 09:57	12/06/23 21:00	1
4,6-Dinitro-ortho-cresol	ND		9.4	1.5	ug/L		12/05/23 09:57	12/06/23 21:00	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		12/05/23 09:57	12/06/23 21:00	1
2,4-Dinitrotoluene	ND		9.4	1.8	ug/L		12/05/23 09:57	12/06/23 21:00	1
2,6-Dinitrotoluene	ND		9.4	1.8	ug/L		12/05/23 09:57	12/06/23 21:00	1
Di-n-octyl phthalate	ND		9.4	0.16	ug/L		12/05/23 09:57	12/06/23 21:00	1
1,4-Dioxane	ND		9.4	0.94	ug/L		12/05/23 09:57	12/06/23 21:00	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	0.94	ug/L		12/05/23 09:57	12/06/23 21:00	1
Hexachlorobenzene	ND		9.4	0.16	ug/L		12/05/23 09:57	12/06/23 21:00	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		12/05/23 09:57	12/06/23 21:00	1
Hexachloroethane	ND		9.4	4.0	ug/L		12/05/23 09:57	12/06/23 21:00	1
Indene	ND		9.4	0.94	ug/L		12/05/23 09:57	12/06/23 21:00	1
Isophorone	ND		9.4	0.13	ug/L		12/05/23 09:57	12/06/23 21:00	1
2-Methylphenol	ND		9.4	1.7	ug/L		12/05/23 09:57	12/06/23 21:00	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		12/05/23 09:57	12/06/23 21:00	1
2-Nitroaniline	ND		9.4	2.1	ug/L		12/05/23 09:57	12/06/23 21:00	1
3-Nitroaniline	ND		9.4	1.7	ug/L		12/05/23 09:57	12/06/23 21:00	1
4-Nitroaniline	ND		9.4	1.4	ug/L		12/05/23 09:57	12/06/23 21:00	1
Nitrobenzene	ND		9.4	0.12	ug/L		12/05/23 09:57	12/06/23 21:00	1
2-Nitrophenol	ND		9.4	4.9	ug/L		12/05/23 09:57	12/06/23 21:00	1
4-Nitrophenol	ND		9.4	2.0	ug/L		12/05/23 09:57	12/06/23 21:00	1
N-Nitrosodimethylamine	ND		9.4	3.3	ug/L		12/05/23 09:57	12/06/23 21:00	1

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

Job ID: 400-247591-1

Client Sample ID: MW6B-ROX-113023

Lab Sample ID: 400-247591-7

Date Collected: 11/30/23 12:00

Matrix: Water

Date Received: 12/01/23 09:26

Method: SW846 8270E - 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		12/05/23 09:57	12/06/23 21:00	1
N-Nitrosodiphenylamine	ND		9.4	0.17	ug/L		12/05/23 09:57	12/06/23 21:00	1
Pentachlorophenol	ND		19	1.3	ug/L		12/05/23 09:57	12/06/23 21:00	1
Phenol	ND		9.4	2.5	ug/L		12/05/23 09:57	12/06/23 21:00	1
Pyridine	ND		9.4	3.0	ug/L		12/05/23 09:57	12/06/23 21:00	1
Quinoline	ND		9.4	4.2	ug/L		12/05/23 09:57	12/06/23 21:00	1
2,4,5-Trichlorophenol	ND		9.4	3.5	ug/L		12/05/23 09:57	12/06/23 21:00	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		12/05/23 09:57	12/06/23 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*46 - 124*	*12/05/23 09:57*	*12/06/23 21:00*	*1*
2-Fluorophenol	*40*		*13 - 113*	*12/05/23 09:57*	*12/06/23 21:00*	*1*
Nitrobenzene-d5	*64*		*36 - 126*	*12/05/23 09:57*	*12/06/23 21:00*	*1*
Phenol-d5	*55*		*17 - 127*	*12/05/23 09:57*	*12/06/23 21:00*	*1*
Terphenyl-d14	*64*		*44 - 149*	*12/05/23 09:57*	*12/06/23 21:00*	*1*
2,4,6-Tribromophenol	*70*		*26 - 150*	*12/05/23 09:57*	*12/06/23 21:00*	*1*

Method: EPA 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	0.016	ug/L		12/05/23 11:19	12/06/23 13:55	1
1,2-Dibromoethane	ND		0.019	0.014	ug/L		12/05/23 11:19	12/06/23 13:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*119*		*51 - 149*	*12/05/23 11:19*	*12/06/23 13:55*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Job ID: 400-247591-1
Project/Site: ROXANA MONTHLY GW

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
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
E	Result exceeded calibration range.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
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.

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 MONTHLY GW

Job ID: 400-247591-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-130)	(75-126)	(64-132)
400-247591-1	TB-ROX-113023-8260-B	106	98	96
400-247591-3	MW6D-ROX-113023-EB	104	95	97
400-247591-4	MW6D-ROX-113023	103	98	95
400-247591-4 MS	MW6D-ROX-113023	103	95	95
400-247591-4 MSD	MW6D-ROX-113023	104	97	95
400-247591-5	MW6C-ROX-113023	104	98	94
400-247591-6	MW6A-ROX-113023	106	99	95
400-247591-7	MW6B-ROX-113023	104	97	94
LCS 400-653096/1002	Lab Control Sample	105	97	96
MB 400-653096/4	Method Blank	102	96	95

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - 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)
400-247591-3	MW6D-ROX-113023-EB	77	37	67	58	86	67
400-247591-4	MW6D-ROX-113023	74	19	59	38	85	67
400-247591-5	MW6C-ROX-113023	81	46	72	61	71	68
400-247591-6	MW6A-ROX-113023	82	56	79	71	46	75
400-247591-7	MW6B-ROX-113023	73	40	64	55	64	70
LCS 400-652972/2-A	Lab Control Sample	83	53	73	71	91	79
LCS 400-652972/4-A	Lab Control Sample	89	67	79	80	100	68
LCSD 400-652972/3-A	Lab Control Sample Dup	89	55	81	77	94	82
LCSD 400-652972/5-A	Lab Control Sample Dup	94	72	85	84	98	72
MB 400-652972/1-A	Method Blank	80	23	71	46	83	48

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-247591-3	MW6D-ROX-113023-EB	143	79	76
400-247591-4	MW6D-ROX-113023	115	64	62
400-247591-4 - RERA	MW6D-ROX-113023	67	67	64
400-247591-5	MW6C-ROX-113023	87	71	74

Surrogate Summary

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

Job ID: 400-247591-1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	TPHL (18-147)	FBP (15-128)	NBZ (10-144)
400-247591-5 - RERA	MW6C-ROX-113023	68	68	65
400-247591-6	MW6A-ROX-113023	62	66	82
400-247591-6 - RERA	MW6A-ROX-113023	63	59	66
400-247591-7	MW6B-ROX-113023	93	68	70
LCS 400-652972/2-A	Lab Control Sample	93	70	72
LCS 400-653912/2-A	Lab Control Sample	70	74	73
LCSD 400-652972/3-A	Lab Control Sample Dup	87	67	76
LCSD 400-653912/3-A	Lab Control Sample Dup	64	71	68
MB 400-652972/1-A	Method Blank	158 S1+	73	71
MB 400-653912/1-A	Method Blank	75	73	68

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

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	BFB1 (51-149)
400-247591-2	TB-ROX-113023-8011-B	101
400-247591-3	MW6D-ROX-113023-EB	97
400-247591-4	MW6D-ROX-113023	99
400-247591-5	MW6C-ROX-113023	99
400-247591-6	MW6A-ROX-113023	120
400-247591-7	MW6B-ROX-113023	119
LCS 400-652995/2-A	Lab Control Sample	79
LCSD 400-652995/3-A	Lab Control Sample Dup	76
MB 400-652995/1-A	Method Blank	97

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-247591-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

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

Job ID: 400-247591-1

Client Sample ID: TB-ROX-113023-8260-B
Lab Sample ID: 400-247591-1
Date Collected: 11/30/23 00:00
Matrix: Water
Date Received: 12/01/23 09:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653096	12/06/23 09:35	WPD	EET PEN

Client Sample ID: TB-ROX-113023-8011-B
Lab Sample ID: 400-247591-2
Date Collected: 11/30/23 00:00
Matrix: Water
Date Received: 12/01/23 09:26

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	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653060	12/05/23 18:04	PG	EET PEN

Client Sample ID: MW6D-ROX-113023-EB
Lab Sample ID: 400-247591-3
Date Collected: 11/30/23 08:10
Matrix: Water
Date Received: 12/01/23 09:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653096	12/06/23 09:12	WPD	EET PEN
Total/NA	Prep	3520C			263 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 19:36	S1B	EET PEN
Total/NA	Prep	3520C			263 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653195	12/06/23 18:07	TH	EET PEN
Total/NA	Prep	8011			36 mL	35 mL	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653060	12/05/23 18:24	PG	EET PEN

Client Sample ID: MW6D-ROX-113023
Lab Sample ID: 400-247591-4
Date Collected: 11/30/23 09:20
Matrix: Water
Date Received: 12/01/23 09:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653096	12/06/23 09:57	WPD	EET PEN
Total/NA	Prep	3520C			264 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 19:57	S1B	EET PEN
Total/NA	Prep	3520C			264 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653195	12/06/23 18:27	TH	EET PEN
Total/NA	Prep	3520C	RERA		267.4 mL	1 mL	653912	12/13/23 09:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	654319	12/14/23 16:07	S1B	EET PEN
Total/NA	Prep	8011			35.3 mL	35 mL	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653060	12/05/23 18:45	PG	EET PEN

Client Sample ID: MW6C-ROX-113023
Lab Sample ID: 400-247591-5
Date Collected: 11/30/23 10:10
Matrix: Water
Date Received: 12/01/23 09:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653096	12/06/23 10:21	WPD	EET PEN

Lab Chronicle

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

Job ID: 400-247591-1

Client Sample ID: MW6C-ROX-113023
Date Collected: 11/30/23 10:10
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247591-5
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			265 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 20:18	S1B	EET PEN
Total/NA	Prep	3520C			265 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653195	12/06/23 18:47	TH	EET PEN
Total/NA	Prep	3520C	RERA		264.8 mL	1 mL	653912	12/13/23 09:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	654319	12/14/23 16:28	S1B	EET PEN
Total/NA	Prep	8011			35.4 mL	35 mL	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653060	12/05/23 19:06	PG	EET PEN

Client Sample ID: MW6A-ROX-113023
Date Collected: 11/30/23 11:05
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247591-6
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	8260D		1	5 mL	5 mL	653096	12/06/23 10:45	WPD	EET PEN
Total/NA	Prep	3520C			263.8 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 20:39	S1B	EET PEN
Total/NA	Prep	3520C			263.8 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653195	12/06/23 19:08	TH	EET PEN
Total/NA	Prep	3520C	RERA		264.6 mL	1 mL	653912	12/13/23 09:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	654319	12/14/23 16:48	S1B	EET PEN
Total/NA	Prep	8011			35.2 mL	35 mL	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653100	12/06/23 13:34	PG	EET PEN

Client Sample ID: MW6B-ROX-113023
Date Collected: 11/30/23 12:00
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247591-7
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	8260D		1	5 mL	5 mL	653096	12/06/23 11:09	WPD	EET PEN
Total/NA	Prep	3520C			265 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 21:00	S1B	EET PEN
Total/NA	Prep	3520C			265 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653195	12/06/23 19:28	TH	EET PEN
Total/NA	Prep	8011			36.4 mL	35 mL	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653100	12/06/23 13:55	PG	EET PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-652972/1-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 16:27	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-247591-1

Client Sample ID: Method Blank — Lab Sample ID: MB 400-652972/1-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653195	12/06/23 15:44	TH	EET PEN

Client Sample ID: Method Blank — Lab Sample ID: MB 400-652995/1-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	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653060	12/05/23 15:58	PG	EET PEN

Client Sample ID: Method Blank — Lab Sample ID: MB 400-653096/4

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	8260D		1	5 mL	5 mL	653096	12/06/23 08:50	WPD	EET PEN

Client Sample ID: Method Blank — Lab Sample ID: MB 400-653912/1-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	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	654224	12/13/23 18:25	KJA	EET PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 400-652972/2-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 16:48	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	653195	12/06/23 16:04	TH	EET PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 400-652972/4-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 17:30	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-247591-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652995/2-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	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653060	12/05/23 16:19	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653096/1002
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	8260D		1	5 mL	5 mL	653096	12/06/23 08:00	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653912/2-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	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	654224	12/13/23 18:45	KJA	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-652972/3-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 17:09	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	653195	12/06/23 16:25	TH	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-652972/5-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 17:51	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-652995/3-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	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653060	12/05/23 16:40	PG	EET PEN

Lab Chronicle

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

Job ID: 400-247591-1

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653912/3-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	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	654224	12/13/23 19:06	KJA	EET PEN

Client Sample ID: MW6D-ROX-113023
Lab Sample ID: 400-247591-4 MS
Date Collected: 11/30/23 09:20
Matrix: Water
Date Received: 12/01/23 09:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653096	12/06/23 12:42	WPD	EET PEN

Client Sample ID: MW6D-ROX-113023
Lab Sample ID: 400-247591-4 MSD
Date Collected: 11/30/23 09:20
Matrix: Water
Date Received: 12/01/23 09:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653096	12/06/23 13:07	WPD	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 653096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247591-1	TB-ROX-113023-8260-B	Total/NA	Water	8260D	
400-247591-3	MW6D-ROX-113023-EB	Total/NA	Water	8260D	
400-247591-4	MW6D-ROX-113023	Total/NA	Water	8260D	
400-247591-5	MW6C-ROX-113023	Total/NA	Water	8260D	
400-247591-6	MW6A-ROX-113023	Total/NA	Water	8260D	
400-247591-7	MW6B-ROX-113023	Total/NA	Water	8260D	
MB 400-653096/4	Method Blank	Total/NA	Water	8260D	
LCS 400-653096/1002	Lab Control Sample	Total/NA	Water	8260D	
400-247591-4 MS	MW6D-ROX-113023	Total/NA	Water	8260D	
400-247591-4 MSD	MW6D-ROX-113023	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 652972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247591-3	MW6D-ROX-113023-EB	Total/NA	Water	3520C	
400-247591-4	MW6D-ROX-113023	Total/NA	Water	3520C	
400-247591-5	MW6C-ROX-113023	Total/NA	Water	3520C	
400-247591-6	MW6A-ROX-113023	Total/NA	Water	3520C	
400-247591-7	MW6B-ROX-113023	Total/NA	Water	3520C	
MB 400-652972/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-652972/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-652972/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-652972/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-652972/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 653195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247591-3	MW6D-ROX-113023-EB	Total/NA	Water	8270E SIM	652972
400-247591-4	MW6D-ROX-113023	Total/NA	Water	8270E SIM	652972
400-247591-5	MW6C-ROX-113023	Total/NA	Water	8270E SIM	652972
400-247591-6	MW6A-ROX-113023	Total/NA	Water	8270E SIM	652972
400-247591-7	MW6B-ROX-113023	Total/NA	Water	8270E SIM	652972
MB 400-652972/1-A	Method Blank	Total/NA	Water	8270E SIM	652972
LCS 400-652972/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	652972
LCSD 400-652972/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	652972

Analysis Batch: 653218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247591-3	MW6D-ROX-113023-EB	Total/NA	Water	8270E	652972
400-247591-4	MW6D-ROX-113023	Total/NA	Water	8270E	652972
400-247591-5	MW6C-ROX-113023	Total/NA	Water	8270E	652972
400-247591-6	MW6A-ROX-113023	Total/NA	Water	8270E	652972
400-247591-7	MW6B-ROX-113023	Total/NA	Water	8270E	652972
MB 400-652972/1-A	Method Blank	Total/NA	Water	8270E	652972
LCS 400-652972/2-A	Lab Control Sample	Total/NA	Water	8270E	652972
LCS 400-652972/4-A	Lab Control Sample	Total/NA	Water	8270E	652972
LCSD 400-652972/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	652972
LCSD 400-652972/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	652972

QC Association Summary

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

Job ID: 400-247591-1

GC/MS Semi VOA

Prep Batch: 653912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247591-4 - RERA	MW6D-ROX-113023	Total/NA	Water	3520C	
400-247591-5 - RERA	MW6C-ROX-113023	Total/NA	Water	3520C	
400-247591-6 - RERA	MW6A-ROX-113023	Total/NA	Water	3520C	
MB 400-653912/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-653912/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-653912/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 654224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-653912/1-A	Method Blank	Total/NA	Water	8270E SIM	653912
LCS 400-653912/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	653912
LCSD 400-653912/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	653912

Analysis Batch: 654319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247591-4 - RERA	MW6D-ROX-113023	Total/NA	Water	8270E SIM	653912
400-247591-5 - RERA	MW6C-ROX-113023	Total/NA	Water	8270E SIM	653912
400-247591-6 - RERA	MW6A-ROX-113023	Total/NA	Water	8270E SIM	653912

GC Semi VOA

Prep Batch: 652995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247591-2	TB-ROX-113023-8011-B	Total/NA	Water	8011	
400-247591-3	MW6D-ROX-113023-EB	Total/NA	Water	8011	
400-247591-4	MW6D-ROX-113023	Total/NA	Water	8011	
400-247591-5	MW6C-ROX-113023	Total/NA	Water	8011	
400-247591-6	MW6A-ROX-113023	Total/NA	Water	8011	
400-247591-7	MW6B-ROX-113023	Total/NA	Water	8011	
MB 400-652995/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-652995/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-652995/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 653060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247591-2	TB-ROX-113023-8011-B	Total/NA	Water	8011	652995
400-247591-3	MW6D-ROX-113023-EB	Total/NA	Water	8011	652995
400-247591-4	MW6D-ROX-113023	Total/NA	Water	8011	652995
400-247591-5	MW6C-ROX-113023	Total/NA	Water	8011	652995
MB 400-652995/1-A	Method Blank	Total/NA	Water	8011	652995
LCS 400-652995/2-A	Lab Control Sample	Total/NA	Water	8011	652995
LCSD 400-652995/3-A	Lab Control Sample Dup	Total/NA	Water	8011	652995

Analysis Batch: 653100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247591-6	MW6A-ROX-113023	Total/NA	Water	8011	652995
400-247591-7	MW6B-ROX-113023	Total/NA	Water	8011	652995

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

Job ID: 400-247591-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-653096/4
Matrix: Water
Analysis Batch: 653096

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			12/06/23 08:50	1
Acrolein	ND		20	3.3	ug/L			12/06/23 08:50	1
Acrylonitrile	ND		10	2.8	ug/L			12/06/23 08:50	1
Benzene	ND		1.0	0.50	ug/L			12/06/23 08:50	1
Bromobenzene	ND		1.0	0.54	ug/L			12/06/23 08:50	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/06/23 08:50	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/06/23 08:50	1
Bromoform	ND		5.0	0.25	ug/L			12/06/23 08:50	1
Bromomethane	ND		1.0	0.98	ug/L			12/06/23 08:50	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/06/23 08:50	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/06/23 08:50	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/06/23 08:50	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/06/23 08:50	1
Chloroethane	ND		1.0	0.76	ug/L			12/06/23 08:50	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/06/23 08:50	1
Chloroform	ND		1.0	0.90	ug/L			12/06/23 08:50	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/06/23 08:50	1
Chloromethane	ND		1.0	0.90	ug/L			12/06/23 08:50	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/06/23 08:50	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/06/23 08:50	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/06/23 08:50	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/06/23 08:50	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/06/23 08:50	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/06/23 08:50	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/06/23 08:50	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/06/23 08:50	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/06/23 08:50	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 08:50	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 08:50	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 08:50	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 08:50	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/06/23 08:50	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/06/23 08:50	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/06/23 08:50	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/06/23 08:50	1
2-Hexanone	ND		25	1.4	ug/L			12/06/23 08:50	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/06/23 08:50	1
Methylene bromide	ND		5.0	0.22	ug/L			12/06/23 08:50	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/06/23 08:50	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/06/23 08:50	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/06/23 08:50	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/06/23 08:50	1
Naphthalene	ND		5.0	3.0	ug/L			12/06/23 08:50	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/06/23 08:50	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/06/23 08:50	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/06/23 08:50	1
o-Xylene	ND		5.0	0.60	ug/L			12/06/23 08:50	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/06/23 08:50	1

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

Lab Sample ID: MB 400-653096/4
Matrix: Water
Analysis Batch: 653096

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			12/06/23 08:50	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/06/23 08:50	1
Styrene	ND		1.0	1.0	ug/L			12/06/23 08:50	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/06/23 08:50	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/06/23 08:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/06/23 08:50	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/06/23 08:50	1
Toluene	ND		1.0	0.90	ug/L			12/06/23 08:50	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 08:50	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/06/23 08:50	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/06/23 08:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/06/23 08:50	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/06/23 08:50	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/06/23 08:50	1
Trichloroethene	ND		1.0	0.15	ug/L			12/06/23 08:50	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/06/23 08:50	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/06/23 08:50	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/06/23 08:50	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/06/23 08:50	1
Vinyl acetate	ND		25	0.93	ug/L			12/06/23 08:50	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/06/23 08:50	1
Xylenes, Total	ND		10	1.6	ug/L			12/06/23 08:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*12/06/23 08:50*	*1*
Dibromofluoromethane	*96*		*75 - 126*		*12/06/23 08:50*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*12/06/23 08:50*	*1*

Lab Sample ID: LCS 400-653096/1002
Matrix: Water
Analysis Batch: 653096

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	219		ug/L		110	43 - 160
Acrolein	250	238		ug/L		95	38 - 160
Acrylonitrile	500	487		ug/L		97	64 - 142
Benzene	50.0	44.9		ug/L		90	70 - 130
Bromobenzene	50.0	42.2		ug/L		84	70 - 132
Bromochloromethane	50.0	42.4		ug/L		85	70 - 130
Bromodichloromethane	50.0	46.1		ug/L		92	67 - 133
Bromoform	50.0	48.1		ug/L		96	57 - 140
Bromomethane	25.0	20.0		ug/L		80	10 - 160
2-Butanone (MEK)	200	227		ug/L		114	61 - 145
Carbon disulfide	50.0	40.7		ug/L		81	61 - 137
Carbon tetrachloride	50.0	46.2		ug/L		92	61 - 137
Chlorobenzene	50.0	41.6		ug/L		83	70 - 130
Chloroethane	25.0	19.0		ug/L		76	55 - 141
2-Chloroethyl vinyl ether	25.0	19.4		ug/L		78	10 - 160

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

Lab Sample ID: LCS 400-653096/1002
Matrix: Water
Analysis Batch: 653096

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	43.3		ug/L		87	69 - 130
1-Chlorohexane	50.0	44.0		ug/L		88	69 - 130
Chloromethane	25.0	23.3		ug/L		93	58 - 137
cis-1,2-Dichloroethene	50.0	45.2		ug/L		90	68 - 130
cis-1,3-Dichloropropene	50.0	47.0		ug/L		94	69 - 132
Dibromochloromethane	50.0	44.6		ug/L		89	67 - 135
1,2-Dichlorobenzene	50.0	40.6		ug/L		81	67 - 130
1,3-Dichlorobenzene	50.0	42.0		ug/L		84	70 - 130
1,4-Dichlorobenzene	50.0	41.7		ug/L		83	70 - 130
Dichlorodifluoromethane	25.0	15.7		ug/L		63	41 - 146
1,1-Dichloroethane	50.0	46.5		ug/L		93	70 - 130
1,2-Dichloroethane	50.0	41.8		ug/L		84	69 - 130
1,1-Dichloroethene	50.0	42.4		ug/L		85	63 - 134
1,2-Dichloropropane	50.0	46.8		ug/L		94	70 - 130
1,3-Dichloropropane	50.0	43.5		ug/L		87	70 - 130
2,2-Dichloropropane	50.0	44.8		ug/L		90	52 - 135
1,1-Dichloropropene	50.0	44.4		ug/L		89	70 - 130
Ethylbenzene	50.0	42.7		ug/L		85	70 - 130
Ethyl methacrylate	50.0	43.3		ug/L		87	68 - 130
Hexachlorobutadiene	50.0	51.5		ug/L		103	53 - 140
2-Hexanone	200	206		ug/L		103	65 - 137
Isopropylbenzene	50.0	42.0		ug/L		84	70 - 130
Methylene bromide	50.0	43.5		ug/L		87	70 - 130
Methylene Chloride	50.0	41.8		ug/L		84	66 - 135
4-Methyl-2-pentanone (MIBK)	200	182		ug/L		91	69 - 138
Methyl tert-butyl ether	50.0	44.2		ug/L		88	66 - 130
m-Xylene & p-Xylene	50.0	42.8		ug/L		86	70 - 130
Naphthalene	50.0	38.9		ug/L		78	47 - 149
n-Butylbenzene	50.0	40.0		ug/L		80	67 - 130
N-Propylbenzene	50.0	40.9		ug/L		82	70 - 130
o-Chlorotoluene	50.0	41.8		ug/L		84	70 - 130
o-Xylene	50.0	42.7		ug/L		85	70 - 130
p-Chlorotoluene	50.0	41.7		ug/L		83	70 - 130
p-Isopropyltoluene	50.0	41.8		ug/L		84	65 - 130
sec-Butylbenzene	50.0	42.4		ug/L		85	66 - 130
Styrene	50.0	40.2		ug/L		80	70 - 130
tert-Butylbenzene	50.0	47.3		ug/L		95	64 - 139
1,1,1,2-Tetrachloroethane	50.0	44.3		ug/L		89	67 - 131
1,1,2,2-Tetrachloroethane	50.0	40.8		ug/L		82	70 - 131
Tetrachloroethene	50.0	43.4		ug/L		87	65 - 130
Toluene	50.0	42.1		ug/L		84	70 - 130
trans-1,2-Dichloroethene	50.0	43.7		ug/L		87	70 - 130
trans-1,3-Dichloropropene	50.0	43.5		ug/L		87	63 - 130
1,2,3-Trichlorobenzene	50.0	44.5		ug/L		89	60 - 138
1,2,4-Trichlorobenzene	50.0	43.8		ug/L		88	60 - 140
1,1,1-Trichloroethane	50.0	44.3		ug/L		89	68 - 130
1,1,2-Trichloroethane	50.0	43.7		ug/L		87	70 - 130
Trichloroethene	50.0	44.7		ug/L		89	70 - 130
Trichlorofluoromethane	25.0	20.5		ug/L		82	65 - 138

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

Lab Sample ID: LCS 400-653096/1002
Matrix: Water
Analysis Batch: 653096

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	40.6		ug/L		81	70 - 130
1,2,4-Trimethylbenzene	50.0	41.1		ug/L		82	70 - 130
1,3,5-Trimethylbenzene	50.0	41.6		ug/L		83	69 - 130
Vinyl acetate	50.0	45.0		ug/L		90	26 - 160
Vinyl chloride	25.0	21.4		ug/L		86	59 - 136
Xylenes, Total	100	85.5		ug/L		85	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*72 - 130*
Dibromofluoromethane	*97*		*75 - 126*
Toluene-d8 (Surr)	*96*		*64 - 132*

Lab Sample ID: 400-247591-4 MS
Matrix: Water
Analysis Batch: 653096

Client Sample ID: MW6D-ROX-113023
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND	F1	200	66.4	F1	ug/L		33	43 - 150
Acrolein	ND		250	203		ug/L		81	38 - 150
Acrylonitrile	ND		500	420		ug/L		84	62 - 149
Benzene	ND		50.0	38.2		ug/L		76	56 - 142
Bromobenzene	ND		50.0	31.7		ug/L		63	59 - 136
Bromochloromethane	ND		50.0	36.1		ug/L		72	64 - 140
Bromodichloromethane	ND		50.0	39.3		ug/L		79	59 - 143
Bromoform	ND		50.0	38.5		ug/L		77	50 - 140
Bromomethane	ND		25.0	15.3		ug/L		61	10 - 150
2-Butanone (MEK)	ND		200	110		ug/L		55	55 - 150
Carbon disulfide	ND		50.0	34.5		ug/L		69	48 - 150
Carbon tetrachloride	ND		50.0	39.5		ug/L		79	55 - 145
Chlorobenzene	ND		50.0	32.6		ug/L		65	64 - 130
Chloroethane	ND		25.0	16.5		ug/L		66	50 - 150
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	37.3		ug/L		75	60 - 141
1-Chlorohexane	ND		50.0	34.0		ug/L		68	56 - 136
Chloromethane	ND		25.0	19.9		ug/L		79	49 - 148
cis-1,2-Dichloroethene	ND		50.0	38.7		ug/L		77	59 - 143
cis-1,3-Dichloropropene	ND		50.0	38.9		ug/L		78	57 - 140
Dibromochloromethane	ND		50.0	36.3		ug/L		73	56 - 143
1,2-Dichlorobenzene	ND		50.0	29.6		ug/L		59	52 - 137
1,3-Dichlorobenzene	ND	F2	50.0	30.1		ug/L		60	54 - 135
1,4-Dichlorobenzene	ND	F2	50.0	29.4		ug/L		59	53 - 135
Dichlorodifluoromethane	ND		25.0	13.9		ug/L		56	16 - 150
1,1-Dichloroethane	ND		50.0	39.7		ug/L		79	61 - 144
1,2-Dichloroethane	ND		50.0	35.8		ug/L		72	60 - 141
1,1-Dichloroethene	ND		50.0	34.7		ug/L		69	54 - 147
1,2-Dichloropropane	ND		50.0	39.2		ug/L		78	66 - 137
1,3-Dichloropropane	ND		50.0	35.6		ug/L		71	66 - 133
2,2-Dichloropropane	ND		50.0	37.8		ug/L		76	42 - 144

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

Lab Sample ID: 400-247591-4 MS
Matrix: Water
Analysis Batch: 653096

Client Sample ID: MW6D-ROX-113023
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	37.9		ug/L		76	65 - 136
Ethylbenzene	ND		50.0	34.2		ug/L		68	58 - 131
Ethyl methacrylate	ND		50.0	35.9		ug/L		72	64 - 130
Hexachlorobutadiene	ND		50.0	32.8		ug/L		66	31 - 149
2-Hexanone	ND	F1	200	110	F1	ug/L		55	65 - 140
Isopropylbenzene	ND		50.0	32.2		ug/L		64	56 - 133
Methylene bromide	ND		50.0	36.9		ug/L		74	63 - 138
Methylene Chloride	ND		50.0	37.3		ug/L		75	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	147		ug/L		73	63 - 146
Methyl tert-butyl ether	ND		50.0	38.1		ug/L		76	59 - 137
m-Xylene & p-Xylene	ND		50.0	33.3		ug/L		67	57 - 130
Naphthalene	ND		50.0	30.7		ug/L		61	25 - 150
n-Butylbenzene	ND	F2	50.0	27.7		ug/L		55	41 - 142
N-Propylbenzene	ND	F2	50.0	30.3		ug/L		61	51 - 138
o-Chlorotoluene	ND		50.0	31.1		ug/L		62	53 - 134
o-Xylene	ND		50.0	33.1		ug/L		66	61 - 130
p-Chlorotoluene	ND	F2	50.0	29.9		ug/L		60	54 - 133
p-Isopropyltoluene	ND	F2	50.0	28.9		ug/L		58	48 - 139
sec-Butylbenzene	ND	F2	50.0	30.0		ug/L		60	50 - 138
Styrene	ND		50.0	30.6		ug/L		61	58 - 131
tert-Butylbenzene	ND	F2	50.0	34.3		ug/L		69	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	35.2		ug/L		70	59 - 137
1,1,2,2-Tetrachloroethane	ND	F1	50.0	32.6	F1	ug/L		65	66 - 135
Tetrachloroethene	ND		50.0	33.4		ug/L		67	52 - 133
Toluene	ND		50.0	34.9		ug/L		70	65 - 130
trans-1,2-Dichloroethene	ND		50.0	38.5		ug/L		77	61 - 143
trans-1,3-Dichloropropene	ND		50.0	34.7		ug/L		69	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	30.2		ug/L		60	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	30.1		ug/L		60	39 - 148
1,1,1-Trichloroethane	ND		50.0	38.0		ug/L		76	57 - 142
1,1,2-Trichloroethane	ND		50.0	35.5		ug/L		71	66 - 131
Trichloroethene	ND		50.0	37.3		ug/L		75	64 - 136
Trichlorofluoromethane	ND		25.0	17.9		ug/L		71	54 - 150
1,2,3-Trichloropropane	ND		50.0	32.3		ug/L		65	65 - 133
1,2,4-Trimethylbenzene	ND	F2	50.0	29.5		ug/L		59	50 - 139
1,3,5-Trimethylbenzene	ND	F2	50.0	29.8		ug/L		60	52 - 135
Vinyl acetate	ND		50.0	39.3		ug/L		79	26 - 150
Vinyl chloride	ND		25.0	18.0		ug/L		72	46 - 150
Xylenes, Total	ND		100	66.4		ug/L		66	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*72 - 130*
Dibromofluoromethane	*95*		*75 - 126*
Toluene-d8 (Surr)	*95*		*64 - 132*

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

Lab Sample ID: 400-247591-4 MSD
Matrix: Water
Analysis Batch: 653096

Client Sample ID: MW6D-ROX-113023
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	200	71.9	F1	ug/L		36	43 - 150	8	30
Acrolein	ND		250	247		ug/L		99	38 - 150	20	31
Acrylonitrile	ND		500	470		ug/L		94	62 - 149	11	30
Benzene	ND		50.0	46.0		ug/L		92	56 - 142	19	30
Bromobenzene	ND		50.0	41.3		ug/L		83	59 - 136	26	30
Bromochloromethane	ND		50.0	42.6		ug/L		85	64 - 140	17	30
Bromodichloromethane	ND		50.0	46.4		ug/L		93	59 - 143	16	30
Bromoform	ND		50.0	45.9		ug/L		92	50 - 140	18	30
Bromomethane	ND		25.0	20.8		ug/L		83	10 - 150	30	50
2-Butanone (MEK)	ND		200	120		ug/L		60	55 - 150	9	30
Carbon disulfide	ND		50.0	42.0		ug/L		84	48 - 150	20	30
Carbon tetrachloride	ND		50.0	46.6		ug/L		93	55 - 145	16	30
Chlorobenzene	ND		50.0	41.5		ug/L		83	64 - 130	24	30
Chloroethane	ND		25.0	21.2		ug/L		85	50 - 150	25	30
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	43.6		ug/L		87	60 - 141	16	30
1-Chlorohexane	ND		50.0	44.4		ug/L		89	56 - 136	26	30
Chloromethane	ND		25.0	25.3		ug/L		101	49 - 148	24	31
cis-1,2-Dichloroethene	ND		50.0	46.0		ug/L		92	59 - 143	17	30
cis-1,3-Dichloropropene	ND		50.0	47.0		ug/L		94	57 - 140	19	30
Dibromochloromethane	ND		50.0	43.2		ug/L		86	56 - 143	17	30
1,2-Dichlorobenzene	ND		50.0	39.2		ug/L		78	52 - 137	28	30
1,3-Dichlorobenzene	ND	F2	50.0	41.3	F2	ug/L		83	54 - 135	31	30
1,4-Dichlorobenzene	ND	F2	50.0	40.5	F2	ug/L		81	53 - 135	32	30
Dichlorodifluoromethane	ND		25.0	17.1		ug/L		68	16 - 150	20	31
1,1-Dichloroethane	ND		50.0	44.9		ug/L		90	61 - 144	12	30
1,2-Dichloroethane	ND		50.0	41.0		ug/L		82	60 - 141	14	30
1,1-Dichloroethene	ND		50.0	42.0		ug/L		84	54 - 147	19	30
1,2-Dichloropropane	ND		50.0	46.0		ug/L		92	66 - 137	16	30
1,3-Dichloropropane	ND		50.0	42.1		ug/L		84	66 - 133	17	30
2,2-Dichloropropane	ND		50.0	45.2		ug/L		90	42 - 144	18	31
1,1-Dichloropropene	ND		50.0	46.1		ug/L		92	65 - 136	19	30
Ethylbenzene	ND		50.0	43.4		ug/L		87	58 - 131	24	30
Ethyl methacrylate	ND		50.0	41.1		ug/L		82	64 - 130	13	30
Hexachlorobutadiene	ND		50.0	45.4		ug/L		91	31 - 149	32	36
2-Hexanone	ND	F1	200	122	F1	ug/L		61	65 - 140	10	30
Isopropylbenzene	ND		50.0	42.9		ug/L		86	56 - 133	28	30
Methylene bromide	ND		50.0	42.4		ug/L		85	63 - 138	14	30
Methylene Chloride	ND		50.0	43.6		ug/L		87	60 - 146	16	32
4-Methyl-2-pentanone (MIBK)	ND		200	166		ug/L		83	63 - 146	13	30
Methyl tert-butyl ether	ND		50.0	44.5		ug/L		89	59 - 137	16	30
m-Xylene & p-Xylene	ND		50.0	42.9		ug/L		86	57 - 130	25	30
Naphthalene	ND		50.0	36.6		ug/L		73	25 - 150	18	30
n-Butylbenzene	ND	F2	50.0	39.2	F2	ug/L		78	41 - 142	35	31
N-Propylbenzene	ND	F2	50.0	42.1	F2	ug/L		84	51 - 138	33	30
o-Chlorotoluene	ND		50.0	42.2		ug/L		84	53 - 134	30	30
o-Xylene	ND		50.0	42.5		ug/L		85	61 - 130	25	30
p-Chlorotoluene	ND	F2	50.0	40.8	F2	ug/L		82	54 - 133	31	30

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

Lab Sample ID: 400-247591-4 MSD
Matrix: Water
Analysis Batch: 653096

Client Sample ID: MW6D-ROX-113023
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	F2	50.0	41.0	F2	ug/L		82	48 - 139	34	30
sec-Butylbenzene	ND	F2	50.0	42.0	F2	ug/L		84	50 - 138	33	30
Styrene	ND		50.0	39.8		ug/L		80	58 - 131	26	30
tert-Butylbenzene	ND	F2	50.0	47.3	F2	ug/L		95	54 - 146	32	30
1,1,1,2-Tetrachloroethane	ND		50.0	43.6		ug/L		87	59 - 137	21	30
1,1,2,2-Tetrachloroethane	ND	F1	50.0	38.7		ug/L		77	66 - 135	17	30
Tetrachloroethene	ND		50.0	41.7		ug/L		83	52 - 133	22	30
Toluene	ND		50.0	41.6		ug/L		83	65 - 130	18	30
trans-1,2-Dichloroethene	ND		50.0	45.2		ug/L		90	61 - 143	16	30
trans-1,3-Dichloropropene	ND		50.0	41.1		ug/L		82	53 - 133	17	30
1,2,3-Trichlorobenzene	ND		50.0	40.0		ug/L		80	43 - 145	28	30
1,2,4-Trichlorobenzene	ND		50.0	38.1		ug/L		76	39 - 148	24	30
1,1,1-Trichloroethane	ND		50.0	45.5		ug/L		91	57 - 142	18	30
1,1,2-Trichloroethane	ND		50.0	41.7		ug/L		83	66 - 131	16	30
Trichloroethene	ND		50.0	45.6		ug/L		91	64 - 136	20	30
Trichlorofluoromethane	ND		25.0	22.6		ug/L		90	54 - 150	23	30
1,2,3-Trichloropropane	ND		50.0	38.6		ug/L		77	65 - 133	18	30
1,2,4-Trimethylbenzene	ND	F2	50.0	41.1	F2	ug/L		82	50 - 139	33	30
1,3,5-Trimethylbenzene	ND	F2	50.0	41.1	F2	ug/L		82	52 - 135	32	30
Vinyl acetate	ND		50.0	50.5		ug/L		101	26 - 150	25	33
Vinyl chloride	ND		25.0	24.0		ug/L		96	46 - 150	28	30
Xylenes, Total	ND		100	85.4		ug/L		85	59 - 130	25	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*72 - 130*
Dibromofluoromethane	*97*		*75 - 126*
Toluene-d8 (Surr)	*95*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-652972/1-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		12/05/23 09:56	12/06/23 16:27	1
Benzenethiol	ND		10	1.7	ug/L		12/05/23 09:56	12/06/23 16:27	1
Benzoic acid	ND		30	7.3	ug/L		12/05/23 09:56	12/06/23 16:27	1
Benzyl alcohol	ND		10	2.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/05/23 09:56	12/06/23 16:27	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		12/05/23 09:56	12/06/23 16:27	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		12/05/23 09:56	12/06/23 16:27	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/05/23 09:56	12/06/23 16:27	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Chloroaniline	ND		10	3.4	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		12/05/23 09:56	12/06/23 16:27	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/05/23 09:56	12/06/23 16:27	1
2-Chlorophenol	ND		10	2.2	ug/L		12/05/23 09:56	12/06/23 16:27	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-652972/1-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Dibenzofuran	ND		10	0.17	ug/L		12/05/23 09:56	12/06/23 16:27	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Diethyl phthalate	ND		10	0.24	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		12/05/23 09:56	12/06/23 16:27	1
Dimethyl phthalate	ND		10	0.17	ug/L		12/05/23 09:56	12/06/23 16:27	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		12/05/23 09:56	12/06/23 16:27	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/05/23 09:56	12/06/23 16:27	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/05/23 09:56	12/06/23 16:27	1
1,4-Dioxane	ND		10	1.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/05/23 09:56	12/06/23 16:27	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/05/23 09:56	12/06/23 16:27	1
Hexachloroethane	ND		10	4.2	ug/L		12/05/23 09:56	12/06/23 16:27	1
Indene	ND		10	1.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Isophorone	ND		10	0.14	ug/L		12/05/23 09:56	12/06/23 16:27	1
2-Methylphenol	ND		10	1.8	ug/L		12/05/23 09:56	12/06/23 16:27	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		12/05/23 09:56	12/06/23 16:27	1
2-Nitroaniline	ND		10	2.2	ug/L		12/05/23 09:56	12/06/23 16:27	1
3-Nitroaniline	ND		10	1.8	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Nitroaniline	ND		10	1.5	ug/L		12/05/23 09:56	12/06/23 16:27	1
Nitrobenzene	ND		10	0.13	ug/L		12/05/23 09:56	12/06/23 16:27	1
2-Nitrophenol	ND		10	5.2	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Nitrophenol	ND		10	2.1	ug/L		12/05/23 09:56	12/06/23 16:27	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		12/05/23 09:56	12/06/23 16:27	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		12/05/23 09:56	12/06/23 16:27	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/05/23 09:56	12/06/23 16:27	1
Pentachlorophenol	ND		20	1.4	ug/L		12/05/23 09:56	12/06/23 16:27	1
Phenol	ND		10	2.6	ug/L		12/05/23 09:56	12/06/23 16:27	1
Pyridine	ND		10	3.2	ug/L		12/05/23 09:56	12/06/23 16:27	1
Quinoline	ND		10	4.5	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		12/05/23 09:56	12/06/23 16:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*46 - 124*	*12/05/23 09:56*	*12/06/23 16:27*	*1*
2-Fluorophenol	*23*		*13 - 113*	*12/05/23 09:56*	*12/06/23 16:27*	*1*
Nitrobenzene-d5	*71*		*36 - 126*	*12/05/23 09:56*	*12/06/23 16:27*	*1*
Phenol-d5	*46*		*17 - 127*	*12/05/23 09:56*	*12/06/23 16:27*	*1*
Terphenyl-d14	*83*		*44 - 149*	*12/05/23 09:56*	*12/06/23 16:27*	*1*
2,4,6-Tribromophenol	*48*		*26 - 150*	*12/05/23 09:56*	*12/06/23 16:27*	*1*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-652972/2-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	74.9		ug/L		62	21 - 120
Benzoic acid	120	56.5		ug/L		47	10 - 144
Benzyl alcohol	120	85.0		ug/L		71	28 - 120
Bis(2-chloroethoxy)methane	120	77.7		ug/L		65	47 - 120
Bis(2-chloroethyl)ether	120	80.0		ug/L		67	44 - 120
bis (2-chloroisopropyl) ether	120	76.0		ug/L		63	33 - 121
Bis(2-ethylhexyl) phthalate	120	95.0		ug/L		79	52 - 147
4-Bromophenyl phenyl ether	120	96.4		ug/L		80	54 - 122
Butyl benzyl phthalate	120	96.8		ug/L		81	54 - 133
4-Chloroaniline	120	68.5		ug/L		57	26 - 120
4-Chloro-3-methylphenol	120	89.8		ug/L		75	48 - 131
2-Chloronaphthalene	120	90.3		ug/L		75	52 - 121
2-Chlorophenol	120	77.2		ug/L		64	40 - 120
4-Chlorophenyl phenyl ether	120	96.9		ug/L		81	56 - 125
Dibenz[a,h]acridine	120	113		ug/L		94	31 - 150
Dibenzofuran	120	95.3		ug/L		79	56 - 122
3,3'-Dichlorobenzidine	160	112		ug/L		70	36 - 132
2,4-Dichlorophenol	120	81.8		ug/L		68	49 - 120
Diethyl phthalate	120	95.6		ug/L		80	50 - 137
2,4-Dimethylphenol	120	80.3		ug/L		67	48 - 120
Dimethyl phthalate	120	91.2		ug/L		76	57 - 124
Di-n-butyl phthalate	120	105		ug/L		88	58 - 126
4,6-Dinitro-ortho-cresol	240	153		ug/L		64	23 - 148
2,4-Dinitrophenol	240	131		ug/L		55	10 - 150
2,4-Dinitrotoluene	120	96.6		ug/L		80	54 - 142
2,6-Dinitrotoluene	120	91.1		ug/L		76	55 - 130
Di-n-octyl phthalate	120	99.4		ug/L		83	57 - 138
1,4-Dioxane	120	60.6		ug/L		50	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	87.5		ug/L		73	45 - 124
Hexachlorobenzene	120	110		ug/L		91	52 - 129
Hexachlorocyclopentadiene	120	57.9		ug/L		48	10 - 134
Hexachloroethane	120	74.6		ug/L		62	20 - 120
Indene	120	93.2		ug/L		78	49 - 120
Isophorone	120	76.7		ug/L		64	48 - 120
2-Methylphenol	120	84.1		ug/L		70	46 - 124
3 & 4 Methylphenol	120	82.5		ug/L		69	45 - 120
2-Nitroaniline	120	89.3		ug/L		74	51 - 145
3-Nitroaniline	120	76.0		ug/L		63	37 - 127
4-Nitroaniline	120	89.1		ug/L		74	36 - 137
Nitrobenzene	120	76.8		ug/L		64	45 - 120
2-Nitrophenol	120	73.8		ug/L		62	40 - 124
4-Nitrophenol	240	189		ug/L		79	23 - 146
N-Nitrosodimethylamine	120	78.4		ug/L		65	29 - 137
N-Nitrosodi-n-propylamine	120	82.1		ug/L		68	45 - 120
N-Nitrosodiphenylamine	119	91.5		ug/L		77	54 - 120
Pentachlorophenol	240	212		ug/L		88	31 - 130
Phenol	120	79.0		ug/L		66	11 - 120
Pyridine	240	126		ug/L		52	16 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-652972/2-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Quinoline			120	98.7		ug/L		82	49 - 130		
2,4,5-Trichlorophenol			120	93.6		ug/L		78	51 - 136		
2,4,6-Trichlorophenol			120	91.2		ug/L		76	50 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*46 - 124*
2-Fluorophenol	*53*		*13 - 113*
Nitrobenzene-d5	*73*		*36 - 126*
Phenol-d5	*71*		*17 - 127*
Terphenyl-d14	*91*		*44 - 149*
2,4,6-Tribromophenol	*79*		*26 - 150*

Lab Sample ID: LCS 400-652972/4-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	5.12	J *-	ug/L		4	10 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*89*		*46 - 124*
2-Fluorophenol	*67*		*13 - 113*
Nitrobenzene-d5	*79*		*36 - 126*
Phenol-d5	*80*		*17 - 127*
Terphenyl-d14	*100*		*44 - 149*
2,4,6-Tribromophenol	*68*		*26 - 150*

Lab Sample ID: LCSD 400-652972/3-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	94.4		ug/L		79	21 - 120	23	30
Benzoic acid			120	61.8		ug/L		51	10 - 144	9	30
Benzyl alcohol			120	98.0		ug/L		82	28 - 120	14	30
Bis(2-chloroethoxy)methane			120	86.9		ug/L		72	47 - 120	11	30
Bis(2-chloroethyl)ether			120	89.8		ug/L		75	44 - 120	12	30
bis (2-chloroisopropyl) ether			120	84.8		ug/L		71	33 - 121	11	30
Bis(2-ethylhexyl) phthalate			120	101		ug/L		84	52 - 147	6	30
4-Bromophenyl phenyl ether			120	105		ug/L		87	54 - 122	8	30
Butyl benzyl phthalate			120	104		ug/L		87	54 - 133	7	30
4-Chloroaniline			120	83.2		ug/L		69	26 - 120	19	30
4-Chloro-3-methylphenol			120	100		ug/L		83	48 - 131	11	30
2-Chloronaphthalene			120	99.8		ug/L		83	52 - 121	10	30
2-Chlorophenol			120	87.5		ug/L		73	40 - 120	12	30
4-Chlorophenyl phenyl ether			120	106		ug/L		88	56 - 125	9	30
Dibenz[a,h]acridine			120	120		ug/L		101	31 - 150	6	30
Dibenzofuran			120	104		ug/L		87	56 - 122	9	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-652972/3-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine			160	131		ug/L		82	36 - 132	16	30
2,4-Dichlorophenol			120	93.5		ug/L		78	49 - 120	13	30
Diethyl phthalate			120	101		ug/L		84	50 - 137	6	30
2,4-Dimethylphenol			120	87.1		ug/L		73	48 - 120	8	30
Dimethyl phthalate			120	98.0		ug/L		82	57 - 124	7	30
Di-n-butyl phthalate			120	111		ug/L		92	58 - 126	5	30
4,6-Dinitro-ortho-cresol			240	173		ug/L		72	23 - 148	12	30
2,4-Dinitrophenol			240	144		ug/L		60	10 - 150	9	30
2,4-Dinitrotoluene			120	103		ug/L		86	54 - 142	7	30
2,6-Dinitrotoluene			120	98.5		ug/L		82	55 - 130	8	30
Di-n-octyl phthalate			120	103		ug/L		86	57 - 138	4	30
1,4-Dioxane			120	53.7		ug/L		45	31 - 120	12	30
1,2-Diphenylhydrazine (as Azobenzene)			120	93.9		ug/L		78	45 - 124	7	30
Hexachlorobenzene			120	119		ug/L		99	52 - 129	8	30
Hexachlorocyclopentadiene			120	68.3		ug/L		57	10 - 134	16	30
Hexachloroethane			120	88.3		ug/L		74	20 - 120	17	30
Indene			120	108		ug/L		90	49 - 120	14	30
Isophorone			120	84.9		ug/L		71	48 - 120	10	30
2-Methylphenol			120	91.8		ug/L		76	46 - 124	9	30
3 & 4 Methylphenol			120	91.8		ug/L		77	45 - 120	11	30
2-Nitroaniline			120	97.4		ug/L		81	51 - 145	9	30
3-Nitroaniline			120	89.4		ug/L		74	37 - 127	16	30
4-Nitroaniline			120	100		ug/L		83	36 - 137	12	30
Nitrobenzene			120	87.7		ug/L		73	45 - 120	13	30
2-Nitrophenol			120	91.3		ug/L		76	40 - 124	21	30
4-Nitrophenol			240	205		ug/L		85	23 - 146	8	30
N-Nitrosodimethylamine			120	87.2		ug/L		73	29 - 137	11	30
N-Nitrosodi-n-propylamine			120	92.4		ug/L		77	45 - 120	12	30
N-Nitrosodiphenylamine			119	99.0		ug/L		83	54 - 120	8	30
Pentachlorophenol			240	228		ug/L		95	31 - 130	7	30
Phenol			120	88.5		ug/L		74	11 - 120	11	30
Pyridine			240	131		ug/L		55	16 - 120	4	30
Quinoline			120	111		ug/L		93	49 - 130	12	30
2,4,5-Trichlorophenol			120	104		ug/L		87	51 - 136	11	30
2,4,6-Trichlorophenol			120	105		ug/L		87	50 - 127	14	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*89*		*46 - 124*
2-Fluorophenol	*55*		*13 - 113*
Nitrobenzene-d5	*81*		*36 - 126*
Phenol-d5	*77*		*17 - 127*
Terphenyl-d14	*94*		*44 - 149*
2,4,6-Tribromophenol	*82*		*26 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-652972/5-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	116	*1	ug/L		97	10 - 120	183	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*94*		*46 - 124*
2-Fluorophenol	*72*		*13 - 113*
Nitrobenzene-d5	*85*		*36 - 126*
Phenol-d5	*84*		*17 - 127*
Terphenyl-d14	*98*		*44 - 149*
2,4,6-Tribromophenol	*72*		*26 - 150*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-652972/1-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		12/05/23 09:56	12/06/23 15:44	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/05/23 09:56	12/06/23 15:44	1
Anthracene	ND		0.20	0.047	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/05/23 09:56	12/06/23 15:44	1
Chrysene	ND		0.20	0.033	ug/L		12/05/23 09:56	12/06/23 15:44	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/05/23 09:56	12/06/23 15:44	1
Fluoranthene	ND		0.20	0.034	ug/L		12/05/23 09:56	12/06/23 15:44	1
Fluorene	ND		0.20	0.089	ug/L		12/05/23 09:56	12/06/23 15:44	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/05/23 09:56	12/06/23 15:44	1
Phenanthrene	ND		0.20	0.090	ug/L		12/05/23 09:56	12/06/23 15:44	1
Pyrene	ND		0.20	0.039	ug/L		12/05/23 09:56	12/06/23 15:44	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		12/05/23 09:56	12/06/23 15:44	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		12/05/23 09:56	12/06/23 15:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*158*	*S1+*	*18 - 147*	*12/05/23 09:56*	*12/06/23 15:44*	*1*
2-Fluorobiphenyl	*73*		*15 - 128*	*12/05/23 09:56*	*12/06/23 15:44*	*1*
Nitrobenzene-d5	*71*		*10 - 144*	*12/05/23 09:56*	*12/06/23 15:44*	*1*

Lab Sample ID: LCS 400-652972/2-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acenaphthene			120	88.4		ug/L		74	40 - 140		
Acenaphthylene			120	91.3		ug/L		76	40 - 140		
Anthracene			120	88.7		ug/L		74	40 - 140		

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 400-652972/2-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzo[a]anthracene			120	105		ug/L		87	40 - 140		
Benzo[a]pyrene			120	80.7		ug/L		67	40 - 140		
Benzo[b]fluoranthene			120	98.2		ug/L		82	40 - 140		
Benzo[g,h,i]perylene			120	94.9		ug/L		79	40 - 140		
Benzo[k]fluoranthene			120	97.7		ug/L		81	40 - 140		
Chrysene			120	88.1		ug/L		73	40 - 140		
Dibenz(a,h)anthracene			120	89.2		ug/L		74	40 - 140		
Fluoranthene			120	93.2		ug/L		78	40 - 140		
Fluorene			120	90.6		ug/L		75	40 - 140		
Indeno[1,2,3-cd]pyrene			120	89.3		ug/L		74	40 - 140		
Phenanthrene			120	86.7		ug/L		72	40 - 140		
Pyrene			120	121		ug/L		101	40 - 140		
1-Methylnaphthalene			120	70.8		ug/L		59	40 - 140		
2-Methylnaphthalene			120	71.9		ug/L		60	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*93*		*18 - 147*
2-Fluorobiphenyl	*70*		*15 - 128*
Nitrobenzene-d5	*72*		*10 - 144*

Lab Sample ID: LCSD 400-652972/3-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	84.4		ug/L		70	40 - 140	5	40
Acenaphthylene			120	88.3		ug/L		74	40 - 140	3	40
Anthracene			120	81.9		ug/L		68	40 - 140	8	40
Benzo[a]anthracene			120	97.7		ug/L		81	40 - 140	7	40
Benzo[a]pyrene			120	74.5		ug/L		62	40 - 140	8	40
Benzo[b]fluoranthene			120	95.1		ug/L		79	40 - 140	3	40
Benzo[g,h,i]perylene			120	84.2		ug/L		70	40 - 140	12	40
Benzo[k]fluoranthene			120	90.9		ug/L		76	40 - 140	7	40
Chrysene			120	80.6		ug/L		67	40 - 140	9	40
Dibenz(a,h)anthracene			120	80.5		ug/L		67	40 - 140	10	40
Fluoranthene			120	82.9		ug/L		69	40 - 140	12	40
Fluorene			120	84.8		ug/L		71	40 - 140	7	40
Indeno[1,2,3-cd]pyrene			120	80.3		ug/L		67	40 - 140	11	40
Phenanthrene			120	79.3		ug/L		66	40 - 140	9	40
Pyrene			120	117		ug/L		98	40 - 140	3	40
1-Methylnaphthalene			120	71.2		ug/L		59	40 - 140	1	40
2-Methylnaphthalene			120	72.7		ug/L		61	40 - 140	1	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*87*		*18 - 147*
2-Fluorobiphenyl	*67*		*15 - 128*
Nitrobenzene-d5	*76*		*10 - 144*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 400-653912/1-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		12/12/23 10:43	12/13/23 18:25	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/12/23 10:43	12/13/23 18:25	1
Anthracene	ND		0.20	0.047	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/12/23 10:43	12/13/23 18:25	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/12/23 10:43	12/13/23 18:25	1
Chrysene	ND		0.20	0.033	ug/L		12/12/23 10:43	12/13/23 18:25	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/12/23 10:43	12/13/23 18:25	1
Fluoranthene	ND		0.20	0.034	ug/L		12/12/23 10:43	12/13/23 18:25	1
Fluorene	ND		0.20	0.089	ug/L		12/12/23 10:43	12/13/23 18:25	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/12/23 10:43	12/13/23 18:25	1
Phenanthrene	ND		0.20	0.090	ug/L		12/12/23 10:43	12/13/23 18:25	1
Pyrene	ND		0.20	0.039	ug/L		12/12/23 10:43	12/13/23 18:25	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		12/12/23 10:43	12/13/23 18:25	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		12/12/23 10:43	12/13/23 18:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*75*		*18 - 147*	*12/12/23 10:43*	*12/13/23 18:25*	*1*
2-Fluorobiphenyl	*73*		*15 - 128*	*12/12/23 10:43*	*12/13/23 18:25*	*1*
Nitrobenzene-d5	*68*		*10 - 144*	*12/12/23 10:43*	*12/13/23 18:25*	*1*

Lab Sample ID: LCS 400-653912/2-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653912

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	105		ug/L		87	40 - 140
Acenaphthylene	120	120		ug/L		100	40 - 140
Anthracene	120	121		ug/L		101	40 - 140
Benzo[a]anthracene	120	149	E	ug/L		124	40 - 140
Benzo[a]pyrene	120	118		ug/L		98	40 - 140
Benzo[b]fluoranthene	120	119		ug/L		99	40 - 140
Benzo[g,h,i]perylene	120	92.6		ug/L		77	40 - 140
Benzo[k]fluoranthene	120	104		ug/L		86	40 - 140
Chrysene	120	104		ug/L		87	40 - 140
Dibenz(a,h)anthracene	120	108		ug/L		90	40 - 140
Fluoranthene	120	118		ug/L		98	40 - 140
Fluorene	120	109		ug/L		91	40 - 140
Indeno[1,2,3-cd]pyrene	120	106		ug/L		88	40 - 140
Phenanthrene	120	103		ug/L		86	40 - 140
Pyrene	120	97.0		ug/L		81	40 - 140
1-Methylnaphthalene	120	86.9		ug/L		72	40 - 140
2-Methylnaphthalene	120	90.7		ug/L		76	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*70*		*18 - 147*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 400-653912/2-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653912

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	74		15 - 128
Nitrobenzene-d5	73		10 - 144

Lab Sample ID: LCSD 400-653912/3-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653912

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	99.9		ug/L		83	40 - 140	5	40
Acenaphthylene			120	114		ug/L		95	40 - 140	6	40
Anthracene			120	115		ug/L		96	40 - 140	5	40
Benzo[a]anthracene			120	139	E	ug/L		115	40 - 140	7	40
Benzo[a]pyrene			120	114		ug/L		95	40 - 140	3	40
Benzo[b]fluoranthene			120	120		ug/L		100	40 - 140	1	40
Benzo[g,h,i]perylene			120	89.1		ug/L		74	40 - 140	4	40
Benzo[k]fluoranthene			120	105		ug/L		87	40 - 140	1	40
Chrysene			120	99.1		ug/L		83	40 - 140	5	40
Dibenz(a,h)anthracene			120	103		ug/L		86	40 - 140	5	40
Fluoranthene			120	113		ug/L		94	40 - 140	4	40
Fluorene			120	105		ug/L		87	40 - 140	5	40
Indeno[1,2,3-cd]pyrene			120	101		ug/L		84	40 - 140	4	40
Phenanthrene			120	99.0		ug/L		82	40 - 140	4	40
Pyrene			120	90.5		ug/L		75	40 - 140	7	40
1-Methylnaphthalene			120	81.5		ug/L		68	40 - 140	6	40
2-Methylnaphthalene			120	84.3		ug/L		70	40 - 140	7	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	64		18 - 147
2-Fluorobiphenyl	71		15 - 128
Nitrobenzene-d5	68		10 - 144

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-652995/1-A
Matrix: Water
Analysis Batch: 653060

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652995

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		12/05/23 11:19	12/05/23 15:58	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 11:19	12/05/23 15:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		51 - 149	12/05/23 11:19	12/05/23 15:58	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCS 400-652995/2-A
Matrix: Water
Analysis Batch: 653060

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652995

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0967		ug/L		96	60 - 140		
1,2-Dibromoethane			0.100	0.0994		ug/L		99	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*79*		*51 - 149*

Lab Sample ID: LCSD 400-652995/3-A
Matrix: Water
Analysis Batch: 653060

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652995

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0922		ug/L		92	60 - 140	5	30
1,2-Dibromoethane			0.100	0.0956		ug/L		95	60 - 140	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*76*		*51 - 149*

Shell Oil Products US Chain Of Custody Recc

400-247591 COC

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 o.	☐ CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 11/30/2023
PO #	**GSAP Project ID**	PAGE: 2 of 2
60697537 – 3.4.2	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 Monthly GW 60697537 – 3.4.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO.: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

SAMPLER NAME(S) (Print): M. Massa, T. Jones

LAB USE ONLY

TELEPHONE: 314-429-0100 FAX: 314-429-0462 Bill To Contact E-MAIL: melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C° Cooler #1 Cooler #2 Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

- Please include "J" values on Reports.
- Please provide sample receipt upon login.
- Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.4.2

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 8270 SIMS
	TB-ROX-113023-8260-B	11/30/2023	0000	Water	2					2	X			
	TB-ROX-113023-8011-B	11/30/2023	0000	Water	2					2		X		
	MW6D-ROX-113023-EB	11/30/2023	0810	Water	6			2		8	X	X	X	X
	MW6D-ROX-113023	11/30/2023	0920	Water	6			2		8	X	X	X	X
	MW6C-ROX-113023	11/30/2023	1010	Water	6			2		8	X	X	X	X
	MW6A-ROX-113023	11/30/2023	1105	Water	6			2		8	X	X	X	X
	MW6B-ROX-113023	11/30/2023	1200	Water	6			2		8	X	X	X	X

11/30/23

		Date:	Time:
Relinquished by: (Signature) MARY MASSA	Received by: (Signature) FEDEX: See page 1	11/30/2023	1600
Relinquished by: (Signature)	Received by: (Signature) BP	12/1/23	926
Relinquished by: (Signature)	Received by: (Signature)		

Version: 27Sept23

CUSTODY SEALS: See page 1

0.0°C IR8

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc. Job Number: 400-247591-1

Login Number: 247591 **List Source: Eurofins Pensacola**
List Number: 1
Creator: Earnest, Tamantha

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	0.0°C IR8
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").	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. Job ID: 400-247591-1
Project/Site: ROXANA MONTHLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Roxana Groundwater Monthly – November/December 2023 Data Review

Laboratory SDG: 400-247593-1-Rev.1

Data Reviewer: Adelina Gita

Peer Reviewer: Cheyana Cokley

Date Reviewed: 1/8/2024

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

Sample Identification	Sample Identification
TB-ROX-113023-8260-A	TB-ROX-113023-8011-A
ROST4PZE-ROX-113023-EB	ROST4PZE-ROX-113023
MW2-ROX-113023	MW22-ROX-113023

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 were re-extracted outside extraction time criteria in samples ROST4PZE-ROX-113023, MW2-ROX-113023, and MW22-ROX-113023; bis(2-ethylhexyl) phthalate in sample MW22-ROX-113023 was also re-extracted outside of the extraction time criteria. Benzenethiol LCS/LCSD recoveries and LCS/LCSD RPD were outside evaluation criteria. Several SVOC surrogate recoveries were outside criteria in several investigative and quality control samples. 2-chloroethyl vinyl ether MS/MSD recoveries were outside evaluation criteria in sample ROST4PZE-ROX-113023. The continuing calibration verification (CCV) for chloroethane was outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review. The laboratory report was revised on January 8, 2024, to correct trip blank sample IDs.

Three of 70 (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, PAHs in samples ROST4PZE-ROX-113023, MW2-ROX-113023, and MW22-ROX-113023 were re-extracted 7 days outside of extraction time criteria (7 days) for confirmation. Holding time exceedances were not greater than two times (2X) criteria; both sets of data are reported.

The results for the re-extracted and re-analyzed for sample MW22-ROX-113023 were comparable to the initial results; based on professional judgement, the results from the

initial analysis were used for the purposes of this report.

With regard to initial ROST4PZE-ROX-113023 and MW2-ROX-113023 PAH data, the laboratory previously issued a Corrective Action Report (CAR) stating that through confirmation analyses, many previous detections were not confirmed and were therefore deemed laboratory contamination. Based on professional judgement, the results from the re-analysis were used for the purposes of this report.

Additionally, bis(2-ethylhexyl) phthalate in sample MW22-ROX-113023 was re-extracted 7 days outside extraction holding time criteria (7 days) and then re-analyzed for confirmation. Based on professional judgement, the results from the re-analysis were used for the purposes of this report.

Sample ID	Parameter	Analyte	Qualification
MW22-ROX-113023—RERA	SVOCs	bis(2-ethylhexyl) phthalate	**UJ**
ROST4PZE-ROX-113023—RERA	PAHs	All non-detects	**UJ**
ROST4PZE-ROX-113023—RERA	PAHs	1-Methylnaphthalene	**J**
ROST4PZE-ROX-113023—RERA	PAHs	2-Methylnaphthalene	**J**
MW2-ROX-113023—RERA	PAHs	All non-detects	**UJ**
MW2-ROX-113023—RERA	PAHs	1-Methylnaphthalene	**J**
MW2-ROX-113023—RERA	PAHs	2-Methylnaphthalene	**J**

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/LCSD 400-652972/4-A/5-A	SVOCs	Benzenethiol	**4**/97	**183**	10-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol below evaluation criteria; benzenethiol have been identified as a poor performing analyte under Method 8270. Equipment blanks are quality control samples and do not require qualification.

Sample ID	Parameter	Analyte	Qualification
ROST4PZE-ROX-113023	SVOCs	Benzenethiol	**UJ**
MW2-ROX-113023	SVOCs	Benzenethiol	**UJ**
MW22-ROX-113023	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
ROST4PZE-ROX-113023	SVOCs	2-Fluorobiphenyl	**32**	46-124
ROST4PZE-ROX-113023	SVOCs	2-Fluorophenol	**2**	13-113
ROST4PZE-ROX-113023	SVOCs	Nitrobenzene-d_5	**26**	36-126
ROST4PZE-ROX-113023	SVOCs	Phenol-d_5	**10**	17-127
MB 400-652972/1-A	SVOCs	Terphenyl-d_{14}	**158**	18-147
ROST4PZE-ROX-113023-EB	SVOCs	Terphenyl-d_{14}	**155**	18-147

Analytical data that required qualification based on surrogate data are included in the table below. Method blanks and equipment blanks are quality control samples and do not require qualification. Benzenethiol in sample ROST4PZE-ROX-113023 was previously qualified in Section 5.0 of this data review due to LCS/LCSD outside evaluation criteria; no further qualification is required.

Sample ID	Parameter	Analyte	Qualification
ROST4PZE-ROX-113023	SVOCs	All non-detects	**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 ROST4PZE-ROX-113023 was spiked and duplicated for Method 8260B VOCs.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
ROST4PZE-ROX-113023 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**6/0**	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 analyte and to the acid reactive nature of 2-chloroethyl vinyl ether.

Sample ID	Parameter	Analyte	Qualification
ROST4PZE-ROX-113023	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; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification (CCV) for chloroethane was outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
ROST4PZE-ROX-113023	VOCs	Chloroethane	**UJ**
MW2-ROX-113023	VOCs	Chloroethane	**UJ**
MW22-ROX-113023	VOCs	Chloroethane	**UJ**

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ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
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St. Louis, Missouri 63102

Generated 1/8/2024 4:41:51 PM Revision 1

JOB DESCRIPTION

ROXANA MONTHLY GW

JOB NUMBER

400-247593-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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Authorization



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Job Narrative
400-247593-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Revision
Report revised to fix TB sample IDs.
Supersedes report dated 12-19-2023.

Receipt
The samples were received on 12/1/2023 9:26 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 time was 0.0°C

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-652956 recovered outside acceptance criteria, low biased, for Chloroethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: 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-113023-8260-A (400-247593-1), ROST4PZE-ROX-113023-EB (400-247593-3), ROST4PZE-ROX-113023 (400-247593-4), MW2-ROX-113023 (400-247593-5) and MW22-ROX-113023 (400-247593-6). 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 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-652956 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260D: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-652956 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW22-ROX-113023 (400-247593-6). 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 8270E: The laboratory control sample (LCS) for preparation batch 400-652972 and analytical batch 400-653218 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 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-652972 and analytical batch 400-653218 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270E: Surrogate recovery for the following sample was outside control limits: ROST4PZE-ROX-113023 (400-247593-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-652774 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may

proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: Sample MW22-ROX-113023 (400-247593-6) was re-analyzed to confirm a detection of Bis(2-ethylhexyl) phthalate. The associated sample(s) was re-prepared and/or re-analyzed outside holding time. Both sets of data have been

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-653195 recovered above the upper control limit for Benzo[g,h,i]perylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E_SIM: 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: ROST4PZE-ROX-113023-EB (400-247593-3). These results have been reported and qualified.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-654774 recovered above the upper control limit for Benzo[a]anthracene, Dibenz(a,h)anthracene and Indeno[1,2,3-cd]pyrene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E_SIM: The following samples were re-prepared outside of preparation holding time to verify original results: ROST4PZE-ROX-113023 (400-247593-4), MW2-ROX-113023 (400-247593-5) and MW22-ROX-113023 (400-247593-6). Both sets of data are 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 400-653100 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.

Sample Summary

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

Job ID: 400-247593-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-247593-1	TB-ROX-113023-8260-A	Water	11/30/23 00:00	12/01/23 09:26
400-247593-2	TB-ROX-113023-8011-A	Water	11/30/23 00:00	12/01/23 09:26
400-247593-3	ROST4PZE-ROX-113023-EB	Water	11/30/23 08:25	12/01/23 09:26
400-247593-4	ROST4PZE-ROX-113023	Water	11/30/23 09:20	12/01/23 09:26
400-247593-5	MW2-ROX-113023	Water	11/30/23 10:35	12/01/23 09:26
400-247593-6	MW22-ROX-113023	Water	11/30/23 11:25	12/01/23 09:26

Detection Summary

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

Job ID: 400-247593-1

Client Sample ID: TB-ROX-113023-8260-A — Lab Sample ID: 400-247593-1

No Detections.

Client Sample ID: TB-ROX-113023-8011-A — Lab Sample ID: 400-247593-2

No Detections.

Client Sample ID: ROST4PZE-ROX-113023-EB — Lab Sample ID: 400-247593-3

No Detections.

Client Sample ID: ROST4PZE-ROX-113023 — Lab Sample ID: 400-247593-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	5.8	J	25	2.6	ug/L	1		8260D	Total/NA
Ethylbenzene	1.1		1.0	0.50	ug/L	1		8260D	Total/NA
Isopropylbenzene	0.64	J	1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	1.6	J	5.0	0.63	ug/L	1		8260D	Total/NA
1,2,4-Trimethylbenzene	8.6		1.0	0.82	ug/L	1		8260D	Total/NA
Xylenes, Total	1.8	J	10	1.6	ug/L	1		8260D	Total/NA
Acenaphthene	0.21		0.21	0.11	ug/L	1		8270E SIM	Total/NA
Anthracene	0.85		0.21	0.050	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.093	J	0.21	0.036	ug/L	1		8270E SIM	Total/NA
Benzo[a]pyrene	0.13	J	0.21	0.068	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.057	J	0.21	0.040	ug/L	1		8270E SIM	Total/NA
Chrysene	0.050	J	0.21	0.035	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.12	J	0.21	0.036	ug/L	1		8270E SIM	Total/NA
Fluorene	0.39		0.21	0.095	ug/L	1		8270E SIM	Total/NA
Phenanthrene	2.4		0.21	0.096	ug/L	1		8270E SIM	Total/NA
Pyrene	0.48		0.21	0.042	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	1.8		0.21	0.086	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	0.65		0.21	0.071	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene - RERA	6.1	H	0.20	0.082	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene - RERA	8.8	H	0.20	0.067	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW2-ROX-113023 — Lab Sample ID: 400-247593-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.3		1.0	0.50	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	13	J	25	2.6	ug/L	1		8260D	Total/NA
Ethylbenzene	91		1.0	0.50	ug/L	1		8260D	Total/NA
Isopropylbenzene	55		1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	41		5.0	0.63	ug/L	1		8260D	Total/NA
Naphthalene	16		5.0	3.0	ug/L	1		8260D	Total/NA
n-Butylbenzene	6.5		1.0	0.76	ug/L	1		8260D	Total/NA
N-Propylbenzene	93		1.0	0.69	ug/L	1		8260D	Total/NA
o-Xylene	4.4	J	5.0	0.60	ug/L	1		8260D	Total/NA
p-Isopropyltoluene	6.5		1.0	0.71	ug/L	1		8260D	Total/NA
sec-Butylbenzene	7.7		1.0	0.70	ug/L	1		8260D	Total/NA
tert-Butylbenzene	0.92	J	1.0	0.63	ug/L	1		8260D	Total/NA
Toluene	3.9		1.0	0.90	ug/L	1		8260D	Total/NA
1,2,4-Trimethylbenzene	12		1.0	0.82	ug/L	1		8260D	Total/NA
1,3,5-Trimethylbenzene	18		1.0	0.56	ug/L	1		8260D	Total/NA
Xylenes, Total	45		10	1.6	ug/L	1		8260D	Total/NA
Anthracene	0.077	J	0.21	0.050	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.060	J	0.21	0.036	ug/L	1		8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW2-ROX-113023 (Continued)

Lab Sample ID: 400-247593-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	0.062	J	0.21	0.039	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.078	J	0.21	0.036	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	5.2		0.21	0.084	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	7.4		0.21	0.070	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene - RERA	6.1	H	0.21	0.082	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene - RERA	8.9	H	0.21	0.068	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW22-ROX-113023

Lab Sample ID: 400-247593-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	20		1.0	0.50	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	3.6	J	25	2.6	ug/L	1		8260D	Total/NA
Ethylbenzene	72		1.0	0.50	ug/L	1		8260D	Total/NA
Isopropylbenzene	50		1.0	0.53	ug/L	1		8260D	Total/NA
Naphthalene	95		5.0	3.0	ug/L	1		8260D	Total/NA
n-Butylbenzene	11		1.0	0.76	ug/L	1		8260D	Total/NA
N-Propylbenzene	100		1.0	0.69	ug/L	1		8260D	Total/NA
p-Isopropyltoluene	5.5		1.0	0.71	ug/L	1		8260D	Total/NA
sec-Butylbenzene	5.6		1.0	0.70	ug/L	1		8260D	Total/NA
tert-Butylbenzene	10		1.0	0.63	ug/L	1		8260D	Total/NA
Toluene	24		1.0	0.90	ug/L	1		8260D	Total/NA
1,2,4-Trimethylbenzene	110		1.0	0.82	ug/L	1		8260D	Total/NA
1,3,5-Trimethylbenzene	140		1.0	0.56	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene - DL	440		10	1.3	ug/L	2		8260D	Total/NA
o-Xylene - DL	20		10	1.2	ug/L	2		8260D	Total/NA
Xylenes, Total - DL	460		20	3.2	ug/L	2		8260D	Total/NA
Benzo[a]anthracene	0.069	J	0.21	0.035	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.073	J	0.21	0.038	ug/L	1		8270E SIM	Total/NA
Dibenz(a,h)anthracene	0.061	J	0.21	0.050	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.039	J	0.21	0.035	ug/L	1		8270E SIM	Total/NA
Fluorene	0.099	J	0.21	0.092	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.082	J	0.21	0.035	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	8.3		0.21	0.083	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	10		0.21	0.068	ug/L	1		8270E SIM	Total/NA
Anthracene - RERA	0.059	J H	0.21	0.050	ug/L	1		8270E SIM	Total/NA
Benzo[g,h,i]perylene - RERA	0.035	J H	0.21	0.029	ug/L	1		8270E SIM	Total/NA
Phenanthrene - RERA	0.11	J H	0.21	0.096	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene - RERA	6.5	H	0.21	0.086	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene - RERA	7.4	H	0.21	0.071	ug/L	1		8270E SIM	Total/NA
Bis(2-ethylhexyl) phthalate	7.1	J	10	5.2	ug/L	1		8270E	Total/NA
2,4-Dimethylphenol	4.5	J	10	3.6	ug/L	1		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-247593-1

Client Sample ID: TB-ROX-113023-8260-A
Date Collected: 11/30/23 00:00
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247593-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/05/23 14:03	1
Acrolein	ND		20	3.3	ug/L			12/05/23 14:03	1
Acrylonitrile	ND		10	2.8	ug/L			12/05/23 14:03	1
Benzene	ND		1.0	0.50	ug/L			12/05/23 14:03	1
Bromobenzene	ND		1.0	0.54	ug/L			12/05/23 14:03	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/05/23 14:03	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/05/23 14:03	1
Bromoform	ND		5.0	0.25	ug/L			12/05/23 14:03	1
Bromomethane	ND		1.0	0.98	ug/L			12/05/23 14:03	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/05/23 14:03	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/05/23 14:03	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/05/23 14:03	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/05/23 14:03	1
Chloroethane	ND		1.0	0.76	ug/L			12/05/23 14:03	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/05/23 14:03	1
Chloroform	ND		1.0	0.90	ug/L			12/05/23 14:03	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/05/23 14:03	1
Chloromethane	ND		1.0	0.90	ug/L			12/05/23 14:03	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/05/23 14:03	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/05/23 14:03	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/05/23 14:03	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/05/23 14:03	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/05/23 14:03	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/05/23 14:03	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/05/23 14:03	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/05/23 14:03	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/05/23 14:03	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 14:03	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 14:03	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 14:03	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 14:03	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/05/23 14:03	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/05/23 14:03	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/05/23 14:03	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/05/23 14:03	1
2-Hexanone	ND		25	1.4	ug/L			12/05/23 14:03	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/05/23 14:03	1
Methylene bromide	ND		5.0	0.22	ug/L			12/05/23 14:03	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/05/23 14:03	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/05/23 14:03	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/05/23 14:03	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/05/23 14:03	1
Naphthalene	ND		5.0	3.0	ug/L			12/05/23 14:03	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/05/23 14:03	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/05/23 14:03	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/05/23 14:03	1
o-Xylene	ND		5.0	0.60	ug/L			12/05/23 14:03	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/05/23 14:03	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/05/23 14:03	1

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

Job ID: 400-247593-1

Client Sample ID: TB-ROX-113023-8260-A
Date Collected: 11/30/23 00:00
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247593-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/05/23 14:03	1
Styrene	ND		1.0	1.0	ug/L			12/05/23 14:03	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/05/23 14:03	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/05/23 14:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/05/23 14:03	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/05/23 14:03	1
Toluene	ND		1.0	0.90	ug/L			12/05/23 14:03	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 14:03	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/05/23 14:03	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/05/23 14:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/05/23 14:03	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/05/23 14:03	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/05/23 14:03	1
Trichloroethene	ND		1.0	0.15	ug/L			12/05/23 14:03	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/05/23 14:03	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/05/23 14:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/05/23 14:03	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/05/23 14:03	1
Vinyl acetate	ND		25	0.93	ug/L			12/05/23 14:03	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/05/23 14:03	1
Xylenes, Total	ND		10	1.6	ug/L			12/05/23 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 130*		*12/05/23 14:03*	*1*
Dibromofluoromethane	*110*		*75 - 126*		*12/05/23 14:03*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*12/05/23 14:03*	*1*

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

Job ID: 400-247593-1

Client Sample ID: TB-ROX-113023-8011-A
Date Collected: 11/30/23 00:00
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247593-2
Matrix: Water

Method: EPA 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		12/05/23 11:19	12/06/23 14:36	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 11:19	12/06/23 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*125*		*51 - 149*	*12/05/23 11:19*	*12/06/23 14:36*	*1*

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

Job ID: 400-247593-1

Client Sample ID: ROST4PZE-ROX-113023-EB
Date Collected: 11/30/23 08:25
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247593-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/05/23 14:26	1
Acrolein	ND		20	3.3	ug/L			12/05/23 14:26	1
Acrylonitrile	ND		10	2.8	ug/L			12/05/23 14:26	1
Benzene	ND		1.0	0.50	ug/L			12/05/23 14:26	1
Bromobenzene	ND		1.0	0.54	ug/L			12/05/23 14:26	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/05/23 14:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/05/23 14:26	1
Bromoform	ND		5.0	0.25	ug/L			12/05/23 14:26	1
Bromomethane	ND		1.0	0.98	ug/L			12/05/23 14:26	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/05/23 14:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/05/23 14:26	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/05/23 14:26	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/05/23 14:26	1
Chloroethane	ND		1.0	0.76	ug/L			12/05/23 14:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/05/23 14:26	1
Chloroform	ND		1.0	0.90	ug/L			12/05/23 14:26	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/05/23 14:26	1
Chloromethane	ND		1.0	0.90	ug/L			12/05/23 14:26	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/05/23 14:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/05/23 14:26	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/05/23 14:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/05/23 14:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/05/23 14:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/05/23 14:26	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/05/23 14:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/05/23 14:26	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/05/23 14:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 14:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 14:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 14:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 14:26	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/05/23 14:26	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/05/23 14:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/05/23 14:26	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/05/23 14:26	1
2-Hexanone	ND		25	1.4	ug/L			12/05/23 14:26	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/05/23 14:26	1
Methylene bromide	ND		5.0	0.22	ug/L			12/05/23 14:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/05/23 14:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/05/23 14:26	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/05/23 14:26	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/05/23 14:26	1
Naphthalene	ND		5.0	3.0	ug/L			12/05/23 14:26	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/05/23 14:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/05/23 14:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/05/23 14:26	1
o-Xylene	ND		5.0	0.60	ug/L			12/05/23 14:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/05/23 14:26	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/05/23 14:26	1

Client Sample ID: ROST4PZE-ROX-113023-EB
Date Collected: 11/30/23 08:25
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247593-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/05/23 14:26	1
Styrene	ND		1.0	1.0	ug/L			12/05/23 14:26	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/05/23 14:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/05/23 14:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/05/23 14:26	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/05/23 14:26	1
Toluene	ND		1.0	0.90	ug/L			12/05/23 14:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 14:26	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/05/23 14:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/05/23 14:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/05/23 14:26	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/05/23 14:26	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/05/23 14:26	1
Trichloroethene	ND		1.0	0.15	ug/L			12/05/23 14:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/05/23 14:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/05/23 14:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/05/23 14:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/05/23 14:26	1
Vinyl acetate	ND		25	0.93	ug/L			12/05/23 14:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/05/23 14:26	1
Xylenes, Total	ND		10	1.6	ug/L			12/05/23 14:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 130*		*12/05/23 14:26*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*12/05/23 14:26*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*12/05/23 14:26*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		12/05/23 09:57	12/06/23 19:48	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/05/23 09:57	12/06/23 19:48	1
Anthracene	ND		0.20	0.047	ug/L		12/05/23 09:57	12/06/23 19:48	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/05/23 09:57	12/06/23 19:48	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		12/05/23 09:57	12/06/23 19:48	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/05/23 09:57	12/06/23 19:48	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/05/23 09:57	12/06/23 19:48	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/05/23 09:57	12/06/23 19:48	1
Chrysene	ND		0.20	0.033	ug/L		12/05/23 09:57	12/06/23 19:48	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/05/23 09:57	12/06/23 19:48	1
Fluoranthene	ND		0.20	0.034	ug/L		12/05/23 09:57	12/06/23 19:48	1
Fluorene	ND		0.20	0.089	ug/L		12/05/23 09:57	12/06/23 19:48	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/05/23 09:57	12/06/23 19:48	1
Phenanthrene	ND		0.20	0.090	ug/L		12/05/23 09:57	12/06/23 19:48	1
Pyrene	ND		0.20	0.039	ug/L		12/05/23 09:57	12/06/23 19:48	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		12/05/23 09:57	12/06/23 19:48	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		12/05/23 09:57	12/06/23 19:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*155*	*S1+*	*18 - 147*	*12/05/23 09:57*	*12/06/23 19:48*	*1*
2-Fluorobiphenyl	*83*		*15 - 128*	*12/05/23 09:57*	*12/06/23 19:48*	*1*

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

Job ID: 400-247593-1

Client Sample ID: ROST4PZE-ROX-113023-EB
Date Collected: 11/30/23 08:25
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247593-3
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*81*		*10 - 144*	*12/05/23 09:57*	*12/06/23 19:48*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		12/05/23 09:57	12/06/23 21:21	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		12/05/23 09:57	12/06/23 21:21	1
Benzoic acid	ND		30	7.3	ug/L		12/05/23 09:57	12/06/23 21:21	1
Benzyl alcohol	ND		10	2.0	ug/L		12/05/23 09:57	12/06/23 21:21	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/05/23 09:57	12/06/23 21:21	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		12/05/23 09:57	12/06/23 21:21	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		12/05/23 09:57	12/06/23 21:21	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		12/05/23 09:57	12/06/23 21:21	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/05/23 09:57	12/06/23 21:21	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/05/23 09:57	12/06/23 21:21	1
4-Chloroaniline	ND		10	3.4	ug/L		12/05/23 09:57	12/06/23 21:21	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		12/05/23 09:57	12/06/23 21:21	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/05/23 09:57	12/06/23 21:21	1
2-Chlorophenol	ND		10	2.2	ug/L		12/05/23 09:57	12/06/23 21:21	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/05/23 09:57	12/06/23 21:21	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 21:21	1
Dibenzofuran	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 21:21	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		12/05/23 09:57	12/06/23 21:21	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		12/05/23 09:57	12/06/23 21:21	1
Diethyl phthalate	ND		10	0.24	ug/L		12/05/23 09:57	12/06/23 21:21	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		12/05/23 09:57	12/06/23 21:21	1
Dimethyl phthalate	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 21:21	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		12/05/23 09:57	12/06/23 21:21	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/05/23 09:57	12/06/23 21:21	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		12/05/23 09:57	12/06/23 21:21	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/05/23 09:57	12/06/23 21:21	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/05/23 09:57	12/06/23 21:21	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 21:21	1
1,4-Dioxane	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 21:21	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 21:21	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 21:21	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/05/23 09:57	12/06/23 21:21	1
Hexachloroethane	ND		10	4.2	ug/L		12/05/23 09:57	12/06/23 21:21	1
Indene	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 21:21	1
Isophorone	ND		10	0.14	ug/L		12/05/23 09:57	12/06/23 21:21	1
2-Methylphenol	ND		10	1.8	ug/L		12/05/23 09:57	12/06/23 21:21	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		12/05/23 09:57	12/06/23 21:21	1
2-Nitroaniline	ND		10	2.2	ug/L		12/05/23 09:57	12/06/23 21:21	1
3-Nitroaniline	ND		10	1.8	ug/L		12/05/23 09:57	12/06/23 21:21	1
4-Nitroaniline	ND		10	1.5	ug/L		12/05/23 09:57	12/06/23 21:21	1
Nitrobenzene	ND		10	0.13	ug/L		12/05/23 09:57	12/06/23 21:21	1
2-Nitrophenol	ND		10	5.2	ug/L		12/05/23 09:57	12/06/23 21:21	1
4-Nitrophenol	ND		10	2.1	ug/L		12/05/23 09:57	12/06/23 21:21	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		12/05/23 09:57	12/06/23 21:21	1

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

Job ID: 400-247593-1

Client Sample ID: ROST4PZE-ROX-113023-EB

Lab Sample ID: 400-247593-3

Date Collected: 11/30/23 08:25

Matrix: Water

Date Received: 12/01/23 09:26

Method: SW846 8270E - 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		12/05/23 09:57	12/06/23 21:21	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/05/23 09:57	12/06/23 21:21	1
Pentachlorophenol	ND		20	1.4	ug/L		12/05/23 09:57	12/06/23 21:21	1
Phenol	ND		10	2.6	ug/L		12/05/23 09:57	12/06/23 21:21	1
Pyridine	ND		10	3.2	ug/L		12/05/23 09:57	12/06/23 21:21	1
Quinoline	ND		10	4.5	ug/L		12/05/23 09:57	12/06/23 21:21	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		12/05/23 09:57	12/06/23 21:21	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		12/05/23 09:57	12/06/23 21:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*46 - 124*	*12/05/23 09:57*	*12/06/23 21:21*	*1*
2-Fluorophenol	*21*		*13 - 113*	*12/05/23 09:57*	*12/06/23 21:21*	*1*
Nitrobenzene-d5	*69*		*36 - 126*	*12/05/23 09:57*	*12/06/23 21:21*	*1*
Phenol-d5	*45*		*17 - 127*	*12/05/23 09:57*	*12/06/23 21:21*	*1*
Terphenyl-d14	*93*		*44 - 149*	*12/05/23 09:57*	*12/06/23 21:21*	*1*
2,4,6-Tribromophenol	*68*		*26 - 150*	*12/05/23 09:57*	*12/06/23 21:21*	*1*

Method: EPA 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		12/05/23 11:19	12/06/23 14:57	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 11:19	12/06/23 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*121*		*51 - 149*	*12/05/23 11:19*	*12/06/23 14:57*	*1*

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

Job ID: 400-247593-1

Client Sample ID: ROST4PZE-ROX-113023
Date Collected: 11/30/23 09:20
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247593-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/05/23 11:24	1
Acrolein	ND		20	3.3	ug/L			12/05/23 11:24	1
Acrylonitrile	ND		10	2.8	ug/L			12/05/23 11:24	1
Benzene	ND		1.0	0.50	ug/L			12/05/23 11:24	1
Bromobenzene	ND		1.0	0.54	ug/L			12/05/23 11:24	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/05/23 11:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/05/23 11:24	1
Bromoform	ND		5.0	0.25	ug/L			12/05/23 11:24	1
Bromomethane	ND		1.0	0.98	ug/L			12/05/23 11:24	1
2-Butanone (MEK)	**5.8**	**J**	25	2.6	ug/L			12/05/23 11:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/05/23 11:24	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/05/23 11:24	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/05/23 11:24	1
Chloroethane	ND		1.0	0.76	ug/L			12/05/23 11:24	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			12/05/23 11:24	1
Chloroform	ND		1.0	0.90	ug/L			12/05/23 11:24	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/05/23 11:24	1
Chloromethane	ND		1.0	0.90	ug/L			12/05/23 11:24	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/05/23 11:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/05/23 11:24	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/05/23 11:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/05/23 11:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/05/23 11:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/05/23 11:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/05/23 11:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/05/23 11:24	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/05/23 11:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 11:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 11:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 11:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 11:24	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/05/23 11:24	1
Ethylbenzene	**1.1**		1.0	0.50	ug/L			12/05/23 11:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/05/23 11:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/05/23 11:24	1
2-Hexanone	ND		25	1.4	ug/L			12/05/23 11:24	1
Isopropylbenzene	**0.64**	**J**	1.0	0.53	ug/L			12/05/23 11:24	1
Methylene bromide	ND		5.0	0.22	ug/L			12/05/23 11:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/05/23 11:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/05/23 11:24	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/05/23 11:24	1
m-Xylene & p-Xylene	**1.6**	**J**	5.0	0.63	ug/L			12/05/23 11:24	1
Naphthalene	ND		5.0	3.0	ug/L			12/05/23 11:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/05/23 11:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/05/23 11:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/05/23 11:24	1
o-Xylene	ND		5.0	0.60	ug/L			12/05/23 11:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/05/23 11:24	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/05/23 11:24	1

Client Sample ID: ROST4PZE-ROX-113023
Date Collected: 11/30/23 09:20
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247593-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/05/23 11:24	1
Styrene	ND		1.0	1.0	ug/L			12/05/23 11:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/05/23 11:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/05/23 11:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/05/23 11:24	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/05/23 11:24	1
Toluene	ND		1.0	0.90	ug/L			12/05/23 11:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 11:24	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/05/23 11:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/05/23 11:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/05/23 11:24	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/05/23 11:24	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/05/23 11:24	1
Trichloroethene	ND		1.0	0.15	ug/L			12/05/23 11:24	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/05/23 11:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/05/23 11:24	1
1,2,4-Trimethylbenzene	**8.6**		1.0	0.82	ug/L			12/05/23 11:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/05/23 11:24	1
Vinyl acetate	ND		25	0.93	ug/L			12/05/23 11:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/05/23 11:24	1
Xylenes, Total	**1.8**	**J**	10	1.6	ug/L			12/05/23 11:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*12/05/23 11:24*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*12/05/23 11:24*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*12/05/23 11:24*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.21**		0.21	0.11	ug/L		12/05/23 09:57	12/06/23 20:09	1
Acenaphthylene	ND		0.21	0.047	ug/L		12/05/23 09:57	12/06/23 20:09	1
Anthracene	**0.85**		0.21	0.050	ug/L		12/05/23 09:57	12/06/23 20:09	1
Benzo[a]anthracene	**0.093**	**J**	0.21	0.036	ug/L		12/05/23 09:57	12/06/23 20:09	1
Benzo[a]pyrene	**0.13**	**J**	0.21	0.068	ug/L		12/05/23 09:57	12/06/23 20:09	1
Benzo[b]fluoranthene	**0.057**	**J**	0.21	0.040	ug/L		12/05/23 09:57	12/06/23 20:09	1
Benzo[g,h,i]perylene	ND		0.21	0.029	ug/L		12/05/23 09:57	12/06/23 20:09	1
Benzo[k]fluoranthene	ND		0.21	0.066	ug/L		12/05/23 09:57	12/06/23 20:09	1
Chrysene	**0.050**	**J**	0.21	0.035	ug/L		12/05/23 09:57	12/06/23 20:09	1
Dibenz(a,h)anthracene	ND		0.21	0.051	ug/L		12/05/23 09:57	12/06/23 20:09	1
Fluoranthene	**0.12**	**J**	0.21	0.036	ug/L		12/05/23 09:57	12/06/23 20:09	1
Fluorene	**0.39**		0.21	0.095	ug/L		12/05/23 09:57	12/06/23 20:09	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.036	ug/L		12/05/23 09:57	12/06/23 20:09	1
Phenanthrene	**2.4**		0.21	0.096	ug/L		12/05/23 09:57	12/06/23 20:09	1
Pyrene	**0.48**		0.21	0.042	ug/L		12/05/23 09:57	12/06/23 20:09	1
1-Methylnaphthalene	**1.8**		0.21	0.086	ug/L		12/05/23 09:57	12/06/23 20:09	1
2-Methylnaphthalene	**0.65**		0.21	0.071	ug/L		12/05/23 09:57	12/06/23 20:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*76*		*18 - 147*	*12/05/23 09:57*	*12/06/23 20:09*	*1*
2-Fluorobiphenyl	*27*		*15 - 128*	*12/05/23 09:57*	*12/06/23 20:09*	*1*

Client Sample ID: ROST4PZE-ROX-113023

Lab Sample ID: 400-247593-4

Date Collected: 11/30/23 09:20

Matrix: Water

Date Received: 12/01/23 09:26

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*28*		*10 - 144*	*12/05/23 09:57*	*12/06/23 20:09*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.20	0.10	ug/L		12/14/23 09:40	12/19/23 10:52	1
Acenaphthylene	ND	H	0.20	0.045	ug/L		12/14/23 09:40	12/19/23 10:52	1
Anthracene	ND	H	0.20	0.048	ug/L		12/14/23 09:40	12/19/23 10:52	1
Benzo[a]anthracene	ND	H	0.20	0.035	ug/L		12/14/23 09:40	12/19/23 10:52	1
Benzo[a]pyrene	ND	H	0.20	0.065	ug/L		12/14/23 09:40	12/19/23 10:52	1
Benzo[b]fluoranthene	ND	H	0.20	0.038	ug/L		12/14/23 09:40	12/19/23 10:52	1
Benzo[g,h,i]perylene	ND	H	0.20	0.028	ug/L		12/14/23 09:40	12/19/23 10:52	1
Benzo[k]fluoranthene	ND	H	0.20	0.063	ug/L		12/14/23 09:40	12/19/23 10:52	1
Chrysene	ND	H	0.20	0.034	ug/L		12/14/23 09:40	12/19/23 10:52	1
Dibenz(a,h)anthracene	ND	H	0.20	0.049	ug/L		12/14/23 09:40	12/19/23 10:52	1
Fluoranthene	ND	H	0.20	0.035	ug/L		12/14/23 09:40	12/19/23 10:52	1
Fluorene	ND	H	0.20	0.091	ug/L		12/14/23 09:40	12/19/23 10:52	1
Indeno[1,2,3-cd]pyrene	ND	H	0.20	0.035	ug/L		12/14/23 09:40	12/19/23 10:52	1
Phenanthrene	ND	H	0.20	0.092	ug/L		12/14/23 09:40	12/19/23 10:52	1
Pyrene	ND	H	0.20	0.040	ug/L		12/14/23 09:40	12/19/23 10:52	1
1-Methylnaphthalene	**6.1**	**H**	0.20	0.082	ug/L		12/14/23 09:40	12/19/23 10:52	1
2-Methylnaphthalene	**8.8**	**H**	0.20	0.067	ug/L		12/14/23 09:40	12/19/23 10:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*72*		*18 - 147*	*12/14/23 09:40*	*12/19/23 10:52*	*1*
2-Fluorobiphenyl	*76*		*15 - 128*	*12/14/23 09:40*	*12/19/23 10:52*	*1*
Nitrobenzene-d5	*70*		*10 - 144*	*12/14/23 09:40*	*12/19/23 10:52*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	4.1	ug/L		12/05/23 09:57	12/06/23 21:42	1
Benzenethiol	ND	*- *1	11	1.8	ug/L		12/05/23 09:57	12/06/23 21:42	1
Benzoic acid	ND		32	7.8	ug/L		12/05/23 09:57	12/06/23 21:42	1
Benzyl alcohol	ND		11	2.1	ug/L		12/05/23 09:57	12/06/23 21:42	1
Bis(2-chloroethoxy)methane	ND		11	0.17	ug/L		12/05/23 09:57	12/06/23 21:42	1
Bis(2-chloroethyl)ether	ND		11	2.9	ug/L		12/05/23 09:57	12/06/23 21:42	1
bis (2-chloroisopropyl) ether	ND		11	0.17	ug/L		12/05/23 09:57	12/06/23 21:42	1
Bis(2-ethylhexyl) phthalate	ND		11	5.4	ug/L		12/05/23 09:57	12/06/23 21:42	1
4-Bromophenyl phenyl ether	ND		11	0.21	ug/L		12/05/23 09:57	12/06/23 21:42	1
Butyl benzyl phthalate	ND		11	0.20	ug/L		12/05/23 09:57	12/06/23 21:42	1
4-Chloroaniline	ND		11	3.6	ug/L		12/05/23 09:57	12/06/23 21:42	1
4-Chloro-3-methylphenol	ND		11	4.1	ug/L		12/05/23 09:57	12/06/23 21:42	1
2-Chloronaphthalene	ND		11	0.15	ug/L		12/05/23 09:57	12/06/23 21:42	1
2-Chlorophenol	ND		11	2.4	ug/L		12/05/23 09:57	12/06/23 21:42	1
4-Chlorophenyl phenyl ether	ND		11	2.1	ug/L		12/05/23 09:57	12/06/23 21:42	1
Dibenz[a,h]acridine	ND		11	1.1	ug/L		12/05/23 09:57	12/06/23 21:42	1
Dibenzofuran	ND		11	0.18	ug/L		12/05/23 09:57	12/06/23 21:42	1
3,3'-Dichlorobenzidine	ND		11	2.8	ug/L		12/05/23 09:57	12/06/23 21:42	1
2,4-Dichlorophenol	ND		11	3.2	ug/L		12/05/23 09:57	12/06/23 21:42	1
Diethyl phthalate	ND		11	0.26	ug/L		12/05/23 09:57	12/06/23 21:42	1
2,4-Dimethylphenol	ND		11	3.7	ug/L		12/05/23 09:57	12/06/23 21:42	1

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

Job ID: 400-247593-1

Client Sample ID: ROST4PZE-ROX-113023
Date Collected: 11/30/23 09:20
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247593-4
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		11	0.18	ug/L		12/05/23 09:57	12/06/23 21:42	1
Di-n-butyl phthalate	ND		11	2.9	ug/L		12/05/23 09:57	12/06/23 21:42	1
4,6-Dinitro-ortho-cresol	ND		11	1.7	ug/L		12/05/23 09:57	12/06/23 21:42	1
2,4-Dinitrophenol	ND		32	3.6	ug/L		12/05/23 09:57	12/06/23 21:42	1
2,4-Dinitrotoluene	ND		11	2.0	ug/L		12/05/23 09:57	12/06/23 21:42	1
2,6-Dinitrotoluene	ND		11	2.0	ug/L		12/05/23 09:57	12/06/23 21:42	1
Di-n-octyl phthalate	ND		11	0.18	ug/L		12/05/23 09:57	12/06/23 21:42	1
1,4-Dioxane	ND		11	1.1	ug/L		12/05/23 09:57	12/06/23 21:42	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	1.1	ug/L		12/05/23 09:57	12/06/23 21:42	1
Hexachlorobenzene	ND		11	0.18	ug/L		12/05/23 09:57	12/06/23 21:42	1
Hexachlorocyclopentadiene	ND		21	2.8	ug/L		12/05/23 09:57	12/06/23 21:42	1
Hexachloroethane	ND		11	4.5	ug/L		12/05/23 09:57	12/06/23 21:42	1
Indene	ND		11	1.1	ug/L		12/05/23 09:57	12/06/23 21:42	1
Isophorone	ND		11	0.15	ug/L		12/05/23 09:57	12/06/23 21:42	1
2-Methylphenol	ND		11	1.9	ug/L		12/05/23 09:57	12/06/23 21:42	1
3 & 4 Methylphenol	ND		21	0.42	ug/L		12/05/23 09:57	12/06/23 21:42	1
2-Nitroaniline	ND		11	2.4	ug/L		12/05/23 09:57	12/06/23 21:42	1
3-Nitroaniline	ND		11	1.9	ug/L		12/05/23 09:57	12/06/23 21:42	1
4-Nitroaniline	ND		11	1.6	ug/L		12/05/23 09:57	12/06/23 21:42	1
Nitrobenzene	ND		11	0.14	ug/L		12/05/23 09:57	12/06/23 21:42	1
2-Nitrophenol	ND		11	5.6	ug/L		12/05/23 09:57	12/06/23 21:42	1
4-Nitrophenol	ND		11	2.2	ug/L		12/05/23 09:57	12/06/23 21:42	1
N-Nitrosodimethylamine	ND		11	3.7	ug/L		12/05/23 09:57	12/06/23 21:42	1
N-Nitrosodi-n-propylamine	ND		11	3.5	ug/L		12/05/23 09:57	12/06/23 21:42	1
N-Nitrosodiphenylamine	ND		11	0.19	ug/L		12/05/23 09:57	12/06/23 21:42	1
Pentachlorophenol	ND		21	1.5	ug/L		12/05/23 09:57	12/06/23 21:42	1
Phenol	ND		11	2.8	ug/L		12/05/23 09:57	12/06/23 21:42	1
Pyridine	ND		11	3.4	ug/L		12/05/23 09:57	12/06/23 21:42	1
Quinoline	ND		11	4.8	ug/L		12/05/23 09:57	12/06/23 21:42	1
2,4,5-Trichlorophenol	ND		11	4.0	ug/L		12/05/23 09:57	12/06/23 21:42	1
2,4,6-Trichlorophenol	ND		11	3.7	ug/L		12/05/23 09:57	12/06/23 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*32*	*S1-*	*46 - 124*	*12/05/23 09:57*	*12/06/23 21:42*	*1*
2-Fluorophenol	*2*	*S1-*	*13 - 113*	*12/05/23 09:57*	*12/06/23 21:42*	*1*
Nitrobenzene-d5	*26*	*S1-*	*36 - 126*	*12/05/23 09:57*	*12/06/23 21:42*	*1*
Phenol-d5	*10*	*S1-*	*17 - 127*	*12/05/23 09:57*	*12/06/23 21:42*	*1*
Terphenyl-d14	*51*		*44 - 149*	*12/05/23 09:57*	*12/06/23 21:42*	*1*
2,4,6-Tribromophenol	*44*		*26 - 150*	*12/05/23 09:57*	*12/06/23 21:42*	*1*

Method: EPA 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		12/05/23 11:19	12/06/23 15:18	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 11:19	12/06/23 15:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*51 - 149*	*12/05/23 11:19*	*12/06/23 15:18*	*1*

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

Job ID: 400-247593-1

Client Sample ID: MW2-ROX-113023

Lab Sample ID: 400-247593-5

Date Collected: 11/30/23 10:35

Matrix: Water

Date Received: 12/01/23 09:26

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/05/23 11:47	1
Acrolein	ND		20	3.3	ug/L			12/05/23 11:47	1
Acrylonitrile	ND		10	2.8	ug/L			12/05/23 11:47	1
Benzene	**1.3**		1.0	0.50	ug/L			12/05/23 11:47	1
Bromobenzene	ND		1.0	0.54	ug/L			12/05/23 11:47	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/05/23 11:47	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/05/23 11:47	1
Bromoform	ND		5.0	0.25	ug/L			12/05/23 11:47	1
Bromomethane	ND		1.0	0.98	ug/L			12/05/23 11:47	1
2-Butanone (MEK)	**13**	**J**	25	2.6	ug/L			12/05/23 11:47	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/05/23 11:47	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/05/23 11:47	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/05/23 11:47	1
Chloroethane	ND		1.0	0.76	ug/L			12/05/23 11:47	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/05/23 11:47	1
Chloroform	ND		1.0	0.90	ug/L			12/05/23 11:47	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/05/23 11:47	1
Chloromethane	ND		1.0	0.90	ug/L			12/05/23 11:47	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/05/23 11:47	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/05/23 11:47	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/05/23 11:47	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/05/23 11:47	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/05/23 11:47	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/05/23 11:47	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/05/23 11:47	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/05/23 11:47	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/05/23 11:47	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 11:47	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 11:47	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 11:47	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 11:47	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/05/23 11:47	1
Ethylbenzene	**91**		1.0	0.50	ug/L			12/05/23 11:47	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/05/23 11:47	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/05/23 11:47	1
2-Hexanone	ND		25	1.4	ug/L			12/05/23 11:47	1
Isopropylbenzene	**55**		1.0	0.53	ug/L			12/05/23 11:47	1
Methylene bromide	ND		5.0	0.22	ug/L			12/05/23 11:47	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/05/23 11:47	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/05/23 11:47	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/05/23 11:47	1
m-Xylene & p-Xylene	**41**		5.0	0.63	ug/L			12/05/23 11:47	1
Naphthalene	**16**		5.0	3.0	ug/L			12/05/23 11:47	1
n-Butylbenzene	**6.5**		1.0	0.76	ug/L			12/05/23 11:47	1
N-Propylbenzene	**93**		1.0	0.69	ug/L			12/05/23 11:47	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/05/23 11:47	1
o-Xylene	**4.4**	**J**	5.0	0.60	ug/L			12/05/23 11:47	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/05/23 11:47	1
p-Isopropyltoluene	**6.5**		1.0	0.71	ug/L			12/05/23 11:47	1

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

Job ID: 400-247593-1

Client Sample ID: MW2-ROX-113023

Lab Sample ID: 400-247593-5

Date Collected: 11/30/23 10:35

Matrix: Water

Date Received: 12/01/23 09:26

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**7.7**		1.0	0.70	ug/L			12/05/23 11:47	1
Styrene	ND		1.0	1.0	ug/L			12/05/23 11:47	1
tert-Butylbenzene	**0.92**	**J**	1.0	0.63	ug/L			12/05/23 11:47	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/05/23 11:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/05/23 11:47	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/05/23 11:47	1
Toluene	**3.9**		1.0	0.90	ug/L			12/05/23 11:47	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 11:47	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/05/23 11:47	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/05/23 11:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/05/23 11:47	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/05/23 11:47	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/05/23 11:47	1
Trichloroethene	ND		1.0	0.15	ug/L			12/05/23 11:47	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/05/23 11:47	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/05/23 11:47	1
1,2,4-Trimethylbenzene	**12**		1.0	0.82	ug/L			12/05/23 11:47	1
1,3,5-Trimethylbenzene	**18**		1.0	0.56	ug/L			12/05/23 11:47	1
Vinyl acetate	ND		25	0.93	ug/L			12/05/23 11:47	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/05/23 11:47	1
Xylenes, Total	**45**		10	1.6	ug/L			12/05/23 11:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*12/05/23 11:47*	*1*
Dibromofluoromethane	*92*		*75 - 126*		*12/05/23 11:47*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*12/05/23 11:47*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.10	ug/L		12/05/23 09:57	12/06/23 20:29	1
Acenaphthylene	ND		0.21	0.046	ug/L		12/05/23 09:57	12/06/23 20:29	1
Anthracene	**0.077**	**J**	0.21	0.050	ug/L		12/05/23 09:57	12/06/23 20:29	1
Benzo[a]anthracene	**0.060**	**J**	0.21	0.036	ug/L		12/05/23 09:57	12/06/23 20:29	1
Benzo[a]pyrene	ND		0.21	0.068	ug/L		12/05/23 09:57	12/06/23 20:29	1
Benzo[b]fluoranthene	**0.062**	**J**	0.21	0.039	ug/L		12/05/23 09:57	12/06/23 20:29	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		12/05/23 09:57	12/06/23 20:29	1
Benzo[k]fluoranthene	ND		0.21	0.065	ug/L		12/05/23 09:57	12/06/23 20:29	1
Chrysene	ND		0.21	0.035	ug/L		12/05/23 09:57	12/06/23 20:29	1
Dibenz(a,h)anthracene	ND		0.21	0.051	ug/L		12/05/23 09:57	12/06/23 20:29	1
Fluoranthene	ND		0.21	0.036	ug/L		12/05/23 09:57	12/06/23 20:29	1
Fluorene	ND		0.21	0.094	ug/L		12/05/23 09:57	12/06/23 20:29	1
Indeno[1,2,3-cd]pyrene	**0.078**	**J**	0.21	0.036	ug/L		12/05/23 09:57	12/06/23 20:29	1
Phenanthrene	ND		0.21	0.095	ug/L		12/05/23 09:57	12/06/23 20:29	1
Pyrene	ND		0.21	0.041	ug/L		12/05/23 09:57	12/06/23 20:29	1
1-Methylnaphthalene	**5.2**		0.21	0.084	ug/L		12/05/23 09:57	12/06/23 20:29	1
2-Methylnaphthalene	**7.4**		0.21	0.070	ug/L		12/05/23 09:57	12/06/23 20:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*101*		*18 - 147*	*12/05/23 09:57*	*12/06/23 20:29*	*1*
2-Fluorobiphenyl	*30*		*15 - 128*	*12/05/23 09:57*	*12/06/23 20:29*	*1*

Client Sample ID: MW2-ROX-113023

Date Collected: 11/30/23 10:35
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247593-5

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	62		10 - 144	12/05/23 09:57	12/06/23 20:29	1

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.21	0.10	ug/L		12/14/23 09:40	12/19/23 10:52	1
Acenaphthylene	ND	H	0.21	0.045	ug/L		12/14/23 09:40	12/19/23 10:52	1
Anthracene	ND	H	0.21	0.048	ug/L		12/14/23 09:40	12/19/23 10:52	1
Benzo[a]anthracene	ND	H	0.21	0.035	ug/L		12/14/23 09:40	12/19/23 10:52	1
Benzo[a]pyrene	ND	H	0.21	0.066	ug/L		12/14/23 09:40	12/19/23 10:52	1
Benzo[b]fluoranthene	ND	H	0.21	0.038	ug/L		12/14/23 09:40	12/19/23 10:52	1
Benzo[g,h,i]perylene	ND	H	0.21	0.028	ug/L		12/14/23 09:40	12/19/23 10:52	1
Benzo[k]fluoranthene	ND	H	0.21	0.064	ug/L		12/14/23 09:40	12/19/23 10:52	1
Chrysene	ND	H	0.21	0.034	ug/L		12/14/23 09:40	12/19/23 10:52	1
Dibenz(a,h)anthracene	ND	H	0.21	0.049	ug/L		12/14/23 09:40	12/19/23 10:52	1
Fluoranthene	ND	H	0.21	0.035	ug/L		12/14/23 09:40	12/19/23 10:52	1
Fluorene	ND	H	0.21	0.092	ug/L		12/14/23 09:40	12/19/23 10:52	1
Indeno[1,2,3-cd]pyrene	ND	H	0.21	0.035	ug/L		12/14/23 09:40	12/19/23 10:52	1
Phenanthrene	ND	H	0.21	0.093	ug/L		12/14/23 09:40	12/19/23 10:52	1
Pyrene	ND	H	0.21	0.040	ug/L		12/14/23 09:40	12/19/23 10:52	1
1-Methylnaphthalene	**6.1**	**H**	0.21	0.082	ug/L		12/14/23 09:40	12/19/23 10:52	1
2-Methylnaphthalene	**8.9**	**H**	0.21	0.068	ug/L		12/14/23 09:40	12/19/23 10:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	72		18 - 147	12/14/23 09:40	12/19/23 10:52	1
2-Fluorobiphenyl	76		15 - 128	12/14/23 09:40	12/19/23 10:52	1
Nitrobenzene-d5	70		10 - 144	12/14/23 09:40	12/19/23 10:52	1

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	4.0	ug/L		12/05/23 09:57	12/06/23 22:03	1
Benzenethiol	ND	*- *1	11	1.8	ug/L		12/05/23 09:57	12/06/23 22:03	1
Benzoic acid	ND		32	7.7	ug/L		12/05/23 09:57	12/06/23 22:03	1
Benzyl alcohol	ND		11	2.1	ug/L		12/05/23 09:57	12/06/23 22:03	1
Bis(2-chloroethoxy)methane	ND		11	0.17	ug/L		12/05/23 09:57	12/06/23 22:03	1
Bis(2-chloroethyl)ether	ND		11	2.8	ug/L		12/05/23 09:57	12/06/23 22:03	1
bis (2-chloroisopropyl) ether	ND		11	0.17	ug/L		12/05/23 09:57	12/06/23 22:03	1
Bis(2-ethylhexyl) phthalate	ND		11	5.3	ug/L		12/05/23 09:57	12/06/23 22:03	1
4-Bromophenyl phenyl ether	ND		11	0.21	ug/L		12/05/23 09:57	12/06/23 22:03	1
Butyl benzyl phthalate	ND		11	0.20	ug/L		12/05/23 09:57	12/06/23 22:03	1
4-Chloroaniline	ND		11	3.6	ug/L		12/05/23 09:57	12/06/23 22:03	1
4-Chloro-3-methylphenol	ND		11	4.0	ug/L		12/05/23 09:57	12/06/23 22:03	1
2-Chloronaphthalene	ND		11	0.15	ug/L		12/05/23 09:57	12/06/23 22:03	1
2-Chlorophenol	ND		11	2.3	ug/L		12/05/23 09:57	12/06/23 22:03	1
4-Chlorophenyl phenyl ether	ND		11	2.1	ug/L		12/05/23 09:57	12/06/23 22:03	1
Dibenz[a,h]acridine	ND		11	1.1	ug/L		12/05/23 09:57	12/06/23 22:03	1
Dibenzofuran	ND		11	0.18	ug/L		12/05/23 09:57	12/06/23 22:03	1
3,3'-Dichlorobenzidine	ND		11	2.7	ug/L		12/05/23 09:57	12/06/23 22:03	1
2,4-Dichlorophenol	ND		11	3.2	ug/L		12/05/23 09:57	12/06/23 22:03	1
Diethyl phthalate	ND		11	0.25	ug/L		12/05/23 09:57	12/06/23 22:03	1
2,4-Dimethylphenol	ND		11	3.7	ug/L		12/05/23 09:57	12/06/23 22:03	1

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

Job ID: 400-247593-1

Client Sample ID: MW2-ROX-113023
Date Collected: 11/30/23 10:35
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247593-5
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		11	0.18	ug/L		12/05/23 09:57	12/06/23 22:03	1
Di-n-butyl phthalate	ND		11	2.8	ug/L		12/05/23 09:57	12/06/23 22:03	1
4,6-Dinitro-ortho-cresol	ND		11	1.7	ug/L		12/05/23 09:57	12/06/23 22:03	1
2,4-Dinitrophenol	ND		32	3.6	ug/L		12/05/23 09:57	12/06/23 22:03	1
2,4-Dinitrotoluene	ND		11	2.0	ug/L		12/05/23 09:57	12/06/23 22:03	1
2,6-Dinitrotoluene	ND		11	2.0	ug/L		12/05/23 09:57	12/06/23 22:03	1
Di-n-octyl phthalate	ND		11	0.18	ug/L		12/05/23 09:57	12/06/23 22:03	1
1,4-Dioxane	ND		11	1.1	ug/L		12/05/23 09:57	12/06/23 22:03	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	1.1	ug/L		12/05/23 09:57	12/06/23 22:03	1
Hexachlorobenzene	ND		11	0.18	ug/L		12/05/23 09:57	12/06/23 22:03	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		12/05/23 09:57	12/06/23 22:03	1
Hexachloroethane	ND		11	4.4	ug/L		12/05/23 09:57	12/06/23 22:03	1
Indene	ND		11	1.1	ug/L		12/05/23 09:57	12/06/23 22:03	1
Isophorone	ND		11	0.15	ug/L		12/05/23 09:57	12/06/23 22:03	1
2-Methylphenol	ND		11	1.9	ug/L		12/05/23 09:57	12/06/23 22:03	1
3 & 4 Methylphenol	ND		21	0.41	ug/L		12/05/23 09:57	12/06/23 22:03	1
2-Nitroaniline	ND		11	2.3	ug/L		12/05/23 09:57	12/06/23 22:03	1
3-Nitroaniline	ND		11	1.9	ug/L		12/05/23 09:57	12/06/23 22:03	1
4-Nitroaniline	ND		11	1.6	ug/L		12/05/23 09:57	12/06/23 22:03	1
Nitrobenzene	ND		11	0.14	ug/L		12/05/23 09:57	12/06/23 22:03	1
2-Nitrophenol	ND		11	5.5	ug/L		12/05/23 09:57	12/06/23 22:03	1
4-Nitrophenol	ND		11	2.2	ug/L		12/05/23 09:57	12/06/23 22:03	1
N-Nitrosodimethylamine	ND		11	3.7	ug/L		12/05/23 09:57	12/06/23 22:03	1
N-Nitrosodi-n-propylamine	ND		11	3.5	ug/L		12/05/23 09:57	12/06/23 22:03	1
N-Nitrosodiphenylamine	ND		11	0.19	ug/L		12/05/23 09:57	12/06/23 22:03	1
Pentachlorophenol	ND		21	1.5	ug/L		12/05/23 09:57	12/06/23 22:03	1
Phenol	ND		11	2.7	ug/L		12/05/23 09:57	12/06/23 22:03	1
Pyridine	ND		11	3.4	ug/L		12/05/23 09:57	12/06/23 22:03	1
Quinoline	ND		11	4.7	ug/L		12/05/23 09:57	12/06/23 22:03	1
2,4,5-Trichlorophenol	ND		11	3.9	ug/L		12/05/23 09:57	12/06/23 22:03	1
2,4,6-Trichlorophenol	ND		11	3.7	ug/L		12/05/23 09:57	12/06/23 22:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*46 - 124*	*12/05/23 09:57*	*12/06/23 22:03*	*1*
2-Fluorophenol	*21*		*13 - 113*	*12/05/23 09:57*	*12/06/23 22:03*	*1*
Nitrobenzene-d5	*57*		*36 - 126*	*12/05/23 09:57*	*12/06/23 22:03*	*1*
Phenol-d5	*39*		*17 - 127*	*12/05/23 09:57*	*12/06/23 22:03*	*1*
Terphenyl-d14	*72*		*44 - 149*	*12/05/23 09:57*	*12/06/23 22:03*	*1*
2,4,6-Tribromophenol	*72*		*26 - 150*	*12/05/23 09:57*	*12/06/23 22:03*	*1*

Method: EPA 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		12/05/23 11:19	12/06/23 15:39	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 11:19	12/06/23 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*51 - 149*	*12/05/23 11:19*	*12/06/23 15:39*	*1*

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

Job ID: 400-247593-1

Client Sample ID: MW22-ROX-113023
Date Collected: 11/30/23 11:25
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247593-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/05/23 12:09	1
Acrolein	ND		20	3.3	ug/L			12/05/23 12:09	1
Acrylonitrile	ND		10	2.8	ug/L			12/05/23 12:09	1
Benzene	**20**		1.0	0.50	ug/L			12/05/23 12:09	1
Bromobenzene	ND		1.0	0.54	ug/L			12/05/23 12:09	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/05/23 12:09	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/05/23 12:09	1
Bromoform	ND		5.0	0.25	ug/L			12/05/23 12:09	1
Bromomethane	ND		1.0	0.98	ug/L			12/05/23 12:09	1
2-Butanone (MEK)	**3.6**	**J**	25	2.6	ug/L			12/05/23 12:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/05/23 12:09	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/05/23 12:09	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/05/23 12:09	1
Chloroethane	ND		1.0	0.76	ug/L			12/05/23 12:09	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/05/23 12:09	1
Chloroform	ND		1.0	0.90	ug/L			12/05/23 12:09	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/05/23 12:09	1
Chloromethane	ND		1.0	0.90	ug/L			12/05/23 12:09	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/05/23 12:09	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/05/23 12:09	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/05/23 12:09	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/05/23 12:09	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/05/23 12:09	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/05/23 12:09	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/05/23 12:09	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/05/23 12:09	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/05/23 12:09	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 12:09	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 12:09	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 12:09	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 12:09	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/05/23 12:09	1
Ethylbenzene	**72**		1.0	0.50	ug/L			12/05/23 12:09	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/05/23 12:09	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/05/23 12:09	1
2-Hexanone	ND		25	1.4	ug/L			12/05/23 12:09	1
Isopropylbenzene	**50**		1.0	0.53	ug/L			12/05/23 12:09	1
Methylene bromide	ND		5.0	0.22	ug/L			12/05/23 12:09	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/05/23 12:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/05/23 12:09	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/05/23 12:09	1
Naphthalene	**95**		5.0	3.0	ug/L			12/05/23 12:09	1
n-Butylbenzene	**11**		1.0	0.76	ug/L			12/05/23 12:09	1
N-Propylbenzene	**100**		1.0	0.69	ug/L			12/05/23 12:09	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/05/23 12:09	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/05/23 12:09	1
p-Isopropyltoluene	**5.5**		1.0	0.71	ug/L			12/05/23 12:09	1
sec-Butylbenzene	**5.6**		1.0	0.70	ug/L			12/05/23 12:09	1
Styrene	ND		1.0	1.0	ug/L			12/05/23 12:09	1

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

Job ID: 400-247593-1

Client Sample ID: MW22-ROX-113023

Lab Sample ID: 400-247593-6

Date Collected: 11/30/23 11:25

Matrix: Water

Date Received: 12/01/23 09:26

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	**10**		1.0	0.63	ug/L			12/05/23 12:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/05/23 12:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/05/23 12:09	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/05/23 12:09	1
Toluene	**24**		1.0	0.90	ug/L			12/05/23 12:09	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 12:09	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/05/23 12:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/05/23 12:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/05/23 12:09	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/05/23 12:09	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/05/23 12:09	1
Trichloroethene	ND		1.0	0.15	ug/L			12/05/23 12:09	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/05/23 12:09	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/05/23 12:09	1
1,2,4-Trimethylbenzene	**110**		1.0	0.82	ug/L			12/05/23 12:09	1
1,3,5-Trimethylbenzene	**140**		1.0	0.56	ug/L			12/05/23 12:09	1
Vinyl acetate	ND		25	0.93	ug/L			12/05/23 12:09	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/05/23 12:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*12/05/23 12:09*	*1*
Dibromofluoromethane	*92*		*75 - 126*		*12/05/23 12:09*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*12/05/23 12:09*	*1*

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	**440**		10	1.3	ug/L			12/06/23 12:42	2
o-Xylene	**20**		10	1.2	ug/L			12/06/23 12:42	2
Xylenes, Total	**460**		20	3.2	ug/L			12/06/23 12:42	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*12/06/23 12:42*	*2*
Dibromofluoromethane	*95*		*75 - 126*		*12/06/23 12:42*	*2*
Toluene-d8 (Surr)	*98*		*64 - 132*		*12/06/23 12:42*	*2*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.10	ug/L		12/05/23 09:57	12/06/23 20:49	1
Acenaphthylene	ND		0.21	0.045	ug/L		12/05/23 09:57	12/06/23 20:49	1
Anthracene	ND		0.21	0.049	ug/L		12/05/23 09:57	12/06/23 20:49	1
Benzo[a]anthracene	**0.069**	**J**	0.21	0.035	ug/L		12/05/23 09:57	12/06/23 20:49	1
Benzo[a]pyrene	ND		0.21	0.066	ug/L		12/05/23 09:57	12/06/23 20:49	1
Benzo[b]fluoranthene	**0.073**	**J**	0.21	0.038	ug/L		12/05/23 09:57	12/06/23 20:49	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		12/05/23 09:57	12/06/23 20:49	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		12/05/23 09:57	12/06/23 20:49	1
Chrysene	ND		0.21	0.034	ug/L		12/05/23 09:57	12/06/23 20:49	1
Dibenz(a,h)anthracene	**0.061**	**J**	0.21	0.050	ug/L		12/05/23 09:57	12/06/23 20:49	1
Fluoranthene	**0.039**	**J**	0.21	0.035	ug/L		12/05/23 09:57	12/06/23 20:49	1
Fluorene	**0.099**	**J**	0.21	0.092	ug/L		12/05/23 09:57	12/06/23 20:49	1
Indeno[1,2,3-cd]pyrene	**0.082**	**J**	0.21	0.035	ug/L		12/05/23 09:57	12/06/23 20:49	1

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

Job ID: 400-247593-1

Client Sample ID: MW22-ROX-113023

Date Collected: 11/30/23 11:25
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247593-6

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		0.21	0.093	ug/L		12/05/23 09:57	12/06/23 20:49	1
Pyrene	ND		0.21	0.040	ug/L		12/05/23 09:57	12/06/23 20:49	1
1-Methylnaphthalene	**8.3**		0.21	0.083	ug/L		12/05/23 09:57	12/06/23 20:49	1
2-Methylnaphthalene	**10**		0.21	0.068	ug/L		12/05/23 09:57	12/06/23 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*118*		*18 - 147*	*12/05/23 09:57*	*12/06/23 20:49*	*1*
2-Fluorobiphenyl	*61*		*15 - 128*	*12/05/23 09:57*	*12/06/23 20:49*	*1*
Nitrobenzene-d5	*76*		*10 - 144*	*12/05/23 09:57*	*12/06/23 20:49*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.21	0.11	ug/L		12/14/23 09:40	12/19/23 11:12	1
Acenaphthylene	ND	H	0.21	0.047	ug/L		12/14/23 09:40	12/19/23 11:12	1
Anthracene	**0.059**	**J H**	0.21	0.050	ug/L		12/14/23 09:40	12/19/23 11:12	1
Benzo[a]anthracene	ND	H	0.21	0.036	ug/L		12/14/23 09:40	12/19/23 11:12	1
Benzo[a]pyrene	ND	H	0.21	0.068	ug/L		12/14/23 09:40	12/19/23 11:12	1
Benzo[b]fluoranthene	ND	H	0.21	0.040	ug/L		12/14/23 09:40	12/19/23 11:12	1
Benzo[g,h,i]perylene	**0.035**	**J H**	0.21	0.029	ug/L		12/14/23 09:40	12/19/23 11:12	1
Benzo[k]fluoranthene	ND	H	0.21	0.066	ug/L		12/14/23 09:40	12/19/23 11:12	1
Chrysene	ND	H	0.21	0.035	ug/L		12/14/23 09:40	12/19/23 11:12	1
Dibenz(a,h)anthracene	ND	H	0.21	0.051	ug/L		12/14/23 09:40	12/19/23 11:12	1
Fluoranthene	ND	H	0.21	0.036	ug/L		12/14/23 09:40	12/19/23 11:12	1
Fluorene	ND	H	0.21	0.095	ug/L		12/14/23 09:40	12/19/23 11:12	1
Indeno[1,2,3-cd]pyrene	ND	H	0.21	0.036	ug/L		12/14/23 09:40	12/19/23 11:12	1
Phenanthrene	**0.11**	**J H**	0.21	0.096	ug/L		12/14/23 09:40	12/19/23 11:12	1
Pyrene	ND	H	0.21	0.042	ug/L		12/14/23 09:40	12/19/23 11:12	1
1-Methylnaphthalene	**6.5**	**H**	0.21	0.086	ug/L		12/14/23 09:40	12/19/23 11:12	1
2-Methylnaphthalene	**7.4**	**H**	0.21	0.071	ug/L		12/14/23 09:40	12/19/23 11:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*73*		*18 - 147*	*12/14/23 09:40*	*12/19/23 11:12*	*1*
2-Fluorobiphenyl	*46*		*15 - 128*	*12/14/23 09:40*	*12/19/23 11:12*	*1*
Nitrobenzene-d5	*62*		*10 - 144*	*12/14/23 09:40*	*12/19/23 11:12*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		12/05/23 09:57	12/06/23 22:25	1
Benzenethiol	ND	*- *1	10	1.8	ug/L		12/05/23 09:57	12/06/23 22:25	1
Benzoic acid	ND		31	7.5	ug/L		12/05/23 09:57	12/06/23 22:25	1
Benzyl alcohol	ND		10	2.1	ug/L		12/05/23 09:57	12/06/23 22:25	1
Bis(2-chloroethoxy)methane	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 22:25	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		12/05/23 09:57	12/06/23 22:25	1
bis (2-chloroisopropyl) ether	ND		10	0.17	ug/L		12/05/23 09:57	12/06/23 22:25	1
Bis(2-ethylhexyl) phthalate	**7.1**	**J**	10	5.2	ug/L		12/05/23 09:57	12/06/23 22:25	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		12/05/23 09:57	12/06/23 22:25	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		12/05/23 09:57	12/06/23 22:25	1
4-Chloroaniline	ND		10	3.5	ug/L		12/05/23 09:57	12/06/23 22:25	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		12/05/23 09:57	12/06/23 22:25	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/05/23 09:57	12/06/23 22:25	1

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

Job ID: 400-247593-1

Client Sample ID: MW22-ROX-113023
Date Collected: 11/30/23 11:25
Date Received: 12/01/23 09:26

Lab Sample ID: 400-247593-6
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND		10	2.3	ug/L		12/05/23 09:57	12/06/23 22:25	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		12/05/23 09:57	12/06/23 22:25	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 22:25	1
Dibenzofuran	ND		10	0.18	ug/L		12/05/23 09:57	12/06/23 22:25	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		12/05/23 09:57	12/06/23 22:25	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		12/05/23 09:57	12/06/23 22:25	1
Diethyl phthalate	ND		10	0.25	ug/L		12/05/23 09:57	12/06/23 22:25	1
2,4-Dimethylphenol	**4.5**	**J**	10	3.6	ug/L		12/05/23 09:57	12/06/23 22:25	1
Dimethyl phthalate	ND		10	0.18	ug/L		12/05/23 09:57	12/06/23 22:25	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		12/05/23 09:57	12/06/23 22:25	1
4,6-Dinitro-ortho-cresol	ND		10	1.7	ug/L		12/05/23 09:57	12/06/23 22:25	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		12/05/23 09:57	12/06/23 22:25	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		12/05/23 09:57	12/06/23 22:25	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		12/05/23 09:57	12/06/23 22:25	1
Di-n-octyl phthalate	ND		10	0.18	ug/L		12/05/23 09:57	12/06/23 22:25	1
1,4-Dioxane	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 22:25	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 22:25	1
Hexachlorobenzene	ND		10	0.18	ug/L		12/05/23 09:57	12/06/23 22:25	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		12/05/23 09:57	12/06/23 22:25	1
Hexachloroethane	ND		10	4.3	ug/L		12/05/23 09:57	12/06/23 22:25	1
Indene	ND		10	1.0	ug/L		12/05/23 09:57	12/06/23 22:25	1
Isophorone	ND		10	0.14	ug/L		12/05/23 09:57	12/06/23 22:25	1
2-Methylphenol	ND		10	1.9	ug/L		12/05/23 09:57	12/06/23 22:25	1
3 & 4 Methylphenol	ND		21	0.40	ug/L		12/05/23 09:57	12/06/23 22:25	1
2-Nitroaniline	ND		10	2.3	ug/L		12/05/23 09:57	12/06/23 22:25	1
3-Nitroaniline	ND		10	1.9	ug/L		12/05/23 09:57	12/06/23 22:25	1
4-Nitroaniline	ND		10	1.5	ug/L		12/05/23 09:57	12/06/23 22:25	1
Nitrobenzene	ND		10	0.13	ug/L		12/05/23 09:57	12/06/23 22:25	1
2-Nitrophenol	ND		10	5.4	ug/L		12/05/23 09:57	12/06/23 22:25	1
4-Nitrophenol	ND		10	2.2	ug/L		12/05/23 09:57	12/06/23 22:25	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		12/05/23 09:57	12/06/23 22:25	1
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		12/05/23 09:57	12/06/23 22:25	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		12/05/23 09:57	12/06/23 22:25	1
Pentachlorophenol	ND		21	1.4	ug/L		12/05/23 09:57	12/06/23 22:25	1
Phenol	ND		10	2.7	ug/L		12/05/23 09:57	12/06/23 22:25	1
Pyridine	ND		10	3.3	ug/L		12/05/23 09:57	12/06/23 22:25	1
Quinoline	ND		10	4.6	ug/L		12/05/23 09:57	12/06/23 22:25	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		12/05/23 09:57	12/06/23 22:25	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		12/05/23 09:57	12/06/23 22:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*46 - 124*	*12/05/23 09:57*	*12/06/23 22:25*	*1*
2-Fluorophenol	*28*		*13 - 113*	*12/05/23 09:57*	*12/06/23 22:25*	*1*
Nitrobenzene-d5	*74*		*36 - 126*	*12/05/23 09:57*	*12/06/23 22:25*	*1*
Phenol-d5	*54*		*17 - 127*	*12/05/23 09:57*	*12/06/23 22:25*	*1*
Terphenyl-d14	*83*		*44 - 149*	*12/05/23 09:57*	*12/06/23 22:25*	*1*
2,4,6-Tribromophenol	*74*		*26 - 150*	*12/05/23 09:57*	*12/06/23 22:25*	*1*

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

Job ID: 400-247593-1

Client Sample ID: MW22-ROX-113023

Lab Sample ID: 400-247593-6

Date Collected: 11/30/23 11:25

Matrix: Water

Date Received: 12/01/23 09:26

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H	11	5.3	ug/L		12/14/23 09:40	12/19/23 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*46 - 124*	*12/14/23 09:40*	*12/19/23 14:47*	*1*
Nitrobenzene-d5	*68*		*36 - 126*	*12/14/23 09:40*	*12/19/23 14:47*	*1*
Terphenyl-d14	*82*		*44 - 149*	*12/14/23 09:40*	*12/19/23 14:47*	*1*

Method: EPA 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		12/05/23 11:19	12/06/23 16:00	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 11:19	12/06/23 16:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*123*		*51 - 149*	*12/05/23 11:19*	*12/06/23 16:00*	*1*

Qualifiers

GC/MS 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/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
E	Result exceeded calibration range.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
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.

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 MONTHLY GW

Job ID: 400-247593-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-130)	(75-126)	(64-132)
400-247593-1	TB-ROX-113023-8260-A	109	110	96
400-247593-3	ROST4PZE-ROX-113023-EB	109	109	96
400-247593-4	ROST4PZE-ROX-113023	106	94	98
400-247593-4 MS	ROST4PZE-ROX-113023	103	92	99
400-247593-4 MSD	ROST4PZE-ROX-113023	103	93	98
400-247593-5	MW2-ROX-113023	106	92	101
400-247593-6	MW22-ROX-113023	105	92	98
400-247593-6 - DL	MW22-ROX-113023	105	95	98
LCS 400-652956/1001	Lab Control Sample	104	94	99
LCS 400-653111/1001	Lab Control Sample	103	95	99
MB 400-652956/3	Method Blank	107	110	95
MB 400-653111/3	Method Blank	105	110	95

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - 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)
400-247593-3	ROST4PZE-ROX-113023-EB	81	21	69	45	93	68
400-247593-4	ROST4PZE-ROX-113023	32 S1-	2 S1-	26 S1-	10 S1-	51	44
400-247593-5	MW2-ROX-113023	66	21	57	39	72	72
400-247593-6	MW22-ROX-113023	83	28	74	54	83	74
400-247593-6 - RERA	MW22-ROX-113023	67		68		82	
LCS 400-652972/2-A	Lab Control Sample	83	53	73	71	91	79
LCS 400-652972/4-A	Lab Control Sample	89	67	79	80	100	68
LCS 400-654289/2-A	Lab Control Sample	64		59		86	
LCSD 400-652972/3-A	Lab Control Sample Dup	89	55	81	77	94	82
LCSD 400-652972/5-A	Lab Control Sample Dup	94	72	85	84	98	72
LCSD 400-654289/3-A	Lab Control Sample Dup	75		67		103	
MB 400-652972/1-A	Method Blank	80	23	71	46	83	48
MB 400-654289/1-A	Method Blank	68		70		86	

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 MONTHLY GW

Job ID: 400-247593-1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-247593-3	ROST4PZE-ROX-113023-EB	155 S1+	83	81
400-247593-4	ROST4PZE-ROX-113023	76	27	28
400-247593-4 - RERA	ROST4PZE-ROX-113023	72	76	70
400-247593-5	MW2-ROX-113023	101	30	62
400-247593-5 - RERA	MW2-ROX-113023	72	76	70
400-247593-6	MW22-ROX-113023	118	61	76
400-247593-6 - RERA	MW22-ROX-113023	73	46	62
LCS 400-652972/2-A	Lab Control Sample	93	70	72
LCS 400-654289/2-A	Lab Control Sample	66	67	72
LCSD 400-652972/3-A	Lab Control Sample Dup	87	67	76
LCSD 400-654289/3-A	Lab Control Sample Dup	71	75	73
MB 400-652972/1-A	Method Blank	158 S1+	73	71
MB 400-654289/1-A	Method Blank	81	76	71

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-247593-2	TB-ROX-113023-8011-A	125
400-247593-3	ROST4PZE-ROX-113023-EB	121
400-247593-4	ROST4PZE-ROX-113023	78
400-247593-5	MW2-ROX-113023	113
400-247593-6	MW22-ROX-113023	123
LCS 400-652995/2-A	Lab Control Sample	79
LCSD 400-652995/3-A	Lab Control Sample Dup	76
MB 400-652995/1-A	Method Blank	97

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-247593-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

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

Job ID: 400-247593-1

Client Sample ID: TB-ROX-113023-8260-A
Lab Sample ID: 400-247593-1
Date Collected: 11/30/23 00:00
Matrix: Water
Date Received: 12/01/23 09:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652956	12/05/23 14:03	BPO	EET PEN

Client Sample ID: TB-ROX-113023-8011-A
Lab Sample ID: 400-247593-2
Date Collected: 11/30/23 00:00
Matrix: Water
Date Received: 12/01/23 09:26

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	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653100	12/06/23 14:36	PG	EET PEN

Client Sample ID: ROST4PZE-ROX-113023-EB
Lab Sample ID: 400-247593-3
Date Collected: 11/30/23 08:25
Matrix: Water
Date Received: 12/01/23 09:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652956	12/05/23 14:26	BPO	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 21:21	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653195	12/06/23 19:48	TH	EET PEN
Total/NA	Prep	8011			35.5 mL	35 mL	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653100	12/06/23 14:57	PG	EET PEN

Client Sample ID: ROST4PZE-ROX-113023
Lab Sample ID: 400-247593-4
Date Collected: 11/30/23 09:20
Matrix: Water
Date Received: 12/01/23 09:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652956	12/05/23 11:24	BPO	EET PEN
Total/NA	Prep	3520C			233.6 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 21:42	S1B	EET PEN
Total/NA	Prep	3520C			233.6 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653195	12/06/23 20:09	TH	EET PEN
Total/NA	Prep	3520C	RERA		245 mL	1 mL	654289	12/14/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	654774	12/19/23 10:52	KJA	EET PEN
Total/NA	Prep	8011			34.5 mL	35 mL	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653100	12/06/23 15:18	PG	EET PEN

Client Sample ID: MW2-ROX-113023
Lab Sample ID: 400-247593-5
Date Collected: 11/30/23 10:35
Matrix: Water
Date Received: 12/01/23 09:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652956	12/05/23 11:47	BPO	EET PEN

Client Sample ID: MW2-ROX-113023

Lab Sample ID: 400-247593-5

Date Collected: 11/30/23 10:35

Matrix: Water

Date Received: 12/01/23 09:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			237 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 22:03	S1B	EET PEN
Total/NA	Prep	3520C			237 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653195	12/06/23 20:29	TH	EET PEN
Total/NA	Prep	3520C	RERA		243 mL	1 mL	654289	12/14/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	654774	12/19/23 10:52	KJA	EET PEN
Total/NA	Prep	8011			35.3 mL	35 mL	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653100	12/06/23 15:39	PG	EET PEN

Client Sample ID: MW22-ROX-113023

Lab Sample ID: 400-247593-6

Date Collected: 11/30/23 11:25

Matrix: Water

Date Received: 12/01/23 09:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652956	12/05/23 12:09	BPO	EET PEN
Total/NA	Analysis	8260D	DL	2	5 mL	5 mL	653111	12/06/23 12:42	BPO	EET PEN
Total/NA	Prep	3520C			242 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 22:25	S1B	EET PEN
Total/NA	Prep	3520C	RERA		233.8 mL	1 mL	654289	12/14/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E	RERA	1	0.4 mL	0.4 mL	654902	12/19/23 14:47	VC1	EET PEN
Total/NA	Prep	3520C			242 mL	1 mL	652972	12/05/23 09:57	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653195	12/06/23 20:49	TH	EET PEN
Total/NA	Prep	3520C	RERA		233.8 mL	1 mL	654289	12/14/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	654774	12/19/23 11:12	KJA	EET PEN
Total/NA	Prep	8011			34.4 mL	35 mL	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653100	12/06/23 16:00	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-652956/3

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	8260D		1	5 mL	5 mL	652956	12/05/23 10:39	BPO	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-652972/1-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 16:27	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653195	12/06/23 15:44	TH	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-652995/1-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	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653060	12/05/23 15:58	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-653111/3

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	8260D		1	5 mL	5 mL	653111	12/06/23 10:26	BPO	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-654289/1-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	654289	12/14/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654902	12/19/23 13:40	VC1	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	654289	12/14/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	654774	12/19/23 09:30	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652956/1001

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	8260D		1	5 mL	5 mL	652956	12/05/23 09:34	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652972/2-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 16:48	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	653195	12/06/23 16:04	TH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652972/4-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 17:30	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652995/2-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	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653060	12/05/23 16:19	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653111/1001
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	8260D		1	5 mL	5 mL	653111	12/06/23 09:23	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-654289/2-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	654289	12/14/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654902	12/19/23 14:02	VC1	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	654289	12/14/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	654774	12/19/23 09:51	KJA	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-652972/3-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 17:09	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	653195	12/06/23 16:25	TH	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-652972/5-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	652972	12/05/23 09:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653218	12/06/23 17:51	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-652995/3-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	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653060	12/05/23 16:40	PG	EET PEN

Lab Chronicle

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

Job ID: 400-247593-1

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-654289/3-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	654289	12/14/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654902	12/19/23 14:24	VC1	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	654289	12/14/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	654774	12/19/23 10:11	KJA	EET PEN

Client Sample ID: ROST4PZE-ROX-113023
Lab Sample ID: 400-247593-4 MS

Date Collected: 11/30/23 09:20
Matrix: Water
Date Received: 12/01/23 09:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652956	12/05/23 12:55	BPO	EET PEN

Client Sample ID: ROST4PZE-ROX-113023
Lab Sample ID: 400-247593-4 MSD

Date Collected: 11/30/23 09:20
Matrix: Water
Date Received: 12/01/23 09:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	652956	12/05/23 13:17	BPO	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 652956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247593-1	TB-ROX-113023-8260-A	Total/NA	Water	8260D	
400-247593-3	ROST4PZE-ROX-113023-EB	Total/NA	Water	8260D	
400-247593-4	ROST4PZE-ROX-113023	Total/NA	Water	8260D	
400-247593-5	MW2-ROX-113023	Total/NA	Water	8260D	
400-247593-6	MW22-ROX-113023	Total/NA	Water	8260D	
MB 400-652956/3	Method Blank	Total/NA	Water	8260D	
LCS 400-652956/1001	Lab Control Sample	Total/NA	Water	8260D	
400-247593-4 MS	ROST4PZE-ROX-113023	Total/NA	Water	8260D	
400-247593-4 MSD	ROST4PZE-ROX-113023	Total/NA	Water	8260D	

Analysis Batch: 653111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247593-6 - DL	MW22-ROX-113023	Total/NA	Water	8260D	
MB 400-653111/3	Method Blank	Total/NA	Water	8260D	
LCS 400-653111/1001	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 652972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247593-3	ROST4PZE-ROX-113023-EB	Total/NA	Water	3520C	
400-247593-4	ROST4PZE-ROX-113023	Total/NA	Water	3520C	
400-247593-5	MW2-ROX-113023	Total/NA	Water	3520C	
400-247593-6	MW22-ROX-113023	Total/NA	Water	3520C	
MB 400-652972/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-652972/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-652972/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-652972/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-652972/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 653195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247593-3	ROST4PZE-ROX-113023-EB	Total/NA	Water	8270E SIM	652972
400-247593-4	ROST4PZE-ROX-113023	Total/NA	Water	8270E SIM	652972
400-247593-5	MW2-ROX-113023	Total/NA	Water	8270E SIM	652972
400-247593-6	MW22-ROX-113023	Total/NA	Water	8270E SIM	652972
MB 400-652972/1-A	Method Blank	Total/NA	Water	8270E SIM	652972
LCS 400-652972/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	652972
LCSD 400-652972/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	652972

Analysis Batch: 653218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247593-3	ROST4PZE-ROX-113023-EB	Total/NA	Water	8270E	652972
400-247593-4	ROST4PZE-ROX-113023	Total/NA	Water	8270E	652972
400-247593-5	MW2-ROX-113023	Total/NA	Water	8270E	652972
400-247593-6	MW22-ROX-113023	Total/NA	Water	8270E	652972
MB 400-652972/1-A	Method Blank	Total/NA	Water	8270E	652972
LCS 400-652972/2-A	Lab Control Sample	Total/NA	Water	8270E	652972
LCS 400-652972/4-A	Lab Control Sample	Total/NA	Water	8270E	652972
LCSD 400-652972/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	652972
LCSD 400-652972/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	652972

GC/MS Semi VOA

Prep Batch: 654289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247593-4 - RERA	ROST4PZE-ROX-113023	Total/NA	Water	3520C	
400-247593-5 - RERA	MW2-ROX-113023	Total/NA	Water	3520C	
400-247593-6 - RERA	MW22-ROX-113023	Total/NA	Water	3520C	
MB 400-654289/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-654289/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-654289/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 654774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247593-4 - RERA	ROST4PZE-ROX-113023	Total/NA	Water	8270E SIM	654289
400-247593-5 - RERA	MW2-ROX-113023	Total/NA	Water	8270E SIM	654289
400-247593-6 - RERA	MW22-ROX-113023	Total/NA	Water	8270E SIM	654289
MB 400-654289/1-A	Method Blank	Total/NA	Water	8270E SIM	654289
LCS 400-654289/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	654289
LCSD 400-654289/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	654289

Analysis Batch: 654902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247593-6 - RERA	MW22-ROX-113023	Total/NA	Water	8270E	654289
MB 400-654289/1-A	Method Blank	Total/NA	Water	8270E	654289
LCS 400-654289/2-A	Lab Control Sample	Total/NA	Water	8270E	654289
LCSD 400-654289/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	654289

GC Semi VOA

Prep Batch: 652995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247593-2	TB-ROX-113023-8011-A	Total/NA	Water	8011	
400-247593-3	ROST4PZE-ROX-113023-EB	Total/NA	Water	8011	
400-247593-4	ROST4PZE-ROX-113023	Total/NA	Water	8011	
400-247593-5	MW2-ROX-113023	Total/NA	Water	8011	
400-247593-6	MW22-ROX-113023	Total/NA	Water	8011	
MB 400-652995/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-652995/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-652995/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 653060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-652995/1-A	Method Blank	Total/NA	Water	8011	652995
LCS 400-652995/2-A	Lab Control Sample	Total/NA	Water	8011	652995
LCSD 400-652995/3-A	Lab Control Sample Dup	Total/NA	Water	8011	652995

Analysis Batch: 653100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247593-2	TB-ROX-113023-8011-A	Total/NA	Water	8011	652995
400-247593-3	ROST4PZE-ROX-113023-EB	Total/NA	Water	8011	652995
400-247593-4	ROST4PZE-ROX-113023	Total/NA	Water	8011	652995
400-247593-5	MW2-ROX-113023	Total/NA	Water	8011	652995
400-247593-6	MW22-ROX-113023	Total/NA	Water	8011	652995

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-652956/3
Matrix: Water
Analysis Batch: 652956

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			12/05/23 10:39	1
Acrolein	ND		20	3.3	ug/L			12/05/23 10:39	1
Acrylonitrile	ND		10	2.8	ug/L			12/05/23 10:39	1
Benzene	ND		1.0	0.50	ug/L			12/05/23 10:39	1
Bromobenzene	ND		1.0	0.54	ug/L			12/05/23 10:39	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/05/23 10:39	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/05/23 10:39	1
Bromoform	ND		5.0	0.25	ug/L			12/05/23 10:39	1
Bromomethane	ND		1.0	0.98	ug/L			12/05/23 10:39	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/05/23 10:39	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/05/23 10:39	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/05/23 10:39	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/05/23 10:39	1
Chloroethane	ND		1.0	0.76	ug/L			12/05/23 10:39	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/05/23 10:39	1
Chloroform	ND		1.0	0.90	ug/L			12/05/23 10:39	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/05/23 10:39	1
Chloromethane	ND		1.0	0.90	ug/L			12/05/23 10:39	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/05/23 10:39	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/05/23 10:39	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/05/23 10:39	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/05/23 10:39	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/05/23 10:39	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/05/23 10:39	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/05/23 10:39	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/05/23 10:39	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/05/23 10:39	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 10:39	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 10:39	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 10:39	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/05/23 10:39	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/05/23 10:39	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/05/23 10:39	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/05/23 10:39	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/05/23 10:39	1
2-Hexanone	ND		25	1.4	ug/L			12/05/23 10:39	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/05/23 10:39	1
Methylene bromide	ND		5.0	0.22	ug/L			12/05/23 10:39	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/05/23 10:39	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/05/23 10:39	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/05/23 10:39	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/05/23 10:39	1
Naphthalene	ND		5.0	3.0	ug/L			12/05/23 10:39	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/05/23 10:39	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/05/23 10:39	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/05/23 10:39	1
o-Xylene	ND		5.0	0.60	ug/L			12/05/23 10:39	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/05/23 10:39	1

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

Lab Sample ID: MB 400-652956/3
Matrix: Water
Analysis Batch: 652956

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			12/05/23 10:39	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/05/23 10:39	1
Styrene	ND		1.0	1.0	ug/L			12/05/23 10:39	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/05/23 10:39	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/05/23 10:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/05/23 10:39	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/05/23 10:39	1
Toluene	ND		1.0	0.90	ug/L			12/05/23 10:39	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/05/23 10:39	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/05/23 10:39	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/05/23 10:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/05/23 10:39	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/05/23 10:39	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/05/23 10:39	1
Trichloroethene	ND		1.0	0.15	ug/L			12/05/23 10:39	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/05/23 10:39	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/05/23 10:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/05/23 10:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/05/23 10:39	1
Vinyl acetate	ND		25	0.93	ug/L			12/05/23 10:39	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/05/23 10:39	1
Xylenes, Total	ND		10	1.6	ug/L			12/05/23 10:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 130*		*12/05/23 10:39*	*1*
Dibromofluoromethane	*110*		*75 - 126*		*12/05/23 10:39*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*12/05/23 10:39*	*1*

Lab Sample ID: LCS 400-652956/1001
Matrix: Water
Analysis Batch: 652956

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	218		ug/L		109	43 - 160
Acrolein	500	502		ug/L		100	38 - 160
Acrylonitrile	500	486		ug/L		97	64 - 142
Benzene	50.0	49.7		ug/L		99	70 - 130
Bromobenzene	50.0	49.0		ug/L		98	70 - 132
Bromochloromethane	50.0	48.9		ug/L		98	70 - 130
Bromodichloromethane	50.0	50.7		ug/L		101	67 - 133
Bromoform	50.0	49.5		ug/L		99	57 - 140
Bromomethane	50.0	29.5		ug/L		59	10 - 160
2-Butanone (MEK)	200	220		ug/L		110	61 - 145
Carbon disulfide	50.0	41.1		ug/L		82	61 - 137
Carbon tetrachloride	50.0	44.8		ug/L		90	61 - 137
Chlorobenzene	50.0	48.8		ug/L		98	70 - 130
Chloroethane	50.0	38.5		ug/L		77	55 - 141
2-Chloroethyl vinyl ether	50.0	63.0		ug/L		126	10 - 160

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

Lab Sample ID: LCS 400-652956/1001
Matrix: Water
Analysis Batch: 652956

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	48.5		ug/L		97	69 - 130
1-Chlorohexane	50.0	49.9		ug/L		100	69 - 130
Chloromethane	50.0	49.4		ug/L		99	58 - 137
cis-1,2-Dichloroethene	50.0	48.0		ug/L		96	68 - 130
cis-1,3-Dichloropropene	50.0	52.0		ug/L		104	69 - 132
Dibromochloromethane	50.0	51.2		ug/L		102	67 - 135
1,2-Dichlorobenzene	50.0	49.7		ug/L		99	67 - 130
1,3-Dichlorobenzene	50.0	50.5		ug/L		101	70 - 130
1,4-Dichlorobenzene	50.0	50.0		ug/L		100	70 - 130
Dichlorodifluoromethane	50.0	47.5		ug/L		95	41 - 146
1,1-Dichloroethane	50.0	48.1		ug/L		96	70 - 130
1,2-Dichloroethane	50.0	49.3		ug/L		99	69 - 130
1,1-Dichloroethene	50.0	43.8		ug/L		88	63 - 134
1,2-Dichloropropane	50.0	51.7		ug/L		103	70 - 130
1,3-Dichloropropane	50.0	53.7		ug/L		107	70 - 130
2,2-Dichloropropane	50.0	40.8		ug/L		82	52 - 135
1,1-Dichloropropene	50.0	49.0		ug/L		98	70 - 130
Ethylbenzene	50.0	50.7		ug/L		101	70 - 130
Ethyl methacrylate	50.0	50.4		ug/L		101	68 - 130
Hexachlorobutadiene	50.0	55.7		ug/L		111	53 - 140
2-Hexanone	200	236		ug/L		118	65 - 137
Isopropylbenzene	50.0	49.7		ug/L		99	70 - 130
Methylene bromide	50.0	48.1		ug/L		96	70 - 130
Methylene Chloride	50.0	48.3		ug/L		97	66 - 135
4-Methyl-2-pentanone (MIBK)	200	202		ug/L		101	69 - 138
Methyl tert-butyl ether	50.0	49.7		ug/L		99	66 - 130
m-Xylene & p-Xylene	50.0	50.6		ug/L		101	70 - 130
Naphthalene	50.0	46.7		ug/L		93	47 - 149
n-Butylbenzene	50.0	55.1		ug/L		110	67 - 130
N-Propylbenzene	50.0	51.1		ug/L		102	70 - 130
o-Chlorotoluene	50.0	52.3		ug/L		105	70 - 130
o-Xylene	50.0	51.2		ug/L		102	70 - 130
p-Chlorotoluene	50.0	51.0		ug/L		102	70 - 130
p-Isopropyltoluene	50.0	51.4		ug/L		103	65 - 130
sec-Butylbenzene	50.0	50.3		ug/L		101	66 - 130
Styrene	50.0	51.2		ug/L		102	70 - 130
tert-Butylbenzene	50.0	46.6		ug/L		93	64 - 139
1,1,1,2-Tetrachloroethane	50.0	48.1		ug/L		96	67 - 131
1,1,2,2-Tetrachloroethane	50.0	49.8		ug/L		100	70 - 131
Tetrachloroethene	50.0	49.7		ug/L		99	65 - 130
Toluene	50.0	49.0		ug/L		98	70 - 130
trans-1,2-Dichloroethene	50.0	46.4		ug/L		93	70 - 130
trans-1,3-Dichloropropene	50.0	52.3		ug/L		105	63 - 130
1,2,3-Trichlorobenzene	50.0	47.9		ug/L		96	60 - 138
1,2,4-Trichlorobenzene	50.0	47.3		ug/L		95	60 - 140
1,1,1-Trichloroethane	50.0	45.6		ug/L		91	68 - 130
1,1,2-Trichloroethane	50.0	53.1		ug/L		106	70 - 130
Trichloroethene	50.0	47.6		ug/L		95	70 - 130
Trichlorofluoromethane	50.0	45.3		ug/L		91	65 - 138

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

Lab Sample ID: LCS 400-652956/1001
Matrix: Water
Analysis Batch: 652956

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	48.9		ug/L		98	70 - 130
1,2,4-Trimethylbenzene	50.0	52.2		ug/L		104	70 - 130
1,3,5-Trimethylbenzene	50.0	50.6		ug/L		101	69 - 130
Vinyl acetate	100	116		ug/L		116	26 - 160
Vinyl chloride	50.0	50.3		ug/L		101	59 - 136
Xylenes, Total	100	102		ug/L		102	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*72 - 130*
Dibromofluoromethane	*94*		*75 - 126*
Toluene-d8 (Surr)	*99*		*64 - 132*

Lab Sample ID: 400-247593-4 MS
Matrix: Water
Analysis Batch: 652956

Client Sample ID: ROST4PZE-ROX-113023
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND		200	120		ug/L		60	43 - 150
Acrolein	ND		500	456		ug/L		91	38 - 150
Acrylonitrile	ND		500	560		ug/L		112	62 - 149
Benzene	ND		50.0	53.5		ug/L		107	56 - 142
Bromobenzene	ND		50.0	51.6		ug/L		103	59 - 136
Bromochloromethane	ND		50.0	51.7		ug/L		103	64 - 140
Bromodichloromethane	ND		50.0	53.0		ug/L		106	59 - 143
Bromoform	ND		50.0	51.4		ug/L		103	50 - 140
Bromomethane	ND		50.0	26.8		ug/L		54	10 - 150
2-Butanone (MEK)	5.8	J	200	145		ug/L		70	55 - 150
Carbon disulfide	ND		50.0	44.1		ug/L		88	48 - 150
Carbon tetrachloride	ND		50.0	45.2		ug/L		90	55 - 145
Chlorobenzene	ND		50.0	51.9		ug/L		104	64 - 130
Chloroethane	ND		50.0	28.6		ug/L		57	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	3.03	J F1	ug/L		6	10 - 150
Chloroform	ND		50.0	51.8		ug/L		104	60 - 141
1-Chlorohexane	ND		50.0	53.6		ug/L		107	56 - 136
Chloromethane	ND		50.0	46.9		ug/L		94	49 - 148
cis-1,2-Dichloroethene	ND		50.0	51.6		ug/L		103	59 - 143
cis-1,3-Dichloropropene	ND		50.0	55.3		ug/L		111	57 - 140
Dibromochloromethane	ND		50.0	53.1		ug/L		106	56 - 143
1,2-Dichlorobenzene	ND		50.0	51.4		ug/L		103	52 - 137
1,3-Dichlorobenzene	ND		50.0	51.9		ug/L		104	54 - 135
1,4-Dichlorobenzene	ND		50.0	51.5		ug/L		103	53 - 135
Dichlorodifluoromethane	ND		50.0	42.0		ug/L		84	16 - 150
1,1-Dichloroethane	ND		50.0	51.4		ug/L		103	61 - 144
1,2-Dichloroethane	ND		50.0	52.3		ug/L		105	60 - 141
1,1-Dichloroethene	ND		50.0	47.2		ug/L		94	54 - 147
1,2-Dichloropropane	ND		50.0	55.4		ug/L		111	66 - 137
1,3-Dichloropropane	ND		50.0	59.0		ug/L		118	66 - 133
2,2-Dichloropropane	ND		50.0	42.3		ug/L		85	42 - 144

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

Lab Sample ID: 400-247593-4 MS
Matrix: Water
Analysis Batch: 652956

Client Sample ID: ROST4PZE-ROX-113023
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	52.4		ug/L		105	65 - 136
Ethylbenzene	1.1		50.0	54.5		ug/L		107	58 - 131
Ethyl methacrylate	ND		50.0	57.1		ug/L		114	64 - 130
Hexachlorobutadiene	ND		50.0	55.9		ug/L		112	31 - 149
2-Hexanone	ND		200	170		ug/L		85	65 - 140
Isopropylbenzene	0.64	J	50.0	52.8		ug/L		104	56 - 133
Methylene bromide	ND		50.0	52.4		ug/L		105	63 - 138
Methylene Chloride	ND		50.0	54.7		ug/L		109	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	238		ug/L		119	63 - 146
Methyl tert-butyl ether	ND		50.0	54.6		ug/L		109	59 - 137
m-Xylene & p-Xylene	1.6	J	50.0	54.5		ug/L		106	57 - 130
Naphthalene	ND		50.0	59.7		ug/L		119	25 - 150
n-Butylbenzene	ND		50.0	54.3		ug/L		109	41 - 142
N-Propylbenzene	ND		50.0	52.3		ug/L		105	51 - 138
o-Chlorotoluene	ND		50.0	51.7		ug/L		103	53 - 134
o-Xylene	ND		50.0	54.4		ug/L		109	61 - 130
p-Chlorotoluene	ND		50.0	51.4		ug/L		103	54 - 133
p-Isopropyltoluene	ND		50.0	53.0		ug/L		106	48 - 139
sec-Butylbenzene	ND		50.0	52.1		ug/L		104	50 - 138
Styrene	ND		50.0	54.0		ug/L		108	58 - 131
tert-Butylbenzene	ND		50.0	47.7		ug/L		95	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	53.0		ug/L		106	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	56.7		ug/L		113	66 - 135
Tetrachloroethene	ND		50.0	50.9		ug/L		102	52 - 133
Toluene	ND		50.0	52.8		ug/L		106	65 - 130
trans-1,2-Dichloroethene	ND		50.0	49.6		ug/L		99	61 - 143
trans-1,3-Dichloropropene	ND		50.0	55.0		ug/L		110	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	59.0		ug/L		118	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	59.0		ug/L		118	39 - 148
1,1,1-Trichloroethane	ND		50.0	48.1		ug/L		96	57 - 142
1,1,2-Trichloroethane	ND		50.0	59.7		ug/L		119	66 - 131
Trichloroethene	ND		50.0	50.9		ug/L		102	64 - 136
Trichlorofluoromethane	ND		50.0	38.9		ug/L		78	54 - 150
1,2,3-Trichloropropane	ND		50.0	54.8		ug/L		110	65 - 133
1,2,4-Trimethylbenzene	8.6		50.0	62.3		ug/L		108	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	53.0		ug/L		106	52 - 135
Vinyl acetate	ND		100	109		ug/L		109	26 - 150
Vinyl chloride	ND		50.0	44.5		ug/L		89	46 - 150
Xylenes, Total	1.8	J	100	109		ug/L		107	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*72 - 130*
Dibromofluoromethane	*92*		*75 - 126*
Toluene-d8 (Surr)	*99*		*64 - 132*

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

Lab Sample ID: 400-247593-4 MSD
Matrix: Water
Analysis Batch: 652956

Client Sample ID: ROST4PZE-ROX-113023
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	119		ug/L		60	43 - 150	1	30
Acrolein	ND		500	459		ug/L		92	38 - 150	1	31
Acrylonitrile	ND		500	560		ug/L		112	62 - 149	0	30
Benzene	ND		50.0	52.8		ug/L		106	56 - 142	1	30
Bromobenzene	ND		50.0	60.0		ug/L		120	59 - 136	15	30
Bromochloromethane	ND		50.0	51.6		ug/L		103	64 - 140	0	30
Bromodichloromethane	ND		50.0	52.4		ug/L		105	59 - 143	1	30
Bromoform	ND		50.0	51.7		ug/L		103	50 - 140	1	30
Bromomethane	ND		50.0	26.9		ug/L		54	10 - 150	0	50
2-Butanone (MEK)	5.8	J	200	146		ug/L		70	55 - 150	1	30
Carbon disulfide	ND		50.0	42.6		ug/L		85	48 - 150	4	30
Carbon tetrachloride	ND		50.0	43.8		ug/L		88	55 - 145	3	30
Chlorobenzene	ND		50.0	51.1		ug/L		102	64 - 130	1	30
Chloroethane	ND		50.0	29.4		ug/L		59	50 - 150	3	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	50.6		ug/L		101	60 - 141	2	30
1-Chlorohexane	ND		50.0	51.6		ug/L		103	56 - 136	4	30
Chloromethane	ND		50.0	45.8		ug/L		92	49 - 148	2	31
cis-1,2-Dichloroethene	ND		50.0	50.9		ug/L		102	59 - 143	1	30
cis-1,3-Dichloropropene	ND		50.0	55.9		ug/L		112	57 - 140	1	30
Dibromochloromethane	ND		50.0	52.6		ug/L		105	56 - 143	1	30
1,2-Dichlorobenzene	ND		50.0	51.6		ug/L		103	52 - 137	0	30
1,3-Dichlorobenzene	ND		50.0	51.8		ug/L		104	54 - 135	0	30
1,4-Dichlorobenzene	ND		50.0	51.6		ug/L		103	53 - 135	0	30
Dichlorodifluoromethane	ND		50.0	40.9		ug/L		82	16 - 150	3	31
1,1-Dichloroethane	ND		50.0	49.8		ug/L		100	61 - 144	3	30
1,2-Dichloroethane	ND		50.0	51.1		ug/L		102	60 - 141	2	30
1,1-Dichloroethene	ND		50.0	45.6		ug/L		91	54 - 147	3	30
1,2-Dichloropropane	ND		50.0	54.8		ug/L		110	66 - 137	1	30
1,3-Dichloropropane	ND		50.0	58.5		ug/L		117	66 - 133	1	30
2,2-Dichloropropane	ND		50.0	42.2		ug/L		84	42 - 144	0	31
1,1-Dichloropropene	ND		50.0	50.5		ug/L		101	65 - 136	4	30
Ethylbenzene	1.1		50.0	53.3		ug/L		104	58 - 131	2	30
Ethyl methacrylate	ND		50.0	57.3		ug/L		115	64 - 130	0	30
Hexachlorobutadiene	ND		50.0	54.0		ug/L		108	31 - 149	4	36
2-Hexanone	ND		200	167		ug/L		84	65 - 140	1	30
Isopropylbenzene	0.64	J	50.0	51.8		ug/L		102	56 - 133	2	30
Methylene bromide	ND		50.0	51.6		ug/L		103	63 - 138	2	30
Methylene Chloride	ND		50.0	54.2		ug/L		108	60 - 146	1	32
4-Methyl-2-pentanone (MIBK)	ND		200	241		ug/L		121	63 - 146	1	30
Methyl tert-butyl ether	ND		50.0	54.6		ug/L		109	59 - 137	0	30
m-Xylene & p-Xylene	1.6	J	50.0	53.0		ug/L		103	57 - 130	3	30
Naphthalene	ND		50.0	59.7		ug/L		119	25 - 150	0	30
n-Butylbenzene	ND		50.0	53.1		ug/L		106	41 - 142	2	31
N-Propylbenzene	ND		50.0	51.1		ug/L		102	51 - 138	2	30
o-Chlorotoluene	ND		50.0	51.5		ug/L		103	53 - 134	1	30
o-Xylene	ND		50.0	53.1		ug/L		106	61 - 130	2	30
p-Chlorotoluene	ND		50.0	51.6		ug/L		103	54 - 133	0	30

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

Lab Sample ID: 400-247593-4 MSD
Matrix: Water
Analysis Batch: 652956

Client Sample ID: ROST4PZE-ROX-113023
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	51.5		ug/L		103	48 - 139	3	30
sec-Butylbenzene	ND		50.0	50.6		ug/L		101	50 - 138	3	30
Styrene	ND		50.0	53.7		ug/L		107	58 - 131	1	30
tert-Butylbenzene	ND		50.0	46.6		ug/L		93	54 - 146	2	30
1,1,1,2-Tetrachloroethane	ND		50.0	52.1		ug/L		104	59 - 137	2	30
1,1,2,2-Tetrachloroethane	ND		50.0	57.0		ug/L		114	66 - 135	0	30
Tetrachloroethene	ND		50.0	49.1		ug/L		98	52 - 133	4	30
Toluene	ND		50.0	51.3		ug/L		103	65 - 130	3	30
trans-1,2-Dichloroethene	ND		50.0	48.5		ug/L		97	61 - 143	2	30
trans-1,3-Dichloropropene	ND		50.0	55.0		ug/L		110	53 - 133	0	30
1,2,3-Trichlorobenzene	ND		50.0	59.0		ug/L		118	43 - 145	0	30
1,2,4-Trichlorobenzene	ND		50.0	58.6		ug/L		117	39 - 148	1	30
1,1,1-Trichloroethane	ND		50.0	46.2		ug/L		92	57 - 142	4	30
1,1,2-Trichloroethane	ND		50.0	57.4		ug/L		115	66 - 131	4	30
Trichloroethene	ND		50.0	49.8		ug/L		100	64 - 136	2	30
Trichlorofluoromethane	ND		50.0	37.9		ug/L		76	54 - 150	3	30
1,2,3-Trichloropropane	ND		50.0	55.2		ug/L		110	65 - 133	1	30
1,2,4-Trimethylbenzene	8.6		50.0	62.1		ug/L		107	50 - 139	0	30
1,3,5-Trimethylbenzene	ND		50.0	52.4		ug/L		105	52 - 135	1	30
Vinyl acetate	ND		100	110		ug/L		110	26 - 150	1	33
Vinyl chloride	ND		50.0	43.0		ug/L		86	46 - 150	3	30
Xylenes, Total	1.8	J	100	106		ug/L		104	59 - 130	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*72 - 130*
Dibromofluoromethane	*93*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Lab Sample ID: MB 400-653111/3
Matrix: Water
Analysis Batch: 653111

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/06/23 10:26	1
o-Xylene	ND		5.0	0.60	ug/L			12/06/23 10:26	1
Xylenes, Total	ND		10	1.6	ug/L			12/06/23 10:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*12/06/23 10:26*	*1*
Dibromofluoromethane	*110*		*75 - 126*		*12/06/23 10:26*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*12/06/23 10:26*	*1*

Lab Sample ID: LCS 400-653111/1001
Matrix: Water
Analysis Batch: 653111

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
m-Xylene & p-Xylene			50.0	52.0		ug/L		104	70 - 130		

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

Lab Sample ID: LCS 400-653111/1001
Matrix: Water
Analysis Batch: 653111

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	50.0	52.8		ug/L		106	70 - 130
Xylenes, Total	100	105		ug/L		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*72 - 130*
Dibromofluoromethane	*95*		*75 - 126*
Toluene-d8 (Surr)	*99*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-652972/1-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		12/05/23 09:56	12/06/23 16:27	1
Benzenethiol	ND		10	1.7	ug/L		12/05/23 09:56	12/06/23 16:27	1
Benzoic acid	ND		30	7.3	ug/L		12/05/23 09:56	12/06/23 16:27	1
Benzyl alcohol	ND		10	2.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/05/23 09:56	12/06/23 16:27	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		12/05/23 09:56	12/06/23 16:27	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		12/05/23 09:56	12/06/23 16:27	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/05/23 09:56	12/06/23 16:27	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Chloroaniline	ND		10	3.4	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		12/05/23 09:56	12/06/23 16:27	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/05/23 09:56	12/06/23 16:27	1
2-Chlorophenol	ND		10	2.2	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Dibenzofuran	ND		10	0.17	ug/L		12/05/23 09:56	12/06/23 16:27	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Diethyl phthalate	ND		10	0.24	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		12/05/23 09:56	12/06/23 16:27	1
Dimethyl phthalate	ND		10	0.17	ug/L		12/05/23 09:56	12/06/23 16:27	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		12/05/23 09:56	12/06/23 16:27	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/05/23 09:56	12/06/23 16:27	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/05/23 09:56	12/06/23 16:27	1
1,4-Dioxane	ND		10	1.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/05/23 09:56	12/06/23 16:27	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/05/23 09:56	12/06/23 16:27	1
Hexachloroethane	ND		10	4.2	ug/L		12/05/23 09:56	12/06/23 16:27	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-652972/1-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indene	ND		10	1.0	ug/L		12/05/23 09:56	12/06/23 16:27	1
Isophorone	ND		10	0.14	ug/L		12/05/23 09:56	12/06/23 16:27	1
2-Methylphenol	ND		10	1.8	ug/L		12/05/23 09:56	12/06/23 16:27	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		12/05/23 09:56	12/06/23 16:27	1
2-Nitroaniline	ND		10	2.2	ug/L		12/05/23 09:56	12/06/23 16:27	1
3-Nitroaniline	ND		10	1.8	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Nitroaniline	ND		10	1.5	ug/L		12/05/23 09:56	12/06/23 16:27	1
Nitrobenzene	ND		10	0.13	ug/L		12/05/23 09:56	12/06/23 16:27	1
2-Nitrophenol	ND		10	5.2	ug/L		12/05/23 09:56	12/06/23 16:27	1
4-Nitrophenol	ND		10	2.1	ug/L		12/05/23 09:56	12/06/23 16:27	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		12/05/23 09:56	12/06/23 16:27	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		12/05/23 09:56	12/06/23 16:27	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/05/23 09:56	12/06/23 16:27	1
Pentachlorophenol	ND		20	1.4	ug/L		12/05/23 09:56	12/06/23 16:27	1
Phenol	ND		10	2.6	ug/L		12/05/23 09:56	12/06/23 16:27	1
Pyridine	ND		10	3.2	ug/L		12/05/23 09:56	12/06/23 16:27	1
Quinoline	ND		10	4.5	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		12/05/23 09:56	12/06/23 16:27	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		12/05/23 09:56	12/06/23 16:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*46 - 124*	*12/05/23 09:56*	*12/06/23 16:27*	*1*
2-Fluorophenol	*23*		*13 - 113*	*12/05/23 09:56*	*12/06/23 16:27*	*1*
Nitrobenzene-d5	*71*		*36 - 126*	*12/05/23 09:56*	*12/06/23 16:27*	*1*
Phenol-d5	*46*		*17 - 127*	*12/05/23 09:56*	*12/06/23 16:27*	*1*
Terphenyl-d14	*83*		*44 - 149*	*12/05/23 09:56*	*12/06/23 16:27*	*1*
2,4,6-Tribromophenol	*48*		*26 - 150*	*12/05/23 09:56*	*12/06/23 16:27*	*1*

Lab Sample ID: LCS 400-652972/2-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	74.9		ug/L		62	21 - 120
Benzoic acid	120	56.5		ug/L		47	10 - 144
Benzyl alcohol	120	85.0		ug/L		71	28 - 120
Bis(2-chloroethoxy)methane	120	77.7		ug/L		65	47 - 120
Bis(2-chloroethyl)ether	120	80.0		ug/L		67	44 - 120
bis (2-chloroisopropyl) ether	120	76.0		ug/L		63	33 - 121
Bis(2-ethylhexyl) phthalate	120	95.0		ug/L		79	52 - 147
4-Bromophenyl phenyl ether	120	96.4		ug/L		80	54 - 122
Butyl benzyl phthalate	120	96.8		ug/L		81	54 - 133
4-Chloroaniline	120	68.5		ug/L		57	26 - 120
4-Chloro-3-methylphenol	120	89.8		ug/L		75	48 - 131
2-Chloronaphthalene	120	90.3		ug/L		75	52 - 121
2-Chlorophenol	120	77.2		ug/L		64	40 - 120
4-Chlorophenyl phenyl ether	120	96.9		ug/L		81	56 - 125
Dibenz[a,h]acridine	120	113		ug/L		94	31 - 150

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-652972/2-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dibenzofuran	120	95.3		ug/L		79	56 - 122
3,3'-Dichlorobenzidine	160	112		ug/L		70	36 - 132
2,4-Dichlorophenol	120	81.8		ug/L		68	49 - 120
Diethyl phthalate	120	95.6		ug/L		80	50 - 137
2,4-Dimethylphenol	120	80.3		ug/L		67	48 - 120
Dimethyl phthalate	120	91.2		ug/L		76	57 - 124
Di-n-butyl phthalate	120	105		ug/L		88	58 - 126
4,6-Dinitro-ortho-cresol	240	153		ug/L		64	23 - 148
2,4-Dinitrophenol	240	131		ug/L		55	10 - 150
2,4-Dinitrotoluene	120	96.6		ug/L		80	54 - 142
2,6-Dinitrotoluene	120	91.1		ug/L		76	55 - 130
Di-n-octyl phthalate	120	99.4		ug/L		83	57 - 138
1,4-Dioxane	120	60.6		ug/L		50	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	87.5		ug/L		73	45 - 124
Hexachlorobenzene	120	110		ug/L		91	52 - 129
Hexachlorocyclopentadiene	120	57.9		ug/L		48	10 - 134
Hexachloroethane	120	74.6		ug/L		62	20 - 120
Indene	120	93.2		ug/L		78	49 - 120
Isophorone	120	76.7		ug/L		64	48 - 120
2-Methylphenol	120	84.1		ug/L		70	46 - 124
3 & 4 Methylphenol	120	82.5		ug/L		69	45 - 120
2-Nitroaniline	120	89.3		ug/L		74	51 - 145
3-Nitroaniline	120	76.0		ug/L		63	37 - 127
4-Nitroaniline	120	89.1		ug/L		74	36 - 137
Nitrobenzene	120	76.8		ug/L		64	45 - 120
2-Nitrophenol	120	73.8		ug/L		62	40 - 124
4-Nitrophenol	240	189		ug/L		79	23 - 146
N-Nitrosodimethylamine	120	78.4		ug/L		65	29 - 137
N-Nitrosodi-n-propylamine	120	82.1		ug/L		68	45 - 120
N-Nitrosodiphenylamine	119	91.5		ug/L		77	54 - 120
Pentachlorophenol	240	212		ug/L		88	31 - 130
Phenol	120	79.0		ug/L		66	11 - 120
Pyridine	240	126		ug/L		52	16 - 120
Quinoline	120	98.7		ug/L		82	49 - 130
2,4,5-Trichlorophenol	120	93.6		ug/L		78	51 - 136
2,4,6-Trichlorophenol	120	91.2		ug/L		76	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*46 - 124*
2-Fluorophenol	*53*		*13 - 113*
Nitrobenzene-d5	*73*		*36 - 126*
Phenol-d5	*71*		*17 - 127*
Terphenyl-d14	*91*		*44 - 149*
2,4,6-Tribromophenol	*79*		*26 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-652972/4-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	5.12	J *-	ug/L		4	10 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*89*		*46 - 124*
2-Fluorophenol	*67*		*13 - 113*
Nitrobenzene-d5	*79*		*36 - 126*
Phenol-d5	*80*		*17 - 127*
Terphenyl-d14	*100*		*44 - 149*
2,4,6-Tribromophenol	*68*		*26 - 150*

Lab Sample ID: LCSD 400-652972/3-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	94.4		ug/L		79	21 - 120	23	30
Benzoic acid			120	61.8		ug/L		51	10 - 144	9	30
Benzyl alcohol			120	98.0		ug/L		82	28 - 120	14	30
Bis(2-chloroethoxy)methane			120	86.9		ug/L		72	47 - 120	11	30
Bis(2-chloroethyl)ether			120	89.8		ug/L		75	44 - 120	12	30
bis (2-chloroisopropyl) ether			120	84.8		ug/L		71	33 - 121	11	30
Bis(2-ethylhexyl) phthalate			120	101		ug/L		84	52 - 147	6	30
4-Bromophenyl phenyl ether			120	105		ug/L		87	54 - 122	8	30
Butyl benzyl phthalate			120	104		ug/L		87	54 - 133	7	30
4-Chloroaniline			120	83.2		ug/L		69	26 - 120	19	30
4-Chloro-3-methylphenol			120	100		ug/L		83	48 - 131	11	30
2-Chloronaphthalene			120	99.8		ug/L		83	52 - 121	10	30
2-Chlorophenol			120	87.5		ug/L		73	40 - 120	12	30
4-Chlorophenyl phenyl ether			120	106		ug/L		88	56 - 125	9	30
Dibenz[a,h]acridine			120	120		ug/L		101	31 - 150	6	30
Dibenzofuran			120	104		ug/L		87	56 - 122	9	30
3,3'-Dichlorobenzidine			160	131		ug/L		82	36 - 132	16	30
2,4-Dichlorophenol			120	93.5		ug/L		78	49 - 120	13	30
Diethyl phthalate			120	101		ug/L		84	50 - 137	6	30
2,4-Dimethylphenol			120	87.1		ug/L		73	48 - 120	8	30
Dimethyl phthalate			120	98.0		ug/L		82	57 - 124	7	30
Di-n-butyl phthalate			120	111		ug/L		92	58 - 126	5	30
4,6-Dinitro-ortho-cresol			240	173		ug/L		72	23 - 148	12	30
2,4-Dinitrophenol			240	144		ug/L		60	10 - 150	9	30
2,4-Dinitrotoluene			120	103		ug/L		86	54 - 142	7	30
2,6-Dinitrotoluene			120	98.5		ug/L		82	55 - 130	8	30
Di-n-octyl phthalate			120	103		ug/L		86	57 - 138	4	30
1,4-Dioxane			120	53.7		ug/L		45	31 - 120	12	30
1,2-Diphenylhydrazine (as Azobenzene)			120	93.9		ug/L		78	45 - 124	7	30
Hexachlorobenzene			120	119		ug/L		99	52 - 129	8	30
Hexachlorocyclopentadiene			120	68.3		ug/L		57	10 - 134	16	30
Hexachloroethane			120	88.3		ug/L		74	20 - 120	17	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-652972/3-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Indene			120	108		ug/L		90	49 - 120	14	30
Isophorone			120	84.9		ug/L		71	48 - 120	10	30
2-Methylphenol			120	91.8		ug/L		76	46 - 124	9	30
3 & 4 Methylphenol			120	91.8		ug/L		77	45 - 120	11	30
2-Nitroaniline			120	97.4		ug/L		81	51 - 145	9	30
3-Nitroaniline			120	89.4		ug/L		74	37 - 127	16	30
4-Nitroaniline			120	100		ug/L		83	36 - 137	12	30
Nitrobenzene			120	87.7		ug/L		73	45 - 120	13	30
2-Nitrophenol			120	91.3		ug/L		76	40 - 124	21	30
4-Nitrophenol			240	205		ug/L		85	23 - 146	8	30
N-Nitrosodimethylamine			120	87.2		ug/L		73	29 - 137	11	30
N-Nitrosodi-n-propylamine			120	92.4		ug/L		77	45 - 120	12	30
N-Nitrosodiphenylamine			119	99.0		ug/L		83	54 - 120	8	30
Pentachlorophenol			240	228		ug/L		95	31 - 130	7	30
Phenol			120	88.5		ug/L		74	11 - 120	11	30
Pyridine			240	131		ug/L		55	16 - 120	4	30
Quinoline			120	111		ug/L		93	49 - 130	12	30
2,4,5-Trichlorophenol			120	104		ug/L		87	51 - 136	11	30
2,4,6-Trichlorophenol			120	105		ug/L		87	50 - 127	14	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*89*		*46 - 124*
2-Fluorophenol	*55*		*13 - 113*
Nitrobenzene-d5	*81*		*36 - 126*
Phenol-d5	*77*		*17 - 127*
Terphenyl-d14	*94*		*44 - 149*
2,4,6-Tribromophenol	*82*		*26 - 150*

Lab Sample ID: LCSD 400-652972/5-A
Matrix: Water
Analysis Batch: 653218

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	116	*1	ug/L		97	10 - 120	183	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*94*		*46 - 124*
2-Fluorophenol	*72*		*13 - 113*
Nitrobenzene-d5	*85*		*36 - 126*
Phenol-d5	*84*		*17 - 127*
Terphenyl-d14	*98*		*44 - 149*
2,4,6-Tribromophenol	*72*		*26 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-654289/1-A
Matrix: Water
Analysis Batch: 654902

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654289

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		12/14/23 09:40	12/19/23 13:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*46 - 124*	*12/14/23 09:40*	*12/19/23 13:40*	*1*
Nitrobenzene-d5	*70*		*36 - 126*	*12/14/23 09:40*	*12/19/23 13:40*	*1*
Terphenyl-d14	*86*		*44 - 149*	*12/14/23 09:40*	*12/19/23 13:40*	*1*

Lab Sample ID: LCS 400-654289/2-A
Matrix: Water
Analysis Batch: 654902

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654289

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	*64*		*46 - 124*
Nitrobenzene-d5	*59*		*36 - 126*
Terphenyl-d14	*86*		*44 - 149*

Lab Sample ID: LCSD 400-654289/3-A
Matrix: Water
Analysis Batch: 654902

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 654289

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate			120	122		ug/L		102	52 - 147	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*46 - 124*
Nitrobenzene-d5	*67*		*36 - 126*
Terphenyl-d14	*103*		*44 - 149*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-652972/1-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		12/05/23 09:56	12/06/23 15:44	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/05/23 09:56	12/06/23 15:44	1
Anthracene	ND		0.20	0.047	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/05/23 09:56	12/06/23 15:44	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/05/23 09:56	12/06/23 15:44	1
Chrysene	ND		0.20	0.033	ug/L		12/05/23 09:56	12/06/23 15:44	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/05/23 09:56	12/06/23 15:44	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 400-652972/1-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		0.20	0.034	ug/L		12/05/23 09:56	12/06/23 15:44	1
Fluorene	ND		0.20	0.089	ug/L		12/05/23 09:56	12/06/23 15:44	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/05/23 09:56	12/06/23 15:44	1
Phenanthrene	ND		0.20	0.090	ug/L		12/05/23 09:56	12/06/23 15:44	1
Pyrene	ND		0.20	0.039	ug/L		12/05/23 09:56	12/06/23 15:44	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		12/05/23 09:56	12/06/23 15:44	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		12/05/23 09:56	12/06/23 15:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*158*	*S1+*	*18 - 147*	*12/05/23 09:56*	*12/06/23 15:44*	*1*
2-Fluorobiphenyl	*73*		*15 - 128*	*12/05/23 09:56*	*12/06/23 15:44*	*1*
Nitrobenzene-d5	*71*		*10 - 144*	*12/05/23 09:56*	*12/06/23 15:44*	*1*

Lab Sample ID: LCS 400-652972/2-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acenaphthene			120	88.4		ug/L		74	40 - 140		
Acenaphthylene			120	91.3		ug/L		76	40 - 140		
Anthracene			120	88.7		ug/L		74	40 - 140		
Benzo[a]anthracene			120	105		ug/L		87	40 - 140		
Benzo[a]pyrene			120	80.7		ug/L		67	40 - 140		
Benzo[b]fluoranthene			120	98.2		ug/L		82	40 - 140		
Benzo[g,h,i]perylene			120	94.9		ug/L		79	40 - 140		
Benzo[k]fluoranthene			120	97.7		ug/L		81	40 - 140		
Chrysene			120	88.1		ug/L		73	40 - 140		
Dibenz(a,h)anthracene			120	89.2		ug/L		74	40 - 140		
Fluoranthene			120	93.2		ug/L		78	40 - 140		
Fluorene			120	90.6		ug/L		75	40 - 140		
Indeno[1,2,3-cd]pyrene			120	89.3		ug/L		74	40 - 140		
Phenanthrene			120	86.7		ug/L		72	40 - 140		
Pyrene			120	121		ug/L		101	40 - 140		
1-Methylnaphthalene			120	70.8		ug/L		59	40 - 140		
2-Methylnaphthalene			120	71.9		ug/L		60	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*93*		*18 - 147*
2-Fluorobiphenyl	*70*		*15 - 128*
Nitrobenzene-d5	*72*		*10 - 144*

Lab Sample ID: LCSD 400-652972/3-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	84.4		ug/L		70	40 - 140	5	40
Acenaphthylene			120	88.3		ug/L		74	40 - 140	3	40

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 400-652972/3-A
Matrix: Water
Analysis Batch: 653195

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Anthracene			120	81.9		ug/L		68	40 - 140	8	40
Benzo[a]anthracene			120	97.7		ug/L		81	40 - 140	7	40
Benzo[a]pyrene			120	74.5		ug/L		62	40 - 140	8	40
Benzo[b]fluoranthene			120	95.1		ug/L		79	40 - 140	3	40
Benzo[g,h,i]perylene			120	84.2		ug/L		70	40 - 140	12	40
Benzo[k]fluoranthene			120	90.9		ug/L		76	40 - 140	7	40
Chrysene			120	80.6		ug/L		67	40 - 140	9	40
Dibenz(a,h)anthracene			120	80.5		ug/L		67	40 - 140	10	40
Fluoranthene			120	82.9		ug/L		69	40 - 140	12	40
Fluorene			120	84.8		ug/L		71	40 - 140	7	40
Indeno[1,2,3-cd]pyrene			120	80.3		ug/L		67	40 - 140	11	40
Phenanthrene			120	79.3		ug/L		66	40 - 140	9	40
Pyrene			120	117		ug/L		98	40 - 140	3	40
1-Methylnaphthalene			120	71.2		ug/L		59	40 - 140	1	40
2-Methylnaphthalene			120	72.7		ug/L		61	40 - 140	1	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*87*		*18 - 147*
2-Fluorobiphenyl	*67*		*15 - 128*
Nitrobenzene-d5	*76*		*10 - 144*

Lab Sample ID: MB 400-654289/1-A
Matrix: Water
Analysis Batch: 654774

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654289

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		12/14/23 09:40	12/19/23 09:30	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/14/23 09:40	12/19/23 09:30	1
Anthracene	ND		0.20	0.047	ug/L		12/14/23 09:40	12/19/23 09:30	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/14/23 09:40	12/19/23 09:30	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		12/14/23 09:40	12/19/23 09:30	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/14/23 09:40	12/19/23 09:30	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/14/23 09:40	12/19/23 09:30	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/14/23 09:40	12/19/23 09:30	1
Chrysene	ND		0.20	0.033	ug/L		12/14/23 09:40	12/19/23 09:30	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/14/23 09:40	12/19/23 09:30	1
Fluoranthene	ND		0.20	0.034	ug/L		12/14/23 09:40	12/19/23 09:30	1
Fluorene	ND		0.20	0.089	ug/L		12/14/23 09:40	12/19/23 09:30	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/14/23 09:40	12/19/23 09:30	1
Phenanthrene	ND		0.20	0.090	ug/L		12/14/23 09:40	12/19/23 09:30	1
Pyrene	ND		0.20	0.039	ug/L		12/14/23 09:40	12/19/23 09:30	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		12/14/23 09:40	12/19/23 09:30	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		12/14/23 09:40	12/19/23 09:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*18 - 147*	*12/14/23 09:40*	*12/19/23 09:30*	*1*
2-Fluorobiphenyl	*76*		*15 - 128*	*12/14/23 09:40*	*12/19/23 09:30*	*1*
Nitrobenzene-d5	*71*		*10 - 144*	*12/14/23 09:40*	*12/19/23 09:30*	*1*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: LCS 400-654289/2-A
Matrix: Water
Analysis Batch: 654774

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654289

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acenaphthene			120	89.4		ug/L		75	40 - 140		
Acenaphthylene			120	101		ug/L		84	40 - 140		
Anthracene			120	97.6		ug/L		81	40 - 140		
Benzo[a]anthracene			120	116	E	ug/L		97	40 - 140		
Benzo[a]pyrene			120	93.9		ug/L		78	40 - 140		
Benzo[b]fluoranthene			120	102		ug/L		85	40 - 140		
Benzo[g,h,i]perylene			120	85.2		ug/L		71	40 - 140		
Benzo[k]fluoranthene			120	89.2		ug/L		74	40 - 140		
Chrysene			120	85.1		ug/L		71	40 - 140		
Dibenz(a,h)anthracene			120	90.7		ug/L		76	40 - 140		
Fluoranthene			120	93.9		ug/L		78	40 - 140		
Fluorene			120	88.7		ug/L		74	40 - 140		
Indeno[1,2,3-cd]pyrene			120	92.8		ug/L		77	40 - 140		
Phenanthrene			120	85.0		ug/L		71	40 - 140		
Pyrene			120	91.4		ug/L		76	40 - 140		
1-Methylnaphthalene			120	72.6		ug/L		61	40 - 140		
2-Methylnaphthalene			120	76.5		ug/L		64	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*66*		*18 - 147*
2-Fluorobiphenyl	*67*		*15 - 128*
Nitrobenzene-d5	*72*		*10 - 144*

Lab Sample ID: LCSD 400-654289/3-A
Matrix: Water
Analysis Batch: 654774

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 654289

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	99.6		ug/L		83	40 - 140	11	40
Acenaphthylene			120	111		ug/L		93	40 - 140	9	40
Anthracene			120	107		ug/L		89	40 - 140	9	40
Benzo[a]anthracene			120	128	E	ug/L		106	40 - 140	9	40
Benzo[a]pyrene			120	103		ug/L		86	40 - 140	9	40
Benzo[b]fluoranthene			120	112		ug/L		93	40 - 140	9	40
Benzo[g,h,i]perylene			120	101		ug/L		84	40 - 140	17	40
Benzo[k]fluoranthene			120	94.4		ug/L		79	40 - 140	6	40
Chrysene			120	93.8		ug/L		78	40 - 140	10	40
Dibenz(a,h)anthracene			120	109		ug/L		91	40 - 140	18	40
Fluoranthene			120	102		ug/L		85	40 - 140	8	40
Fluorene			120	97.3		ug/L		81	40 - 140	9	40
Indeno[1,2,3-cd]pyrene			120	110		ug/L		92	40 - 140	17	40
Phenanthrene			120	93.2		ug/L		78	40 - 140	9	40
Pyrene			120	96.8		ug/L		81	40 - 140	6	40
1-Methylnaphthalene			120	72.1		ug/L		60	40 - 140	1	40
2-Methylnaphthalene			120	75.8		ug/L		63	40 - 140	1	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*71*		*18 - 147*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 400-654289/3-A
Matrix: Water
Analysis Batch: 654774

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 654289

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*15 - 128*
Nitrobenzene-d5	*73*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-652995/1-A
Matrix: Water
Analysis Batch: 653060

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652995

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		12/05/23 11:19	12/05/23 15:58	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 11:19	12/05/23 15:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*51 - 149*	*12/05/23 11:19*	*12/05/23 15:58*	*1*

Lab Sample ID: LCS 400-652995/2-A
Matrix: Water
Analysis Batch: 653060

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652995

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0967		ug/L		96	60 - 140		
1,2-Dibromoethane			0.100	0.0994		ug/L		99	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*79*		*51 - 149*

Lab Sample ID: LCSD 400-652995/3-A
Matrix: Water
Analysis Batch: 653060

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652995

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0922		ug/L		92	60 - 140	5	30
1,2-Dibromoethane			0.100	0.0956		ug/L		95	60 - 140	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*76*		*51 - 149*

LAB (LOCATION)

400-247593 COC

Shell Oil Products US Chain Of Custody Record

AECOM

☐ 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
Melissa Remiger	25278	DATE: 11/30/2023
PO #	**GSAP Project ID**	PAGE: __1__ of __2__
60697537 – 3.4.2	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 Monthly GW 60697537 – 3.4.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO.: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

SAMPLER NAME(S) (Print): C. McDavid, J. Mayer

LAB USE ONLY

TELEPHONE: 314-429-0100 FAX: 314-429-0462 Bill To Contact E-MAIL: melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

* Please include "J" values on Reports.
* Please provide sample receipt upon login.
* Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.4.2

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 8270 SIMS
	TB-ROX-113023-8260-A	11/30/2023	0000	Water	2					2	X			
	TB-ROX-113023-8011-A	11/30/2023	0000	Water	2					2		X		
	ROST4PZE-ROX-113023-EB	11/30/2023	0825	Water	6			2		8	X	X	X	X
	ROST4PZE-ROX-113023	11/30/2023	0920	Water	6			2		8	X	X	X	X
	MW2-ROX-113023	11/30/2023	1035	Water	6			2		8	X	X	X	X
	MW22-ROX-113023	11/30/2023	1125	Water	6			2		8	X	X	X	X

11-30-23

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 6339 6597 5530, 6339 6597 5540	11/30/2023	1600
Relinquished by: (Signature)	Received by: (Signature) CP	Date: 12/1/23	Time: 926
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: 2463004, 2463005, 2463006, 2463007

0.0°C IR8

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1/8/2024 (Rev. 1)

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc. Job Number: 400-247593-1

Login Number: 247593 **List Source: Eurofins Pensacola**
List Number: 1
Creator: Earnest, Tamantha

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	0.0°C IR8
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").	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. Job ID: 400-247593-1
Project/Site: ROXANA MONTHLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Roxana Groundwater Monthly – November/December 2023 Data Review

Laboratory SDG: 400-247654-1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 1/8/2024

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

Sample Identification	Sample Identification
TB-ROX-120123-8260-A	TB-ROX-120123-8011-A
MW14-ROX-120123	MW14-ROX-120123-DUP

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 case narrative stated that PAHs in field duplicate pair MW14-ROX-120123/MW14-ROX-120123-DUP were re-extracted 7 days outside extraction time criteria. Several SVOC LCS/LCSD recoveries and/or LCS/LCSD RPDs, were outside evaluation criteria. Results for 1,2,4-trimethylbenzene in field duplicate pair MW14-ROX-120123/MW14-ROX-120123-DUP were qualified as estimated (**J/J**) as the difference in results was greater than two times (2X) the reporting level. The continuing calibration verifications (CCV) for chloroethane and n-nitrosodimethylamine were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (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, PAHs in field duplicate pair MW14-ROX-120123/MW14-ROX-120123-DUP were re-extracted 7 days outside of extraction time criteria (7 days) and then re-analyzed for confirmation. Holding time exceedances were not greater than two times (2X) criteria. The results for the re-extracted and re-analyzed samples were comparable to the initial results; both sets of data are reported. Based on professional judgement, the results from the initial analysis were used for the purposes of this report. No qualification of data was required.

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/LCSD 400-653399/19-A/20-A	SVOCs	Benzenethiol	**3/5**	**61**	10-120/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	Aniline	63/46	**32**	21-120/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	Benzoic acid	84/54	**43**	10-144/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	bis(2-Chloroisopropyl) ether	38/**29**	28	33-121/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	2-Chlorophenol	67/42	**46**	40-120/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	2,4-Dinitrophenol	83/54	**43**	10-150/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	1,4-Dioxane	52/37	**34**	31-120/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	84/56	**39**	10-134/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	Hexachloroethane	73/53	**31**	20-120/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	n-Nitrosodimethylamine	50/37	**31**	29-137/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	Phenol	62/42	**39**	11-120/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	Pyridine	45/32	**33**	16-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol below evaluation criteria; benzenethiol has been identified as a poor performing analyte under Method 8270. Analytical data associated with LCS/LCS RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-120123	SVOCs	Benzenethiol	**UJ**
MW14-ROX-120123	SVOCs	bis(2-Chloroisopropyl) ether	**UJ**
MW14-ROX-120123-DUP	SVOCs	Benzenethiol	**UJ**
MW14-ROX-120123-DUP	SVOCs	bis(2-Chloroisopropyl) ether	**UJ**

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?

Yes

Field ID	Field Duplicate ID
MW14-ROX-120123	MW14-ROX-120123-DUP

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
MW14-ROX-120123	MW14-ROX-120123-DUP	VOCs	1,2,4-Trimethylbenzene	**> 2X RL**	**J/J**

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 verifications (CCVs) for chloroethane and n-nitrosodimethylamine were outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-120123	VOCs	Chloroethane	**UJ**
MW14-ROX-120123-DUP	VOCs	Chloroethane	**UJ**
MW14-ROX-120123	SVOCs	N-Nitrosodimethylamine	**UJ**
MW14-ROX-120123-DUP	SVOCs	N-Nitrosodimethylamine	**UJ**

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ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
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St. Louis, Missouri 63102
Generated 12/19/2023 4:53:41 PM

JOB DESCRIPTION

ROXANA MONTHLY GW

JOB NUMBER

400-247654-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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Job Narrative
400-247654-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 12/2/2023 8:23 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 time was 0.0°C

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-653096 recovered outside acceptance criteria, low biased, for Chloroethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: 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-120123-8260-A (400-247654-1), MW14-ROX-120123 (400-247654-3) and MW14-ROX-120123-DUP (400-247654-4). 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 8260D: The initial calibration verification (ICV) analyzed in batch 400-633903 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

GC/MS Semi VOA
Method 8270E: The following analyte(s) recovered outside control limits for the LCSD associated with preparation batch 400-653399 and analytical batch 400-653805: bis (2-chloroisopropyl) ether. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-653399 and 400-653399 and analytical batch 400-653805 recovered outside control limits for the following analytes: Hexachloroethane, N-Nitrosodimethylamine, 2,4-Dinitrophenol, Phenol, Benzoic acid, Benzenethiol,Hexachlorocyclopentadiene, 2-Chlorophenol, 1,4-Dioxane, Pyridine and Aniline.

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-653399 and analytical batch 400-653805 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 8270E: The continuing calibration verification (CCV) associated with batch 400-653805 recovered outside acceptance criteria, low biased, for N-Nitrosodimethylamine. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-653805 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-653805 recovered above the upper control

limit for 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 4-Chlorophenyl phenyl ether, Hexachlorobenzene, 2,4-Dinitrotoluene, Hexachlorocyclopentadiene, 4-Nitrophenol and Di-n-octyl 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 400-653805/3).

Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-652826 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-653755 recovered above the upper control limit for Benzo[g,h,i]perylene and Dibenz(a,h)anthracene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-654774 recovered above the upper control limit for Benzo[a]anthracene, Dibenz(a,h)anthracene and Indeno[1,2,3-cd]pyrene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E_SIM: The following samples were re-prepared outside of preparation holding time to verify original results: MW14-ROX-120123 (400-247654-3) and MW14-ROX-120123-DUP (400-247654-4). Both sets of data are 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 400-653100 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.

Sample Summary

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

Job ID: 400-247654-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-247654-1	TB-ROX-120123-8260-A	Water	12/01/23 12:00	12/02/23 08:23
400-247654-2	TB-ROX-120123-8011-A	Water	12/01/23 12:00	12/02/23 08:23
400-247654-3	MW14-ROX-120123	Water	12/01/23 09:55	12/02/23 08:23
400-247654-4	MW14-ROX-120123-DUP	Water	12/01/23 09:55	12/02/23 08:23

Detection Summary

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

Job ID: 400-247654-1

Client Sample ID: TB-ROX-120123-8260-A — Lab Sample ID: 400-247654-1

No Detections.

Client Sample ID: TB-ROX-120123-8011-A — Lab Sample ID: 400-247654-2

No Detections.

Client Sample ID: MW14-ROX-120123 — Lab Sample ID: 400-247654-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	1.0		1.0	0.50	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	5.6		5.0	0.63	ug/L	1		8260D	Total/NA
o-Xylene	2.5	J	5.0	0.60	ug/L	1		8260D	Total/NA
Toluene	1.8		1.0	0.90	ug/L	1		8260D	Total/NA
1,2,4-Trimethylbenzene	2.5		1.0	0.82	ug/L	1		8260D	Total/NA
1,3,5-Trimethylbenzene	0.81	J	1.0	0.56	ug/L	1		8260D	Total/NA
Xylenes, Total	8.1	J	10	1.6	ug/L	1		8260D	Total/NA
Anthracene	0.091	J	0.20	0.047	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.037	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.14	J	0.20	0.091	ug/L	1		8270E SIM	Total/NA
Pyrene	0.10	J	0.20	0.039	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	0.38		0.20	0.081	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	0.50		0.20	0.067	ug/L	1		8270E SIM	Total/NA
Pyrene - RERA	0.055	J H	0.21	0.040	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene - RERA	0.41	H	0.21	0.082	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene - RERA	0.51	H	0.21	0.068	ug/L	1		8270E SIM	Total/NA
Diethyl phthalate	0.44	J	10	0.24	ug/L	1		8270E	Total/NA
Dimethyl phthalate	1.4	J	10	0.17	ug/L	1		8270E	Total/NA

Client Sample ID: MW14-ROX-120123-DUP — Lab Sample ID: 400-247654-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	1.5		1.0	0.50	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	8.2		5.0	0.63	ug/L	1		8260D	Total/NA
o-Xylene	3.6	J	5.0	0.60	ug/L	1		8260D	Total/NA
Toluene	2.4		1.0	0.90	ug/L	1		8260D	Total/NA
1,2,4-Trimethylbenzene	4.6		1.0	0.82	ug/L	1		8260D	Total/NA
1,3,5-Trimethylbenzene	1.4		1.0	0.56	ug/L	1		8260D	Total/NA
Xylenes, Total	12		10	1.6	ug/L	1		8260D	Total/NA
Anthracene	0.11	J	0.20	0.047	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.059	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.13	J	0.20	0.091	ug/L	1		8270E SIM	Total/NA
Pyrene	0.098	J	0.20	0.039	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	0.44		0.20	0.081	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	0.56		0.20	0.066	ug/L	1		8270E SIM	Total/NA
Anthracene - RERA	0.052	J H	0.20	0.048	ug/L	1		8270E SIM	Total/NA
Fluoranthene - RERA	0.041	J H	0.20	0.035	ug/L	1		8270E SIM	Total/NA
Phenanthrene - RERA	0.11	J H	0.20	0.091	ug/L	1		8270E SIM	Total/NA
Pyrene - RERA	0.058	J H	0.20	0.040	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene - RERA	0.45	H	0.20	0.081	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene - RERA	0.56	H	0.20	0.067	ug/L	1		8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-247654-1

Client Sample ID: TB-ROX-120123-8260-A
Date Collected: 12/01/23 12:00
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247654-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/06/23 14:15	1
Acrolein	ND		20	3.3	ug/L			12/06/23 14:15	1
Acrylonitrile	ND		10	2.8	ug/L			12/06/23 14:15	1
Benzene	ND		1.0	0.50	ug/L			12/06/23 14:15	1
Bromobenzene	ND		1.0	0.54	ug/L			12/06/23 14:15	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/06/23 14:15	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/06/23 14:15	1
Bromoform	ND		5.0	0.25	ug/L			12/06/23 14:15	1
Bromomethane	ND		1.0	0.98	ug/L			12/06/23 14:15	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/06/23 14:15	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/06/23 14:15	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/06/23 14:15	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/06/23 14:15	1
Chloroethane	ND		1.0	0.76	ug/L			12/06/23 14:15	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/06/23 14:15	1
Chloroform	ND		1.0	0.90	ug/L			12/06/23 14:15	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/06/23 14:15	1
Chloromethane	ND		1.0	0.90	ug/L			12/06/23 14:15	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/06/23 14:15	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/06/23 14:15	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/06/23 14:15	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/06/23 14:15	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/06/23 14:15	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/06/23 14:15	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/06/23 14:15	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/06/23 14:15	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/06/23 14:15	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 14:15	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 14:15	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 14:15	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 14:15	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/06/23 14:15	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/06/23 14:15	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/06/23 14:15	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/06/23 14:15	1
2-Hexanone	ND		25	1.4	ug/L			12/06/23 14:15	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/06/23 14:15	1
Methylene bromide	ND		5.0	0.22	ug/L			12/06/23 14:15	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/06/23 14:15	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/06/23 14:15	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/06/23 14:15	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/06/23 14:15	1
Naphthalene	ND		5.0	3.0	ug/L			12/06/23 14:15	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/06/23 14:15	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/06/23 14:15	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/06/23 14:15	1
o-Xylene	ND		5.0	0.60	ug/L			12/06/23 14:15	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/06/23 14:15	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/06/23 14:15	1

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

Job ID: 400-247654-1

Client Sample ID: TB-ROX-120123-8260-A
Date Collected: 12/01/23 12:00
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247654-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/06/23 14:15	1
Styrene	ND		1.0	1.0	ug/L			12/06/23 14:15	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/06/23 14:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/06/23 14:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/06/23 14:15	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/06/23 14:15	1
Toluene	ND		1.0	0.90	ug/L			12/06/23 14:15	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 14:15	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/06/23 14:15	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/06/23 14:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/06/23 14:15	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/06/23 14:15	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/06/23 14:15	1
Trichloroethene	ND		1.0	0.15	ug/L			12/06/23 14:15	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/06/23 14:15	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/06/23 14:15	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/06/23 14:15	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/06/23 14:15	1
Vinyl acetate	ND		25	0.93	ug/L			12/06/23 14:15	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/06/23 14:15	1
Xylenes, Total	ND		10	1.6	ug/L			12/06/23 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*12/06/23 14:15*	*1*
Dibromofluoromethane	*95*		*75 - 126*		*12/06/23 14:15*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*12/06/23 14:15*	*1*

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

Job ID: 400-247654-1

Client Sample ID: TB-ROX-120123-8011-A
Date Collected: 12/01/23 12:00
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247654-2
Matrix: Water

Method: EPA 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		12/05/23 11:19	12/06/23 11:29	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 11:19	12/06/23 11:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*51 - 149*	*12/05/23 11:19*	*12/06/23 11:29*	*1*

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

Job ID: 400-247654-1

Client Sample ID: MW14-ROX-120123
Date Collected: 12/01/23 09:55
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247654-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/06/23 14:38	1
Acrolein	ND		20	3.3	ug/L			12/06/23 14:38	1
Acrylonitrile	ND		10	2.8	ug/L			12/06/23 14:38	1
Benzene	ND		1.0	0.50	ug/L			12/06/23 14:38	1
Bromobenzene	ND		1.0	0.54	ug/L			12/06/23 14:38	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/06/23 14:38	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/06/23 14:38	1
Bromoform	ND		5.0	0.25	ug/L			12/06/23 14:38	1
Bromomethane	ND		1.0	0.98	ug/L			12/06/23 14:38	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/06/23 14:38	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/06/23 14:38	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/06/23 14:38	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/06/23 14:38	1
Chloroethane	ND		1.0	0.76	ug/L			12/06/23 14:38	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/06/23 14:38	1
Chloroform	ND		1.0	0.90	ug/L			12/06/23 14:38	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/06/23 14:38	1
Chloromethane	ND		1.0	0.90	ug/L			12/06/23 14:38	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/06/23 14:38	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/06/23 14:38	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/06/23 14:38	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/06/23 14:38	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/06/23 14:38	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/06/23 14:38	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/06/23 14:38	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/06/23 14:38	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/06/23 14:38	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 14:38	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 14:38	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 14:38	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 14:38	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/06/23 14:38	1
Ethylbenzene	**1.0**		1.0	0.50	ug/L			12/06/23 14:38	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/06/23 14:38	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/06/23 14:38	1
2-Hexanone	ND		25	1.4	ug/L			12/06/23 14:38	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/06/23 14:38	1
Methylene bromide	ND		5.0	0.22	ug/L			12/06/23 14:38	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/06/23 14:38	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/06/23 14:38	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/06/23 14:38	1
m-Xylene & p-Xylene	**5.6**		5.0	0.63	ug/L			12/06/23 14:38	1
Naphthalene	ND		5.0	3.0	ug/L			12/06/23 14:38	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/06/23 14:38	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/06/23 14:38	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/06/23 14:38	1
o-Xylene	**2.5**	**J**	5.0	0.60	ug/L			12/06/23 14:38	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/06/23 14:38	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/06/23 14:38	1

Client Sample ID: MW14-ROX-120123
Date Collected: 12/01/23 09:55
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247654-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/06/23 14:38	1
Styrene	ND		1.0	1.0	ug/L			12/06/23 14:38	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/06/23 14:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/06/23 14:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/06/23 14:38	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/06/23 14:38	1
Toluene	**1.8**		1.0	0.90	ug/L			12/06/23 14:38	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 14:38	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/06/23 14:38	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/06/23 14:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/06/23 14:38	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/06/23 14:38	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/06/23 14:38	1
Trichloroethene	ND		1.0	0.15	ug/L			12/06/23 14:38	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/06/23 14:38	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/06/23 14:38	1
1,2,4-Trimethylbenzene	**2.5**		1.0	0.82	ug/L			12/06/23 14:38	1
1,3,5-Trimethylbenzene	**0.81**	**J**	1.0	0.56	ug/L			12/06/23 14:38	1
Vinyl acetate	ND		25	0.93	ug/L			12/06/23 14:38	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/06/23 14:38	1
Xylenes, Total	**8.1**	**J**	10	1.6	ug/L			12/06/23 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*12/06/23 14:38*	*1*
Dibromofluoromethane	*98*		*75 - 126*		*12/06/23 14:38*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*12/06/23 14:38*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		12/07/23 14:39	12/11/23 18:18	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/07/23 14:39	12/11/23 18:18	1
Anthracene	**0.091**	**J**	0.20	0.047	ug/L		12/07/23 14:39	12/11/23 18:18	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/07/23 14:39	12/11/23 18:18	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		12/07/23 14:39	12/11/23 18:18	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/07/23 14:39	12/11/23 18:18	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/07/23 14:39	12/11/23 18:18	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		12/07/23 14:39	12/11/23 18:18	1
Chrysene	ND		0.20	0.033	ug/L		12/07/23 14:39	12/11/23 18:18	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/07/23 14:39	12/11/23 18:18	1
Fluoranthene	**0.037**	**J**	0.20	0.034	ug/L		12/07/23 14:39	12/11/23 18:18	1
Fluorene	ND		0.20	0.090	ug/L		12/07/23 14:39	12/11/23 18:18	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/07/23 14:39	12/11/23 18:18	1
Phenanthrene	**0.14**	**J**	0.20	0.091	ug/L		12/07/23 14:39	12/11/23 18:18	1
Pyrene	**0.10**	**J**	0.20	0.039	ug/L		12/07/23 14:39	12/11/23 18:18	1
1-Methylnaphthalene	**0.38**		0.20	0.081	ug/L		12/07/23 14:39	12/11/23 18:18	1
2-Methylnaphthalene	**0.50**		0.20	0.067	ug/L		12/07/23 14:39	12/11/23 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*91*		*18 - 147*	*12/07/23 14:39*	*12/11/23 18:18*	*1*
2-Fluorobiphenyl	*60*		*15 - 128*	*12/07/23 14:39*	*12/11/23 18:18*	*1*

Client Sample ID: MW14-ROX-120123

Date Collected: 12/01/23 09:55
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247654-3

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*70*		*10 - 144*	*12/07/23 14:39*	*12/11/23 18:18*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.21	0.10	ug/L		12/15/23 08:24	12/19/23 11:33	1
Acenaphthylene	ND	H	0.21	0.045	ug/L		12/15/23 08:24	12/19/23 11:33	1
Anthracene	ND	H	0.21	0.048	ug/L		12/15/23 08:24	12/19/23 11:33	1
Benzo[a]anthracene	ND	H	0.21	0.035	ug/L		12/15/23 08:24	12/19/23 11:33	1
Benzo[a]pyrene	ND	H	0.21	0.066	ug/L		12/15/23 08:24	12/19/23 11:33	1
Benzo[b]fluoranthene	ND	H	0.21	0.038	ug/L		12/15/23 08:24	12/19/23 11:33	1
Benzo[g,h,i]perylene	ND	H	0.21	0.028	ug/L		12/15/23 08:24	12/19/23 11:33	1
Benzo[k]fluoranthene	ND	H	0.21	0.064	ug/L		12/15/23 08:24	12/19/23 11:33	1
Chrysene	ND	H	0.21	0.034	ug/L		12/15/23 08:24	12/19/23 11:33	1
Dibenz(a,h)anthracene	ND	H	0.21	0.049	ug/L		12/15/23 08:24	12/19/23 11:33	1
Fluoranthene	ND	H	0.21	0.035	ug/L		12/15/23 08:24	12/19/23 11:33	1
Fluorene	ND	H	0.21	0.092	ug/L		12/15/23 08:24	12/19/23 11:33	1
Indeno[1,2,3-cd]pyrene	ND	H	0.21	0.035	ug/L		12/15/23 08:24	12/19/23 11:33	1
Phenanthrene	ND	H	0.21	0.093	ug/L		12/15/23 08:24	12/19/23 11:33	1
Pyrene	**0.055**	**J H**	0.21	0.040	ug/L		12/15/23 08:24	12/19/23 11:33	1
1-Methylnaphthalene	**0.41**	**H**	0.21	0.082	ug/L		12/15/23 08:24	12/19/23 11:33	1
2-Methylnaphthalene	**0.51**	**H**	0.21	0.068	ug/L		12/15/23 08:24	12/19/23 11:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*80*		*18 - 147*	*12/15/23 08:24*	*12/19/23 11:33*	*1*
2-Fluorobiphenyl	*68*		*15 - 128*	*12/15/23 08:24*	*12/19/23 11:33*	*1*
Nitrobenzene-d5	*71*		*10 - 144*	*12/15/23 08:24*	*12/19/23 11:33*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	10	3.8	ug/L		12/07/23 14:39	12/11/23 18:50	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		12/07/23 14:39	12/11/23 18:50	1
Benzoic acid	ND	*1	30	7.4	ug/L		12/07/23 14:39	12/11/23 18:50	1
Benzyl alcohol	ND		10	2.0	ug/L		12/07/23 14:39	12/11/23 18:50	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/07/23 14:39	12/11/23 18:50	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		12/07/23 14:39	12/11/23 18:50	1
bis (2-chloroisopropyl) ether	ND	*-	10	0.16	ug/L		12/07/23 14:39	12/11/23 18:50	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		12/07/23 14:39	12/11/23 18:50	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/07/23 14:39	12/11/23 18:50	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/07/23 14:39	12/11/23 18:50	1
4-Chloroaniline	ND		10	3.4	ug/L		12/07/23 14:39	12/11/23 18:50	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		12/07/23 14:39	12/11/23 18:50	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/07/23 14:39	12/11/23 18:50	1
2-Chlorophenol	ND	*1	10	2.2	ug/L		12/07/23 14:39	12/11/23 18:50	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/07/23 14:39	12/11/23 18:50	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 18:50	1
Dibenzofuran	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 18:50	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		12/07/23 14:39	12/11/23 18:50	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		12/07/23 14:39	12/11/23 18:50	1
Diethyl phthalate	**0.44**	**J**	10	0.24	ug/L		12/07/23 14:39	12/11/23 18:50	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		12/07/23 14:39	12/11/23 18:50	1

Client Sample ID: MW14-ROX-120123

Date Collected: 12/01/23 09:55
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247654-3

Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	**1.4**	**J**	10	0.17	ug/L		12/07/23 14:39	12/11/23 18:50	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		12/07/23 14:39	12/11/23 18:50	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/07/23 14:39	12/11/23 18:50	1
2,4-Dinitrophenol	ND	*1	30	3.4	ug/L		12/07/23 14:39	12/11/23 18:50	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/07/23 14:39	12/11/23 18:50	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/07/23 14:39	12/11/23 18:50	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 18:50	1
1,4-Dioxane	ND	*1	10	1.0	ug/L		12/07/23 14:39	12/11/23 18:50	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 18:50	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 18:50	1
Hexachlorocyclopentadiene	ND	*1	20	2.6	ug/L		12/07/23 14:39	12/11/23 18:50	1
Hexachloroethane	ND	*1	10	4.2	ug/L		12/07/23 14:39	12/11/23 18:50	1
Indene	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 18:50	1
Isophorone	ND		10	0.14	ug/L		12/07/23 14:39	12/11/23 18:50	1
2-Methylphenol	ND		10	1.8	ug/L		12/07/23 14:39	12/11/23 18:50	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		12/07/23 14:39	12/11/23 18:50	1
2-Nitroaniline	ND		10	2.2	ug/L		12/07/23 14:39	12/11/23 18:50	1
3-Nitroaniline	ND		10	1.8	ug/L		12/07/23 14:39	12/11/23 18:50	1
4-Nitroaniline	ND		10	1.5	ug/L		12/07/23 14:39	12/11/23 18:50	1
Nitrobenzene	ND		10	0.13	ug/L		12/07/23 14:39	12/11/23 18:50	1
2-Nitrophenol	ND		10	5.2	ug/L		12/07/23 14:39	12/11/23 18:50	1
4-Nitrophenol	ND		10	2.1	ug/L		12/07/23 14:39	12/11/23 18:50	1
N-Nitrosodimethylamine	ND	*1	10	3.5	ug/L		12/07/23 14:39	12/11/23 18:50	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		12/07/23 14:39	12/11/23 18:50	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/07/23 14:39	12/11/23 18:50	1
Pentachlorophenol	ND		20	1.4	ug/L		12/07/23 14:39	12/11/23 18:50	1
Phenol	ND	*1	10	2.6	ug/L		12/07/23 14:39	12/11/23 18:50	1
Pyridine	ND	*1	10	3.2	ug/L		12/07/23 14:39	12/11/23 18:50	1
Quinoline	ND		10	4.5	ug/L		12/07/23 14:39	12/11/23 18:50	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		12/07/23 14:39	12/11/23 18:50	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		12/07/23 14:39	12/11/23 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*46 - 124*	*12/07/23 14:39*	*12/11/23 18:50*	*1*
2-Fluorophenol	*15*		*13 - 113*	*12/07/23 14:39*	*12/11/23 18:50*	*1*
Nitrobenzene-d5	*57*		*36 - 126*	*12/07/23 14:39*	*12/11/23 18:50*	*1*
Phenol-d5	*37*		*17 - 127*	*12/07/23 14:39*	*12/11/23 18:50*	*1*
Terphenyl-d14	*96*		*44 - 149*	*12/07/23 14:39*	*12/11/23 18:50*	*1*
2,4,6-Tribromophenol	*78*		*26 - 150*	*12/07/23 14:39*	*12/11/23 18:50*	*1*

Method: EPA 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		12/05/23 11:19	12/06/23 16:20	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 11:19	12/06/23 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*124*		*51 - 149*	*12/05/23 11:19*	*12/06/23 16:20*	*1*

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

Job ID: 400-247654-1

Client Sample ID: MW14-ROX-120123-DUP

Date Collected: 12/01/23 09:55
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247654-4

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/06/23 15:03	1
Acrolein	ND		20	3.3	ug/L			12/06/23 15:03	1
Acrylonitrile	ND		10	2.8	ug/L			12/06/23 15:03	1
Benzene	ND		1.0	0.50	ug/L			12/06/23 15:03	1
Bromobenzene	ND		1.0	0.54	ug/L			12/06/23 15:03	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/06/23 15:03	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/06/23 15:03	1
Bromoform	ND		5.0	0.25	ug/L			12/06/23 15:03	1
Bromomethane	ND		1.0	0.98	ug/L			12/06/23 15:03	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/06/23 15:03	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/06/23 15:03	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/06/23 15:03	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/06/23 15:03	1
Chloroethane	ND		1.0	0.76	ug/L			12/06/23 15:03	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/06/23 15:03	1
Chloroform	ND		1.0	0.90	ug/L			12/06/23 15:03	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/06/23 15:03	1
Chloromethane	ND		1.0	0.90	ug/L			12/06/23 15:03	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/06/23 15:03	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/06/23 15:03	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/06/23 15:03	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/06/23 15:03	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/06/23 15:03	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/06/23 15:03	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/06/23 15:03	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/06/23 15:03	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/06/23 15:03	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 15:03	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 15:03	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 15:03	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 15:03	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/06/23 15:03	1
Ethylbenzene	**1.5**		1.0	0.50	ug/L			12/06/23 15:03	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/06/23 15:03	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/06/23 15:03	1
2-Hexanone	ND		25	1.4	ug/L			12/06/23 15:03	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/06/23 15:03	1
Methylene bromide	ND		5.0	0.22	ug/L			12/06/23 15:03	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/06/23 15:03	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/06/23 15:03	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/06/23 15:03	1
m-Xylene & p-Xylene	**8.2**		5.0	0.63	ug/L			12/06/23 15:03	1
Naphthalene	ND		5.0	3.0	ug/L			12/06/23 15:03	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/06/23 15:03	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/06/23 15:03	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/06/23 15:03	1
o-Xylene	**3.6**	**J**	5.0	0.60	ug/L			12/06/23 15:03	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/06/23 15:03	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/06/23 15:03	1

Client Sample ID: MW14-ROX-120123-DUP

Lab Sample ID: 400-247654-4

Date Collected: 12/01/23 09:55

Matrix: Water

Date Received: 12/02/23 08:23

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/06/23 15:03	1
Styrene	ND		1.0	1.0	ug/L			12/06/23 15:03	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/06/23 15:03	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/06/23 15:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/06/23 15:03	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/06/23 15:03	1
Toluene	**2.4**		1.0	0.90	ug/L			12/06/23 15:03	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 15:03	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/06/23 15:03	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/06/23 15:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/06/23 15:03	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/06/23 15:03	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/06/23 15:03	1
Trichloroethene	ND		1.0	0.15	ug/L			12/06/23 15:03	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/06/23 15:03	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/06/23 15:03	1
1,2,4-Trimethylbenzene	**4.6**		1.0	0.82	ug/L			12/06/23 15:03	1
1,3,5-Trimethylbenzene	**1.4**		1.0	0.56	ug/L			12/06/23 15:03	1
Vinyl acetate	ND		25	0.93	ug/L			12/06/23 15:03	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/06/23 15:03	1
Xylenes, Total	**12**		10	1.6	ug/L			12/06/23 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*12/06/23 15:03*	*1*
Dibromofluoromethane	*96*		*75 - 126*		*12/06/23 15:03*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*12/06/23 15:03*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		12/07/23 14:39	12/11/23 18:39	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/07/23 14:39	12/11/23 18:39	1
Anthracene	**0.11**	**J**	0.20	0.047	ug/L		12/07/23 14:39	12/11/23 18:39	1
Benzo[a]anthracene	**0.059**	**J**	0.20	0.034	ug/L		12/07/23 14:39	12/11/23 18:39	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		12/07/23 14:39	12/11/23 18:39	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/07/23 14:39	12/11/23 18:39	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/07/23 14:39	12/11/23 18:39	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/07/23 14:39	12/11/23 18:39	1
Chrysene	ND		0.20	0.033	ug/L		12/07/23 14:39	12/11/23 18:39	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/07/23 14:39	12/11/23 18:39	1
Fluoranthene	ND		0.20	0.034	ug/L		12/07/23 14:39	12/11/23 18:39	1
Fluorene	ND		0.20	0.090	ug/L		12/07/23 14:39	12/11/23 18:39	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/07/23 14:39	12/11/23 18:39	1
Phenanthrene	**0.13**	**J**	0.20	0.091	ug/L		12/07/23 14:39	12/11/23 18:39	1
Pyrene	**0.098**	**J**	0.20	0.039	ug/L		12/07/23 14:39	12/11/23 18:39	1
1-Methylnaphthalene	**0.44**		0.20	0.081	ug/L		12/07/23 14:39	12/11/23 18:39	1
2-Methylnaphthalene	**0.56**		0.20	0.066	ug/L		12/07/23 14:39	12/11/23 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*97*		*18 - 147*	*12/07/23 14:39*	*12/11/23 18:39*	*1*
2-Fluorobiphenyl	*61*		*15 - 128*	*12/07/23 14:39*	*12/11/23 18:39*	*1*

Client Sample ID: MW14-ROX-120123-DUP

Date Collected: 12/01/23 09:55
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247654-4

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*77*		*10 - 144*	*12/07/23 14:39*	*12/11/23 18:39*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.20	0.10	ug/L		12/15/23 08:24	12/19/23 11:53	1
Acenaphthylene	ND	H	0.20	0.045	ug/L		12/15/23 08:24	12/19/23 11:53	1
Anthracene	**0.052**	**J H**	0.20	0.048	ug/L		12/15/23 08:24	12/19/23 11:53	1
Benzo[a]anthracene	ND	H	0.20	0.035	ug/L		12/15/23 08:24	12/19/23 11:53	1
Benzo[a]pyrene	ND	H	0.20	0.065	ug/L		12/15/23 08:24	12/19/23 11:53	1
Benzo[b]fluoranthene	ND	H	0.20	0.038	ug/L		12/15/23 08:24	12/19/23 11:53	1
Benzo[g,h,i]perylene	ND	H	0.20	0.027	ug/L		12/15/23 08:24	12/19/23 11:53	1
Benzo[k]fluoranthene	ND	H	0.20	0.063	ug/L		12/15/23 08:24	12/19/23 11:53	1
Chrysene	ND	H	0.20	0.034	ug/L		12/15/23 08:24	12/19/23 11:53	1
Dibenz(a,h)anthracene	ND	H	0.20	0.049	ug/L		12/15/23 08:24	12/19/23 11:53	1
Fluoranthene	**0.041**	**J H**	0.20	0.035	ug/L		12/15/23 08:24	12/19/23 11:53	1
Fluorene	ND	H	0.20	0.090	ug/L		12/15/23 08:24	12/19/23 11:53	1
Indeno[1,2,3-cd]pyrene	ND	H	0.20	0.035	ug/L		12/15/23 08:24	12/19/23 11:53	1
Phenanthrene	**0.11**	**J H**	0.20	0.091	ug/L		12/15/23 08:24	12/19/23 11:53	1
Pyrene	**0.058**	**J H**	0.20	0.040	ug/L		12/15/23 08:24	12/19/23 11:53	1
1-Methylnaphthalene	**0.45**	**H**	0.20	0.081	ug/L		12/15/23 08:24	12/19/23 11:53	1
2-Methylnaphthalene	**0.56**	**H**	0.20	0.067	ug/L		12/15/23 08:24	12/19/23 11:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*81*		*18 - 147*	*12/15/23 08:24*	*12/19/23 11:53*	*1*
2-Fluorobiphenyl	*65*		*15 - 128*	*12/15/23 08:24*	*12/19/23 11:53*	*1*
Nitrobenzene-d5	*68*		*10 - 144*	*12/15/23 08:24*	*12/19/23 11:53*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	10	3.8	ug/L		12/07/23 14:39	12/11/23 19:15	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		12/07/23 14:39	12/11/23 19:15	1
Benzoic acid	ND	*1	30	7.3	ug/L		12/07/23 14:39	12/11/23 19:15	1
Benzyl alcohol	ND		10	2.0	ug/L		12/07/23 14:39	12/11/23 19:15	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/07/23 14:39	12/11/23 19:15	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		12/07/23 14:39	12/11/23 19:15	1
bis (2-chloroisopropyl) ether	ND	*-	10	0.16	ug/L		12/07/23 14:39	12/11/23 19:15	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		12/07/23 14:39	12/11/23 19:15	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/07/23 14:39	12/11/23 19:15	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/07/23 14:39	12/11/23 19:15	1
4-Chloroaniline	ND		10	3.4	ug/L		12/07/23 14:39	12/11/23 19:15	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		12/07/23 14:39	12/11/23 19:15	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/07/23 14:39	12/11/23 19:15	1
2-Chlorophenol	ND	*1	10	2.2	ug/L		12/07/23 14:39	12/11/23 19:15	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/07/23 14:39	12/11/23 19:15	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 19:15	1
Dibenzofuran	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 19:15	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		12/07/23 14:39	12/11/23 19:15	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		12/07/23 14:39	12/11/23 19:15	1
Diethyl phthalate	ND		10	0.24	ug/L		12/07/23 14:39	12/11/23 19:15	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		12/07/23 14:39	12/11/23 19:15	1

Client Sample ID: MW14-ROX-120123-DUP

Date Collected: 12/01/23 09:55
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247654-4

Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 19:15	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		12/07/23 14:39	12/11/23 19:15	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/07/23 14:39	12/11/23 19:15	1
2,4-Dinitrophenol	ND	*1	30	3.4	ug/L		12/07/23 14:39	12/11/23 19:15	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/07/23 14:39	12/11/23 19:15	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/07/23 14:39	12/11/23 19:15	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 19:15	1
1,4-Dioxane	ND	*1	10	1.0	ug/L		12/07/23 14:39	12/11/23 19:15	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 19:15	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 19:15	1
Hexachlorocyclopentadiene	ND	*1	20	2.6	ug/L		12/07/23 14:39	12/11/23 19:15	1
Hexachloroethane	ND	*1	10	4.2	ug/L		12/07/23 14:39	12/11/23 19:15	1
Indene	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 19:15	1
Isophorone	ND		10	0.14	ug/L		12/07/23 14:39	12/11/23 19:15	1
2-Methylphenol	ND		10	1.8	ug/L		12/07/23 14:39	12/11/23 19:15	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		12/07/23 14:39	12/11/23 19:15	1
2-Nitroaniline	ND		10	2.2	ug/L		12/07/23 14:39	12/11/23 19:15	1
3-Nitroaniline	ND		10	1.8	ug/L		12/07/23 14:39	12/11/23 19:15	1
4-Nitroaniline	ND		10	1.5	ug/L		12/07/23 14:39	12/11/23 19:15	1
Nitrobenzene	ND		10	0.13	ug/L		12/07/23 14:39	12/11/23 19:15	1
2-Nitrophenol	ND		10	5.2	ug/L		12/07/23 14:39	12/11/23 19:15	1
4-Nitrophenol	ND		10	2.1	ug/L		12/07/23 14:39	12/11/23 19:15	1
N-Nitrosodimethylamine	ND	*1	10	3.5	ug/L		12/07/23 14:39	12/11/23 19:15	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		12/07/23 14:39	12/11/23 19:15	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/07/23 14:39	12/11/23 19:15	1
Pentachlorophenol	ND		20	1.4	ug/L		12/07/23 14:39	12/11/23 19:15	1
Phenol	ND	*1	10	2.6	ug/L		12/07/23 14:39	12/11/23 19:15	1
Pyridine	ND	*1	10	3.2	ug/L		12/07/23 14:39	12/11/23 19:15	1
Quinoline	ND		10	4.5	ug/L		12/07/23 14:39	12/11/23 19:15	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		12/07/23 14:39	12/11/23 19:15	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		12/07/23 14:39	12/11/23 19:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*46 - 124*	*12/07/23 14:39*	*12/11/23 19:15*	*1*
2-Fluorophenol	*16*		*13 - 113*	*12/07/23 14:39*	*12/11/23 19:15*	*1*
Nitrobenzene-d5	*63*		*36 - 126*	*12/07/23 14:39*	*12/11/23 19:15*	*1*
Phenol-d5	*42*		*17 - 127*	*12/07/23 14:39*	*12/11/23 19:15*	*1*
Terphenyl-d14	*97*		*44 - 149*	*12/07/23 14:39*	*12/11/23 19:15*	*1*
2,4,6-Tribromophenol	*92*		*26 - 150*	*12/07/23 14:39*	*12/11/23 19:15*	*1*

Method: EPA 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		12/05/23 11:19	12/06/23 16:41	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 11:19	12/06/23 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*132*		*51 - 149*	*12/05/23 11:19*	*12/06/23 16:41*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Job ID: 400-247654-1
Project/Site: ROXANA MONTHLY GW

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, low biased.
*1	LCS/LCSD RPD exceeds control limits.
E	Result exceeded calibration range.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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 MONTHLY GW

Job ID: 400-247654-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-130)	(75-126)	(64-132)
400-247654-1	TB-ROX-120123-8260-A	105	95	96
400-247654-3	MW14-ROX-120123	106	98	96
400-247654-4	MW14-ROX-120123-DUP	104	96	96
LCS 400-653096/1002	Lab Control Sample	105	97	96
MB 400-653096/4	Method Blank	102	96	95

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - 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)
400-247654-3	MW14-ROX-120123	74	15	57	37	96	78
400-247654-4	MW14-ROX-120123-DUP	83	16	63	42	97	92
LCS 400-653399/19-A	Lab Control Sample	88	22	70	45	112	91
LCS 400-653399/2-A	Lab Control Sample	87	47	75	64	105	117
LCSD 400-653399/20-A	Lab Control Sample Dup	84	43	65	61	103	93
LCSD 400-653399/3-A	Lab Control Sample Dup	67	20	56	44	88	91
MB 400-653399/1-A	Method Blank	72	13	53	37	100	71

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-247654-3	MW14-ROX-120123	91	60	70
400-247654-3 - RERA	MW14-ROX-120123	80	68	71
400-247654-4	MW14-ROX-120123-DUP	97	61	77
400-247654-4 - RERA	MW14-ROX-120123-DUP	81	65	68
LCS 400-653399/2-A	Lab Control Sample	76	76	84
LCS 400-654289/2-A	Lab Control Sample	66	67	72
LCSD 400-653399/3-A	Lab Control Sample Dup	58	57	72
LCSD 400-654289/3-A	Lab Control Sample Dup	71	75	73
MB 400-653399/1-A	Method Blank	92	59	75
MB 400-654289/1-A	Method Blank	81	76	71

Surrogate Legend

TPHL = Terphenyl-d14

Surrogate Summary

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

Job ID: 400-247654-1

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-247654-2	TB-ROX-120123-8011-A	108
400-247654-3	MW14-ROX-120123	124
400-247654-4	MW14-ROX-120123-DUP	132
LCS 400-652995/2-A	Lab Control Sample	79
LCSD 400-652995/3-A	Lab Control Sample Dup	76
MB 400-652995/1-A	Method Blank	97

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-247654-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

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

Job ID: 400-247654-1

Client Sample ID: TB-ROX-120123-8260-A
Lab Sample ID: 400-247654-1
Date Collected: 12/01/23 12:00
Matrix: Water
Date Received: 12/02/23 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653096	12/06/23 14:15	WPD	EET PEN

Client Sample ID: TB-ROX-120123-8011-A
Lab Sample ID: 400-247654-2
Date Collected: 12/01/23 12:00
Matrix: Water
Date Received: 12/02/23 08:23

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	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653100	12/06/23 11:29	PG	EET PEN

Client Sample ID: MW14-ROX-120123
Lab Sample ID: 400-247654-3
Date Collected: 12/01/23 09:55
Matrix: Water
Date Received: 12/02/23 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653096	12/06/23 14:38	WPD	EET PEN
Total/NA	Prep	3520C			248 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 18:50	S1B	EET PEN
Total/NA	Prep	3520C			248 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653755	12/11/23 18:18	S1B	EET PEN
Total/NA	Prep	3520C	RERA		242.6 mL	1 mL	654289	12/15/23 08:24	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	654774	12/19/23 11:33	KJA	EET PEN
Total/NA	Prep	8011			35.2 mL	35 mL	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653100	12/06/23 16:20	PG	EET PEN

Client Sample ID: MW14-ROX-120123-DUP
Lab Sample ID: 400-247654-4
Date Collected: 12/01/23 09:55
Matrix: Water
Date Received: 12/02/23 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653096	12/06/23 15:03	WPD	EET PEN
Total/NA	Prep	3520C			248.4 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 19:15	S1B	EET PEN
Total/NA	Prep	3520C			248.4 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653755	12/11/23 18:39	S1B	EET PEN
Total/NA	Prep	3520C	RERA		246 mL	1 mL	654289	12/15/23 08:24	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	654774	12/19/23 11:53	KJA	EET PEN
Total/NA	Prep	8011			35.4 mL	35 mL	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653100	12/06/23 16:41	PG	EET PEN

Lab Chronicle

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

Job ID: 400-247654-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-652995/1-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	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653060	12/05/23 15:58	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-653096/4
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	8260D		1	5 mL	5 mL	653096	12/06/23 08:50	WPD	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-653399/1-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	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 16:45	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653755	12/11/23 15:57	S1B	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-654289/1-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	654289	12/14/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	654774	12/19/23 09:30	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652995/2-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	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653060	12/05/23 16:19	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653096/1002
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	8260D		1	5 mL	5 mL	653096	12/06/23 08:00	WPD	EET PEN

Lab Chronicle

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

Job ID: 400-247654-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653399/19-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	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 18:01	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653399/2-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	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 17:10	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	653755	12/11/23 16:17	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-654289/2-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	654289	12/14/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	654774	12/19/23 09:51	KJA	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-652995/3-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	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653060	12/05/23 16:40	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653399/20-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	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 18:25	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653399/3-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	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 17:36	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	653755	12/11/23 16:37	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-247654-1

Client Sample ID: Lab Control Sample Dup

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-654289/3-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	654289	12/14/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	654774	12/19/23 10:11	KJA	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 653096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247654-1	TB-ROX-120123-8260-A	Total/NA	Water	8260D	
400-247654-3	MW14-ROX-120123	Total/NA	Water	8260D	
400-247654-4	MW14-ROX-120123-DUP	Total/NA	Water	8260D	
MB 400-653096/4	Method Blank	Total/NA	Water	8260D	
LCS 400-653096/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 653399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247654-3	MW14-ROX-120123	Total/NA	Water	3520C	
400-247654-4	MW14-ROX-120123-DUP	Total/NA	Water	3520C	
MB 400-653399/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-653399/19-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-653399/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-653399/20-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-653399/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 653755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247654-3	MW14-ROX-120123	Total/NA	Water	8270E SIM	653399
400-247654-4	MW14-ROX-120123-DUP	Total/NA	Water	8270E SIM	653399
MB 400-653399/1-A	Method Blank	Total/NA	Water	8270E SIM	653399
LCS 400-653399/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	653399
LCSD 400-653399/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	653399

Analysis Batch: 653805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247654-3	MW14-ROX-120123	Total/NA	Water	8270E	653399
400-247654-4	MW14-ROX-120123-DUP	Total/NA	Water	8270E	653399
MB 400-653399/1-A	Method Blank	Total/NA	Water	8270E	653399
LCS 400-653399/19-A	Lab Control Sample	Total/NA	Water	8270E	653399
LCS 400-653399/2-A	Lab Control Sample	Total/NA	Water	8270E	653399
LCSD 400-653399/20-A	Lab Control Sample Dup	Total/NA	Water	8270E	653399
LCSD 400-653399/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	653399

Prep Batch: 654289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247654-3 - RERA	MW14-ROX-120123	Total/NA	Water	3520C	
400-247654-4 - RERA	MW14-ROX-120123-DUP	Total/NA	Water	3520C	
MB 400-654289/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-654289/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-654289/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 654774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247654-3 - RERA	MW14-ROX-120123	Total/NA	Water	8270E SIM	654289
400-247654-4 - RERA	MW14-ROX-120123-DUP	Total/NA	Water	8270E SIM	654289
MB 400-654289/1-A	Method Blank	Total/NA	Water	8270E SIM	654289
LCS 400-654289/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	654289
LCSD 400-654289/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	654289

QC Association Summary

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

Job ID: 400-247654-1

GC Semi VOA

Prep Batch: 652995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247654-2	TB-ROX-120123-8011-A	Total/NA	Water	8011	
400-247654-3	MW14-ROX-120123	Total/NA	Water	8011	
400-247654-4	MW14-ROX-120123-DUP	Total/NA	Water	8011	
MB 400-652995/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-652995/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-652995/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 653060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-652995/1-A	Method Blank	Total/NA	Water	8011	652995
LCS 400-652995/2-A	Lab Control Sample	Total/NA	Water	8011	652995
LCSD 400-652995/3-A	Lab Control Sample Dup	Total/NA	Water	8011	652995

Analysis Batch: 653100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247654-2	TB-ROX-120123-8011-A	Total/NA	Water	8011	652995
400-247654-3	MW14-ROX-120123	Total/NA	Water	8011	652995
400-247654-4	MW14-ROX-120123-DUP	Total/NA	Water	8011	652995

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-653096/4
Matrix: Water
Analysis Batch: 653096

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			12/06/23 08:50	1
Acrolein	ND		20	3.3	ug/L			12/06/23 08:50	1
Acrylonitrile	ND		10	2.8	ug/L			12/06/23 08:50	1
Benzene	ND		1.0	0.50	ug/L			12/06/23 08:50	1
Bromobenzene	ND		1.0	0.54	ug/L			12/06/23 08:50	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/06/23 08:50	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/06/23 08:50	1
Bromoform	ND		5.0	0.25	ug/L			12/06/23 08:50	1
Bromomethane	ND		1.0	0.98	ug/L			12/06/23 08:50	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/06/23 08:50	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/06/23 08:50	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/06/23 08:50	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/06/23 08:50	1
Chloroethane	ND		1.0	0.76	ug/L			12/06/23 08:50	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/06/23 08:50	1
Chloroform	ND		1.0	0.90	ug/L			12/06/23 08:50	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/06/23 08:50	1
Chloromethane	ND		1.0	0.90	ug/L			12/06/23 08:50	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/06/23 08:50	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/06/23 08:50	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/06/23 08:50	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/06/23 08:50	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/06/23 08:50	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/06/23 08:50	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/06/23 08:50	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/06/23 08:50	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/06/23 08:50	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 08:50	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 08:50	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 08:50	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 08:50	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/06/23 08:50	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/06/23 08:50	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/06/23 08:50	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/06/23 08:50	1
2-Hexanone	ND		25	1.4	ug/L			12/06/23 08:50	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/06/23 08:50	1
Methylene bromide	ND		5.0	0.22	ug/L			12/06/23 08:50	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/06/23 08:50	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/06/23 08:50	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/06/23 08:50	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/06/23 08:50	1
Naphthalene	ND		5.0	3.0	ug/L			12/06/23 08:50	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/06/23 08:50	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/06/23 08:50	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/06/23 08:50	1
o-Xylene	ND		5.0	0.60	ug/L			12/06/23 08:50	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/06/23 08:50	1

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

Lab Sample ID: MB 400-653096/4
Matrix: Water
Analysis Batch: 653096

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			12/06/23 08:50	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/06/23 08:50	1
Styrene	ND		1.0	1.0	ug/L			12/06/23 08:50	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/06/23 08:50	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/06/23 08:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/06/23 08:50	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/06/23 08:50	1
Toluene	ND		1.0	0.90	ug/L			12/06/23 08:50	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 08:50	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/06/23 08:50	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/06/23 08:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/06/23 08:50	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/06/23 08:50	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/06/23 08:50	1
Trichloroethene	ND		1.0	0.15	ug/L			12/06/23 08:50	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/06/23 08:50	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/06/23 08:50	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/06/23 08:50	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/06/23 08:50	1
Vinyl acetate	ND		25	0.93	ug/L			12/06/23 08:50	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/06/23 08:50	1
Xylenes, Total	ND		10	1.6	ug/L			12/06/23 08:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*12/06/23 08:50*	*1*
Dibromofluoromethane	*96*		*75 - 126*		*12/06/23 08:50*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*12/06/23 08:50*	*1*

Lab Sample ID: LCS 400-653096/1002
Matrix: Water
Analysis Batch: 653096

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	219		ug/L		110	43 - 160
Acrolein	250	238		ug/L		95	38 - 160
Acrylonitrile	500	487		ug/L		97	64 - 142
Benzene	50.0	44.9		ug/L		90	70 - 130
Bromobenzene	50.0	42.2		ug/L		84	70 - 132
Bromochloromethane	50.0	42.4		ug/L		85	70 - 130
Bromodichloromethane	50.0	46.1		ug/L		92	67 - 133
Bromoform	50.0	48.1		ug/L		96	57 - 140
Bromomethane	25.0	20.0		ug/L		80	10 - 160
2-Butanone (MEK)	200	227		ug/L		114	61 - 145
Carbon disulfide	50.0	40.7		ug/L		81	61 - 137
Carbon tetrachloride	50.0	46.2		ug/L		92	61 - 137
Chlorobenzene	50.0	41.6		ug/L		83	70 - 130
Chloroethane	25.0	19.0		ug/L		76	55 - 141
2-Chloroethyl vinyl ether	25.0	19.4		ug/L		78	10 - 160

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

Lab Sample ID: LCS 400-653096/1002
Matrix: Water
Analysis Batch: 653096

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	43.3		ug/L		87	69 - 130
1-Chlorohexane	50.0	44.0		ug/L		88	69 - 130
Chloromethane	25.0	23.3		ug/L		93	58 - 137
cis-1,2-Dichloroethene	50.0	45.2		ug/L		90	68 - 130
cis-1,3-Dichloropropene	50.0	47.0		ug/L		94	69 - 132
Dibromochloromethane	50.0	44.6		ug/L		89	67 - 135
1,2-Dichlorobenzene	50.0	40.6		ug/L		81	67 - 130
1,3-Dichlorobenzene	50.0	42.0		ug/L		84	70 - 130
1,4-Dichlorobenzene	50.0	41.7		ug/L		83	70 - 130
Dichlorodifluoromethane	25.0	15.7		ug/L		63	41 - 146
1,1-Dichloroethane	50.0	46.5		ug/L		93	70 - 130
1,2-Dichloroethane	50.0	41.8		ug/L		84	69 - 130
1,1-Dichloroethene	50.0	42.4		ug/L		85	63 - 134
1,2-Dichloropropane	50.0	46.8		ug/L		94	70 - 130
1,3-Dichloropropane	50.0	43.5		ug/L		87	70 - 130
2,2-Dichloropropane	50.0	44.8		ug/L		90	52 - 135
1,1-Dichloropropene	50.0	44.4		ug/L		89	70 - 130
Ethylbenzene	50.0	42.7		ug/L		85	70 - 130
Ethyl methacrylate	50.0	43.3		ug/L		87	68 - 130
Hexachlorobutadiene	50.0	51.5		ug/L		103	53 - 140
2-Hexanone	200	206		ug/L		103	65 - 137
Isopropylbenzene	50.0	42.0		ug/L		84	70 - 130
Methylene bromide	50.0	43.5		ug/L		87	70 - 130
Methylene Chloride	50.0	41.8		ug/L		84	66 - 135
4-Methyl-2-pentanone (MIBK)	200	182		ug/L		91	69 - 138
Methyl tert-butyl ether	50.0	44.2		ug/L		88	66 - 130
m-Xylene & p-Xylene	50.0	42.8		ug/L		86	70 - 130
Naphthalene	50.0	38.9		ug/L		78	47 - 149
n-Butylbenzene	50.0	40.0		ug/L		80	67 - 130
N-Propylbenzene	50.0	40.9		ug/L		82	70 - 130
o-Chlorotoluene	50.0	41.8		ug/L		84	70 - 130
o-Xylene	50.0	42.7		ug/L		85	70 - 130
p-Chlorotoluene	50.0	41.7		ug/L		83	70 - 130
p-Isopropyltoluene	50.0	41.8		ug/L		84	65 - 130
sec-Butylbenzene	50.0	42.4		ug/L		85	66 - 130
Styrene	50.0	40.2		ug/L		80	70 - 130
tert-Butylbenzene	50.0	47.3		ug/L		95	64 - 139
1,1,1,2-Tetrachloroethane	50.0	44.3		ug/L		89	67 - 131
1,1,2,2-Tetrachloroethane	50.0	40.8		ug/L		82	70 - 131
Tetrachloroethene	50.0	43.4		ug/L		87	65 - 130
Toluene	50.0	42.1		ug/L		84	70 - 130
trans-1,2-Dichloroethene	50.0	43.7		ug/L		87	70 - 130
trans-1,3-Dichloropropene	50.0	43.5		ug/L		87	63 - 130
1,2,3-Trichlorobenzene	50.0	44.5		ug/L		89	60 - 138
1,2,4-Trichlorobenzene	50.0	43.8		ug/L		88	60 - 140
1,1,1-Trichloroethane	50.0	44.3		ug/L		89	68 - 130
1,1,2-Trichloroethane	50.0	43.7		ug/L		87	70 - 130
Trichloroethene	50.0	44.7		ug/L		89	70 - 130
Trichlorofluoromethane	25.0	20.5		ug/L		82	65 - 138

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

Lab Sample ID: LCS 400-653096/1002
Matrix: Water
Analysis Batch: 653096

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	40.6		ug/L		81	70 - 130
1,2,4-Trimethylbenzene	50.0	41.1		ug/L		82	70 - 130
1,3,5-Trimethylbenzene	50.0	41.6		ug/L		83	69 - 130
Vinyl acetate	50.0	45.0		ug/L		90	26 - 160
Vinyl chloride	25.0	21.4		ug/L		86	59 - 136
Xylenes, Total	100	85.5		ug/L		85	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*72 - 130*
Dibromofluoromethane	*97*		*75 - 126*
Toluene-d8 (Surr)	*96*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-653399/1-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653399

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		12/07/23 14:39	12/11/23 16:45	1
Benzenethiol	ND		10	1.7	ug/L		12/07/23 14:39	12/11/23 16:45	1
Benzoic acid	ND		30	7.3	ug/L		12/07/23 14:39	12/11/23 16:45	1
Benzyl alcohol	ND		10	2.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/07/23 14:39	12/11/23 16:45	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		12/07/23 14:39	12/11/23 16:45	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		12/07/23 14:39	12/11/23 16:45	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/07/23 14:39	12/11/23 16:45	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/07/23 14:39	12/11/23 16:45	1
4-Chloroaniline	ND		10	3.4	ug/L		12/07/23 14:39	12/11/23 16:45	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		12/07/23 14:39	12/11/23 16:45	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/07/23 14:39	12/11/23 16:45	1
2-Chlorophenol	ND		10	2.2	ug/L		12/07/23 14:39	12/11/23 16:45	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
Dibenzofuran	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 16:45	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
Diethyl phthalate	ND		10	0.24	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		12/07/23 14:39	12/11/23 16:45	1
Dimethyl phthalate	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 16:45	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		12/07/23 14:39	12/11/23 16:45	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/07/23 14:39	12/11/23 16:45	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 16:45	1
1,4-Dioxane	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 16:45	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-653399/1-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653399

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 16:45	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/07/23 14:39	12/11/23 16:45	1
Hexachloroethane	ND		10	4.2	ug/L		12/07/23 14:39	12/11/23 16:45	1
Indene	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
Isophorone	ND		10	0.14	ug/L		12/07/23 14:39	12/11/23 16:45	1
2-Methylphenol	ND		10	1.8	ug/L		12/07/23 14:39	12/11/23 16:45	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		12/07/23 14:39	12/11/23 16:45	1
2-Nitroaniline	ND		10	2.2	ug/L		12/07/23 14:39	12/11/23 16:45	1
3-Nitroaniline	ND		10	1.8	ug/L		12/07/23 14:39	12/11/23 16:45	1
4-Nitroaniline	ND		10	1.5	ug/L		12/07/23 14:39	12/11/23 16:45	1
Nitrobenzene	ND		10	0.13	ug/L		12/07/23 14:39	12/11/23 16:45	1
2-Nitrophenol	ND		10	5.2	ug/L		12/07/23 14:39	12/11/23 16:45	1
4-Nitrophenol	ND		10	2.1	ug/L		12/07/23 14:39	12/11/23 16:45	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		12/07/23 14:39	12/11/23 16:45	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		12/07/23 14:39	12/11/23 16:45	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/07/23 14:39	12/11/23 16:45	1
Pentachlorophenol	ND		20	1.4	ug/L		12/07/23 14:39	12/11/23 16:45	1
Phenol	ND		10	2.6	ug/L		12/07/23 14:39	12/11/23 16:45	1
Pyridine	ND		10	3.2	ug/L		12/07/23 14:39	12/11/23 16:45	1
Quinoline	ND		10	4.5	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		12/07/23 14:39	12/11/23 16:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*46 - 124*	*12/07/23 14:39*	*12/11/23 16:45*	*1*
2-Fluorophenol	*13*		*13 - 113*	*12/07/23 14:39*	*12/11/23 16:45*	*1*
Nitrobenzene-d5	*53*		*36 - 126*	*12/07/23 14:39*	*12/11/23 16:45*	*1*
Phenol-d5	*37*		*17 - 127*	*12/07/23 14:39*	*12/11/23 16:45*	*1*
Terphenyl-d14	*100*		*44 - 149*	*12/07/23 14:39*	*12/11/23 16:45*	*1*
2,4,6-Tribromophenol	*71*		*26 - 150*	*12/07/23 14:39*	*12/11/23 16:45*	*1*

Lab Sample ID: LCS 400-653399/19-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653399

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	3.26	J *-	ug/L		3	10 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*88*		*46 - 124*
2-Fluorophenol	*22*		*13 - 113*
Nitrobenzene-d5	*70*		*36 - 126*
Phenol-d5	*45*		*17 - 127*
Terphenyl-d14	*112*		*44 - 149*
2,4,6-Tribromophenol	*91*		*26 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-653399/2-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	75.9		ug/L		63	21 - 120
Benzoic acid	120	101		ug/L		84	10 - 144
Benzyl alcohol	120	86.6		ug/L		72	28 - 120
Bis(2-chloroethoxy)methane	120	80.4		ug/L		67	47 - 120
Bis(2-chloroethyl)ether	120	78.9		ug/L		66	44 - 120
bis (2-chloroisopropyl) ether	120	45.4		ug/L		38	33 - 121
Bis(2-ethylhexyl) phthalate	120	113		ug/L		94	52 - 147
4-Bromophenyl phenyl ether	120	114		ug/L		95	54 - 122
Butyl benzyl phthalate	120	112		ug/L		93	54 - 133
4-Chloroaniline	120	81.9		ug/L		68	26 - 120
4-Chloro-3-methylphenol	120	104		ug/L		87	48 - 131
2-Chloronaphthalene	120	108		ug/L		90	52 - 121
2-Chlorophenol	120	80.7		ug/L		67	40 - 120
4-Chlorophenyl phenyl ether	120	118		ug/L		98	56 - 125
Dibenz[a,h]acridine	120	121		ug/L		101	31 - 150
Dibenzofuran	120	107		ug/L		89	56 - 122
3,3'-Dichlorobenzidine	160	113		ug/L		71	36 - 132
2,4-Dichlorophenol	120	101		ug/L		85	49 - 120
Diethyl phthalate	120	112		ug/L		93	50 - 137
2,4-Dimethylphenol	120	90.3		ug/L		75	48 - 120
Dimethyl phthalate	120	108		ug/L		90	57 - 124
Di-n-butyl phthalate	120	115		ug/L		96	58 - 126
4,6-Dinitro-ortho-cresol	240	196		ug/L		81	23 - 148
2,4-Dinitrophenol	240	200		ug/L		83	10 - 150
2,4-Dinitrotoluene	120	121		ug/L		101	54 - 142
2,6-Dinitrotoluene	120	112		ug/L		94	55 - 130
Di-n-octyl phthalate	120	117		ug/L		98	57 - 138
1,4-Dioxane	120	62.6		ug/L		52	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	77.0		ug/L		64	45 - 124
Hexachlorobenzene	120	122		ug/L		102	52 - 129
Hexachlorocyclopentadiene	120	101		ug/L		84	10 - 134
Hexachloroethane	120	87.1		ug/L		73	20 - 120
Indene	120	99.1		ug/L		83	49 - 120
Isophorone	120	78.1		ug/L		65	48 - 120
2-Methylphenol	120	88.1		ug/L		73	46 - 124
3 & 4 Methylphenol	120	84.6		ug/L		70	45 - 120
2-Nitroaniline	120	83.0		ug/L		69	51 - 145
3-Nitroaniline	120	69.2		ug/L		58	37 - 127
4-Nitroaniline	120	95.3		ug/L		79	36 - 137
Nitrobenzene	120	79.5		ug/L		66	45 - 120
2-Nitrophenol	120	98.8		ug/L		82	40 - 124
4-Nitrophenol	240	259		ug/L		108	23 - 146
N-Nitrosodimethylamine	120	59.9		ug/L		50	29 - 137
N-Nitrosodi-n-propylamine	120	77.0		ug/L		64	45 - 120
N-Nitrosodiphenylamine	119	98.0		ug/L		82	54 - 120
Pentachlorophenol	240	233		ug/L		97	31 - 130
Phenol	120	74.8		ug/L		62	11 - 120
Pyridine	240	109		ug/L		45	16 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-653399/2-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653399

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Quinoline			120	108		ug/L		90	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	*87*		*46 - 124*
2-Fluorophenol	*47*		*13 - 113*
Nitrobenzene-d5	*75*		*36 - 126*
Phenol-d5	*64*		*17 - 127*
Terphenyl-d14	*105*		*44 - 149*
2,4,6-Tribromophenol	*117*		*26 - 150*

Lab Sample ID: LCSD 400-653399/20-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653399

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	6.16	J *- *1	ug/L		5	10 - 120	61	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*46 - 124*
2-Fluorophenol	*43*		*13 - 113*
Nitrobenzene-d5	*65*		*36 - 126*
Phenol-d5	*61*		*17 - 127*
Terphenyl-d14	*103*		*44 - 149*
2,4,6-Tribromophenol	*93*		*26 - 150*

Lab Sample ID: LCSD 400-653399/3-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653399

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	54.8	*1	ug/L		46	21 - 120	32	30
Benzoic acid			120	65.1	*1	ug/L		54	10 - 144	43	30
Benzyl alcohol			120	65.4		ug/L		54	28 - 120	28	30
Bis(2-chloroethoxy)methane			120	61.5		ug/L		51	47 - 120	27	30
Bis(2-chloroethyl)ether			120	61.7		ug/L		51	44 - 120	25	30
bis (2-chloroisopropyl) ether			120	34.3	*-	ug/L		29	33 - 121	28	30
Bis(2-ethylhexyl) phthalate			120	87.8		ug/L		73	52 - 147	25	30
4-Bromophenyl phenyl ether			120	88.5		ug/L		74	54 - 122	25	30
Butyl benzyl phthalate			120	86.9		ug/L		72	54 - 133	25	30
4-Chloroaniline			120	66.8		ug/L		56	26 - 120	20	30
4-Chloro-3-methylphenol			120	81.0		ug/L		68	48 - 131	25	30
2-Chloronaphthalene			120	80.6		ug/L		67	52 - 121	29	30
2-Chlorophenol			120	50.4	*1	ug/L		42	40 - 120	46	30
4-Chlorophenyl phenyl ether			120	90.9		ug/L		76	56 - 125	26	30
Dibenz[a,h]acridine			120	92.5		ug/L		77	31 - 150	27	30
Dibenzofuran			120	83.5		ug/L		70	56 - 122	25	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-653399/3-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653399

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine			160	96.9		ug/L		61	36 - 132	16	30
2,4-Dichlorophenol			120	75.2		ug/L		63	49 - 120	30	30
Diethyl phthalate			120	87.1		ug/L		73	50 - 137	25	30
2,4-Dimethylphenol			120	70.3		ug/L		59	48 - 120	25	30
Dimethyl phthalate			120	85.9		ug/L		72	57 - 124	23	30
Di-n-butyl phthalate			120	90.3		ug/L		75	58 - 126	24	30
4,6-Dinitro-ortho-cresol			240	145		ug/L		60	23 - 148	30	30
2,4-Dinitrophenol			240	129	*1	ug/L		54	10 - 150	43	30
2,4-Dinitrotoluene			120	92.7		ug/L		77	54 - 142	27	30
2,6-Dinitrotoluene			120	86.2		ug/L		72	55 - 130	26	30
Di-n-octyl phthalate			120	87.5		ug/L		73	57 - 138	29	30
1,4-Dioxane			120	44.5	*1	ug/L		37	31 - 120	34	30
1,2-Diphenylhydrazine (as Azobenzene)			120	60.7		ug/L		51	45 - 124	24	30
Hexachlorobenzene			120	95.8		ug/L		80	52 - 129	24	30
Hexachlorocyclopentadiene			120	67.6	*1	ug/L		56	10 - 134	39	30
Hexachloroethane			120	63.8	*1	ug/L		53	20 - 120	31	30
Indene			120	74.3		ug/L		62	49 - 120	29	30
Isophorone			120	60.2		ug/L		50	48 - 120	26	30
2-Methylphenol			120	65.9		ug/L		55	46 - 124	29	30
3 & 4 Methylphenol			120	63.5		ug/L		53	45 - 120	28	30
2-Nitroaniline			120	63.6		ug/L		53	51 - 145	27	30
3-Nitroaniline			120	55.8		ug/L		46	37 - 127	21	30
4-Nitroaniline			120	75.3		ug/L		63	36 - 137	23	30
Nitrobenzene			120	60.4		ug/L		50	45 - 120	27	30
2-Nitrophenol			120	75.7		ug/L		63	40 - 124	26	30
4-Nitrophenol			240	193		ug/L		80	23 - 146	29	30
N-Nitrosodimethylamine			120	44.0	*1	ug/L		37	29 - 137	31	30
N-Nitrosodi-n-propylamine			120	59.6		ug/L		50	45 - 120	25	30
N-Nitrosodiphenylamine			119	77.4		ug/L		65	54 - 120	23	30
Pentachlorophenol			240	178		ug/L		74	31 - 130	27	30
Phenol			120	50.5	*1	ug/L		42	11 - 120	39	30
Pyridine			240	77.8	*1	ug/L		32	16 - 120	33	30
Quinoline			120	79.7		ug/L		67	49 - 130	30	30
2,4,5-Trichlorophenol			120	91.1		ug/L		76	51 - 136	25	30
2,4,6-Trichlorophenol			120	88.2		ug/L		73	50 - 127	26	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*46 - 124*
2-Fluorophenol	*20*		*13 - 113*
Nitrobenzene-d5	*56*		*36 - 126*
Phenol-d5	*44*		*17 - 127*
Terphenyl-d14	*88*		*44 - 149*
2,4,6-Tribromophenol	*91*		*26 - 150*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-653399/1-A
Matrix: Water
Analysis Batch: 653755

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653399

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		12/07/23 14:39	12/11/23 15:57	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/07/23 14:39	12/11/23 15:57	1
Anthracene	ND		0.20	0.047	ug/L		12/07/23 14:39	12/11/23 15:57	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/07/23 14:39	12/11/23 15:57	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		12/07/23 14:39	12/11/23 15:57	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/07/23 14:39	12/11/23 15:57	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/07/23 14:39	12/11/23 15:57	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/07/23 14:39	12/11/23 15:57	1
Chrysene	ND		0.20	0.033	ug/L		12/07/23 14:39	12/11/23 15:57	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/07/23 14:39	12/11/23 15:57	1
Fluoranthene	ND		0.20	0.034	ug/L		12/07/23 14:39	12/11/23 15:57	1
Fluorene	ND		0.20	0.089	ug/L		12/07/23 14:39	12/11/23 15:57	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/07/23 14:39	12/11/23 15:57	1
Phenanthrene	ND		0.20	0.090	ug/L		12/07/23 14:39	12/11/23 15:57	1
Pyrene	ND		0.20	0.039	ug/L		12/07/23 14:39	12/11/23 15:57	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		12/07/23 14:39	12/11/23 15:57	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		12/07/23 14:39	12/11/23 15:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*92*		*18 - 147*	*12/07/23 14:39*	*12/11/23 15:57*	*1*
2-Fluorobiphenyl	*59*		*15 - 128*	*12/07/23 14:39*	*12/11/23 15:57*	*1*
Nitrobenzene-d5	*75*		*10 - 144*	*12/07/23 14:39*	*12/11/23 15:57*	*1*

Lab Sample ID: LCS 400-653399/2-A
Matrix: Water
Analysis Batch: 653755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	102		ug/L		85	40 - 140
Acenaphthylene	120	111		ug/L		93	40 - 140
Anthracene	120	97.4		ug/L		81	40 - 140
Benzo[a]anthracene	120	114		ug/L		95	40 - 140
Benzo[a]pyrene	120	92.2		ug/L		77	40 - 140
Benzo[b]fluoranthene	120	91.2		ug/L		76	40 - 140
Benzo[g,h,i]perylene	120	115		ug/L		96	40 - 140
Benzo[k]fluoranthene	120	108		ug/L		90	40 - 140
Chrysene	120	102		ug/L		85	40 - 140
Dibenz(a,h)anthracene	120	98.1		ug/L		82	40 - 140
Fluoranthene	120	89.5		ug/L		75	40 - 140
Fluorene	120	102		ug/L		85	40 - 140
Indeno[1,2,3-cd]pyrene	120	107		ug/L		89	40 - 140
Phenanthrene	120	93.3		ug/L		78	40 - 140
Pyrene	120	138		ug/L		115	40 - 140
1-Methylnaphthalene	120	79.1		ug/L		66	40 - 140
2-Methylnaphthalene	120	80.0		ug/L		67	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*76*		*18 - 147*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 400-653399/2-A
Matrix: Water
Analysis Batch: 653755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653399

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	76		15 - 128
Nitrobenzene-d5	84		10 - 144

Lab Sample ID: LCSD 400-653399/3-A
Matrix: Water
Analysis Batch: 653755

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653399

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	78.4		ug/L		65	40 - 140	27	40
Acenaphthylene			120	85.2		ug/L		71	40 - 140	26	40
Anthracene			120	76.4		ug/L		64	40 - 140	24	40
Benzo[a]anthracene			120	87.3		ug/L		73	40 - 140	26	40
Benzo[a]pyrene			120	69.0		ug/L		58	40 - 140	29	40
Benzo[b]fluoranthene			120	67.8		ug/L		57	40 - 140	29	40
Benzo[g,h,i]perylene			120	86.2		ug/L		72	40 - 140	29	40
Benzo[k]fluoranthene			120	79.2		ug/L		66	40 - 140	31	40
Chrysene			120	79.1		ug/L		66	40 - 140	25	40
Dibenz(a,h)anthracene			120	77.9		ug/L		65	40 - 140	23	40
Fluoranthene			120	70.2		ug/L		59	40 - 140	24	40
Fluorene			120	80.1		ug/L		67	40 - 140	24	40
Indeno[1,2,3-cd]pyrene			120	80.5		ug/L		67	40 - 140	28	40
Phenanthrene			120	73.7		ug/L		61	40 - 140	23	40
Pyrene			120	108		ug/L		90	40 - 140	25	40
1-Methylnaphthalene			120	80.3		ug/L		67	40 - 140	2	40
2-Methylnaphthalene			120	81.6		ug/L		68	40 - 140	2	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	58		18 - 147
2-Fluorobiphenyl	57		15 - 128
Nitrobenzene-d5	72		10 - 144

Lab Sample ID: MB 400-654289/1-A
Matrix: Water
Analysis Batch: 654774

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654289

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		12/14/23 09:40	12/19/23 09:30	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/14/23 09:40	12/19/23 09:30	1
Anthracene	ND		0.20	0.047	ug/L		12/14/23 09:40	12/19/23 09:30	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/14/23 09:40	12/19/23 09:30	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		12/14/23 09:40	12/19/23 09:30	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/14/23 09:40	12/19/23 09:30	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/14/23 09:40	12/19/23 09:30	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/14/23 09:40	12/19/23 09:30	1
Chrysene	ND		0.20	0.033	ug/L		12/14/23 09:40	12/19/23 09:30	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/14/23 09:40	12/19/23 09:30	1
Fluoranthene	ND		0.20	0.034	ug/L		12/14/23 09:40	12/19/23 09:30	1
Fluorene	ND		0.20	0.089	ug/L		12/14/23 09:40	12/19/23 09:30	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 400-654289/1-A
Matrix: Water
Analysis Batch: 654774

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654289

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/14/23 09:40	12/19/23 09:30	1
Phenanthrene	ND		0.20	0.090	ug/L		12/14/23 09:40	12/19/23 09:30	1
Pyrene	ND		0.20	0.039	ug/L		12/14/23 09:40	12/19/23 09:30	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		12/14/23 09:40	12/19/23 09:30	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		12/14/23 09:40	12/19/23 09:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*18 - 147*	*12/14/23 09:40*	*12/19/23 09:30*	*1*
2-Fluorobiphenyl	*76*		*15 - 128*	*12/14/23 09:40*	*12/19/23 09:30*	*1*
Nitrobenzene-d5	*71*		*10 - 144*	*12/14/23 09:40*	*12/19/23 09:30*	*1*

Lab Sample ID: LCS 400-654289/2-A
Matrix: Water
Analysis Batch: 654774

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654289

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	89.4		ug/L		75	40 - 140
Acenaphthylene	120	101		ug/L		84	40 - 140
Anthracene	120	97.6		ug/L		81	40 - 140
Benzo[a]anthracene	120	116	E	ug/L		97	40 - 140
Benzo[a]pyrene	120	93.9		ug/L		78	40 - 140
Benzo[b]fluoranthene	120	102		ug/L		85	40 - 140
Benzo[g,h,i]perylene	120	85.2		ug/L		71	40 - 140
Benzo[k]fluoranthene	120	89.2		ug/L		74	40 - 140
Chrysene	120	85.1		ug/L		71	40 - 140
Dibenz(a,h)anthracene	120	90.7		ug/L		76	40 - 140
Fluoranthene	120	93.9		ug/L		78	40 - 140
Fluorene	120	88.7		ug/L		74	40 - 140
Indeno[1,2,3-cd]pyrene	120	92.8		ug/L		77	40 - 140
Phenanthrene	120	85.0		ug/L		71	40 - 140
Pyrene	120	91.4		ug/L		76	40 - 140
1-Methylnaphthalene	120	72.6		ug/L		61	40 - 140
2-Methylnaphthalene	120	76.5		ug/L		64	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*66*		*18 - 147*
2-Fluorobiphenyl	*67*		*15 - 128*
Nitrobenzene-d5	*72*		*10 - 144*

Lab Sample ID: LCSD 400-654289/3-A
Matrix: Water
Analysis Batch: 654774

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 654289

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	120	99.6		ug/L		83	40 - 140	11	40
Acenaphthylene	120	111		ug/L		93	40 - 140	9	40
Anthracene	120	107		ug/L		89	40 - 140	9	40
Benzo[a]anthracene	120	128	E	ug/L		106	40 - 140	9	40

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 400-654289/3-A
Matrix: Water
Analysis Batch: 654774

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 654289

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[a]pyrene			120	103		ug/L		86	40 - 140	9	40
Benzo[b]fluoranthene			120	112		ug/L		93	40 - 140	9	40
Benzo[g,h,i]perylene			120	101		ug/L		84	40 - 140	17	40
Benzo[k]fluoranthene			120	94.4		ug/L		79	40 - 140	6	40
Chrysene			120	93.8		ug/L		78	40 - 140	10	40
Dibenz(a,h)anthracene			120	109		ug/L		91	40 - 140	18	40
Fluoranthene			120	102		ug/L		85	40 - 140	8	40
Fluorene			120	97.3		ug/L		81	40 - 140	9	40
Indeno[1,2,3-cd]pyrene			120	110		ug/L		92	40 - 140	17	40
Phenanthrene			120	93.2		ug/L		78	40 - 140	9	40
Pyrene			120	96.8		ug/L		81	40 - 140	6	40
1-Methylnaphthalene			120	72.1		ug/L		60	40 - 140	1	40
2-Methylnaphthalene			120	75.8		ug/L		63	40 - 140	1	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*71*		*18 - 147*
2-Fluorobiphenyl	*75*		*15 - 128*
Nitrobenzene-d5	*73*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-652995/1-A
Matrix: Water
Analysis Batch: 653060

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652995

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		12/05/23 11:19	12/05/23 15:58	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 11:19	12/05/23 15:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*51 - 149*	*12/05/23 11:19*	*12/05/23 15:58*	*1*

Lab Sample ID: LCS 400-652995/2-A
Matrix: Water
Analysis Batch: 653060

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652995

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane			0.101	0.0967		ug/L		96	60 - 140
1,2-Dibromoethane			0.100	0.0994		ug/L		99	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*79*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-652995/3-A
Matrix: Water
Analysis Batch: 653060

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652995

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0922		ug/L		92	60 - 140	5	30
1,2-Dibromoethane			0.100	0.0956		ug/L		95	60 - 140	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*76*		*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
Melissa Remiger	25278	DATE: 12/1/2023
PO #	**GSAP Project ID**	PAGE: 1 of 2
60697537 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY:	LOG CODE:
AECOM	

SITE ADDRESS: Street and City	State	AECOM Project / Task Number:
900 South Central Ave; ROXANA	IL	Roxana Monthly GW 60697537 – 3.4.2

ADDRESS:	EDF DELIVERABLE TO (Name, Company, Office Location):	PHONE NO.:	E-MAIL:	AECOM Other ID:
100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA	Melissa Remiger - please see special instructions	314-602-1207	melissa.remiger@aecom.com	

PROJECT CONTACT (Hardcopy or PDF Report to):	SAMPLER NAME(S) (Print):	LAB USE ONLY
Melissa Remiger, Mary Massa, Brett Howell	C. McDavid, J. Mayer	

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

- Please include "J" values on Reports.
- Please provide sample receipt upon login.
- Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.4.2

FIELD NOTES:

TEMPERATURE ON R[illegible] °T C°

400-247654 COC

Global ID	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 8270 SIMS
420644	TB-ROX-120123-8260-A	12/1/2023	0000	Water	2					2	X			
	TB-ROX-120123-8011-A	12/1/2023	0000	Water	2					2		X		
	MW14-ROX-120123	12/1/2023	0955	Water	6			2		8	X	X	X	X
	MW14-ROX-120123-DUP	12/1/2023	0955	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 6339 6597 5529	12/1/2023	1600
Relinquished by: (Signature)	Received by: (Signature) BP	Date: 12/2/23	Time: 823
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: 1599798, 1599799

0.0°C DR8

12/19/2023

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-247654-1

Login Number: 247654
List Number: 1
Creator: Roberts, Alexis J

List Source: Eurofins 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	0.0°C IR8
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: 400-247654-1
Project/Site: ROXANA MONTHLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Roxana Groundwater Monthly – November/December 2023 Data Review

Laboratory SDG: 400-247655-1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 1/9/2024

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

Sample Identification	Sample Identification
TB-ROX-120123-8260-A	TB-ROX-120123-8011-A
P56-ROX-120123	P93A-ROX-120123
P93C-ROX-120123	P93C-ROX-120123-DUP

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 that several SVOC LCS/LCSD recoveries and/or LCS/LCSD RPDs, were outside evaluation criteria. Results for benzene in field duplicate pair P93C-ROX-120123/P93C-ROX-120123-DUP were qualified as estimated (**J**/**J**) due to field duplicate RPD above evaluation criteria. VOCs in sample P93C-ROX-120123 were diluted to bring target analytes into calibration range of the instrument. The continuing calibration verifications (CCV) for chloroethane and n-nitrosodimethylamine were outside evaluation criteria, biased low. The continuing calibration verification (CCV) for dibenz(a,h)anthracene was outside evaluation criteria, biased high. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (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/LCSD 400-653399/19-A/20-A	SVOCs	Benzenethiol	**3/5**	**61**	10-120/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	Aniline	63/46	**32**	21-120/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	Benzoic acid	84/54	**43**	10-144/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	bis(2-Chloroisopropyl) ether	38/**29**	28	33-121/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	2-Chlorophenol	67/42	**46**	40-120/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	2,4-Dinitrophenol	83/54	**43**	10-150/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	1,4-Dioxane	52/37	**34**	31-120/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	84/56	**39**	10-134/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	Hexachloroethane	73/53	**31**	20-120/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	N-Nitrosodimethylamine	50/37	**31**	29-137/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	Phenol	62/42	**39**	11-120/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	Pyridine	45/32	**33**	16-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol below evaluation criteria; benzenethiol has been identified as a poor performing analyte under Method 8270. Analytical data associated with LCS/LCS RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
P56-ROX-120123	SVOCs	Benzenethiol	**UJ**
P56-ROX-120123	SVOCs	bis(2-Chloroisopropyl) ether	**UJ**
P93A-ROX-120123	SVOCs	Benzenethiol	**UJ**
P93A-ROX-120123	SVOCs	bis(2-Chloroisopropyl) ether	**UJ**
P93C-ROX-120123	SVOCs	Benzenethiol	**UJ**
P93C-ROX-120123	SVOCs	bis(2-Chloroisopropyl) ether	**UJ**
P93C-ROX-120123-DUP	SVOCs	Benzenethiol	**UJ**
P93C-ROX-120123-DUP	SVOCs	bis(2-Chloroisopropyl) ether	**UJ**

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?

Yes

Field ID	Field Duplicate ID
P93C-ROX-120123	P93C-ROX-120123 -DUP

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
P93C-ROX-120123	P93C-ROX-120123-DUP	VOCs	Benzene	**31**	**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 sample P93C-ROX-120123-DUP to bring benzene into calibration range of the instrument. VOCs were non-detect at a dilution factor of 500X, with raised reporting limits of between 500 and 13,000 µg/L. Due to historical detections, please see Section 12.0 of this data review for additional qualifications.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verifications (CCVs) for chloroethane and n-nitrosodimethylamine were outside evaluation criteria, biased low. The continuing calibration verification (CCV) for dibenz(a,h)anthracene was outside evaluation criteria, biased high. Chloroethane in sample P93C-ROX-120123-DUP is qualified in Section 12.0 of this data review due to a sample dilution; no further qualification is required. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
P56-ROX-120123	VOCs	Chloroethane	**UJ**
P93A-ROX-120123	VOCs	Chloroethane	**UJ**
P93C-ROX-120123	VOCs	Chloroethane	**UJ**
P56-ROX-120123	SVOCs	N-Nitrosodimethylamine	**UJ**
P93A-ROX-120123	SVOCs	N-Nitrosodimethylamine	**UJ**
P93C-ROX-120123	SVOCs	N-Nitrosodimethylamine	**UJ**
P93C-ROX-120123-DUP	SVOCs	N-Nitrosodimethylamine	**UJ**
P56-ROX-120123	PAHs	Dibenz(a,h)anthracene	**J**

Additionally, VOCs in sample P93C-ROX-120123-DUP were qualified as estimated non-detect due to sample dilution and historical detections.

Sample ID	Parameter	Analyte	Qualification
P93C-ROX-120123-DUP	VOCs	All non-detect	**UJ**

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 12/13/2023 2:03:48 PM

JOB DESCRIPTION

ROXANA MONTHLY GW

JOB NUMBER

400-247655-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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12/13/2023 2:03:48 PM

Authorized for release by
Mark Swafford, Project Manager II
Mark.Swafford@et.eurofinsus.com
Designee for
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Leah.Klingensmith@et.eurofinsus.com
(615)301-5038

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Certification Summary 52

Job ID: 400-247655-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-247655-1

Receipt
The samples were received on 12/2/2023 8:23 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 0.0º C.

GC/MS VOA
Method 8260D: The following samples were diluted to bring the concentration of target analytes within the calibration range: P93C-ROX-120123 (400-247655-5) and P93C-ROX-120123-DUP (400-247655-6). Elevated reporting limits (RLs) are provided.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-653111 recovered outside acceptance criteria, low biased, for Chloroethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-653111 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8260D: 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-120123-8260-A (400-247655-1), P56-ROX-120123 (400-247655-3), P93A-ROX-120123 (400-247655-4), P93C-ROX-120123 (400-247655-5) and P93C-ROX-120123-DUP (400-247655-6). 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 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-653111 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260D: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-653111 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 8270E: The following analyte(s) recovered outside control limits for the LCSD associated with preparation batch 400-653399 and analytical batch 400-653805: bis (2-chloroisopropyl) ether. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-653399 and 400-653399 and analytical batch 400-653805 recovered outside control limits for the following analytes: Hexachloroethane, N-Nitrosodimethylamine, 2,4-Dinitrophenol, Phenol, Benzoic acid, Benzenethiol,Hexachlorocyclopentadiene, 2-Chlorophenol, 1,4-Dioxane, Pyridine and Aniline.

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-653399 and analytical batch 400-653805 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 8270E: The continuing calibration verification (CCV) associated with batch 400-653805 recovered outside acceptance criteria, low biased, for N-Nitrosodimethylamine. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-653805 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Job ID: 400-247655-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-653805 recovered above the upper control limit for 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 4-Chlorophenyl phenyl ether, Hexachlorobenzene, 2,4-Dinitrotoluene, Hexachlorocyclopentadiene, 4-Nitrophenol and Di-n-octyl 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 400-653805/3).

Method 8270E SIM: The continuing calibration verification (CCV) associated with batch 400-653755 recovered above the upper control limit for Benzo[g,h,i]perylene and Dibenz(a,h)anthracene. 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 400-653100 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.

Sample Summary

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

Job ID: 400-247655-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-247655-1	TB-ROX-120123-8260-A	Water	12/01/23 12:00	12/02/23 08:23
400-247655-2	TB-ROX-120123-8011-A	Water	12/01/23 12:00	12/02/23 08:23
400-247655-3	P56-ROX-120123	Water	12/01/23 09:25	12/02/23 08:23
400-247655-4	P93A-ROX-120123	Water	12/01/23 10:10	12/02/23 08:23
400-247655-5	P93C-ROX-120123	Water	12/01/23 10:55	12/02/23 08:23
400-247655-6	P93C-ROX-120123-DUP	Water	12/01/23 10:55	12/02/23 08:23

Detection Summary

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

Job ID: 400-247655-1

Client Sample ID: TB-ROX-120123-8260-A — Lab Sample ID: 400-247655-1

No Detections.

Client Sample ID: TB-ROX-120123-8011-A — Lab Sample ID: 400-247655-2

No Detections.

Client Sample ID: P56-ROX-120123 — Lab Sample ID: 400-247655-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	20	J	25	10	ug/L	1		8260D	Total/NA
Ethylbenzene	0.51	J	1.0	0.50	ug/L	1		8260D	Total/NA
Isopropylbenzene	11		1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	6.6		5.0	0.63	ug/L	1		8260D	Total/NA
N-Propylbenzene	12		1.0	0.69	ug/L	1		8260D	Total/NA
sec-Butylbenzene	1.8		1.0	0.70	ug/L	1		8260D	Total/NA
1,2,4-Trimethylbenzene	1.7		1.0	0.82	ug/L	1		8260D	Total/NA
1,3,5-Trimethylbenzene	1.0		1.0	0.56	ug/L	1		8260D	Total/NA
Xylenes, Total	6.9	J	10	1.6	ug/L	1		8260D	Total/NA
Acenaphthene	0.39		0.19	0.094	ug/L	1		8270E SIM	Total/NA
Anthracene	0.10	J	0.19	0.045	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.057	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.052	J	0.19	0.035	ug/L	1		8270E SIM	Total/NA
Dibenz(a,h)anthracene	0.061	J	0.19	0.045	ug/L	1		8270E SIM	Total/NA
Fluorene	0.21		0.19	0.084	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.074	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.32		0.19	0.085	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	3.0		0.19	0.076	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	2.3		0.19	0.063	ug/L	1		8270E SIM	Total/NA
Diethyl phthalate	0.41	J	9.5	0.23	ug/L	1		8270E	Total/NA

Client Sample ID: P93A-ROX-120123 — Lab Sample ID: 400-247655-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.1		1.0	0.50	ug/L	1		8260D	Total/NA
tert-Butylbenzene	0.94	J	1.0	0.63	ug/L	1		8260D	Total/NA
Dimethyl phthalate	1.1	J	9.6	0.16	ug/L	1		8270E	Total/NA

Client Sample ID: P93C-ROX-120123 — Lab Sample ID: 400-247655-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	49000		500	250	ug/L	500		8260D	Total/NA
Benzoic acid	15	J *1	29	7.0	ug/L	1		8270E	Total/NA
Diethyl phthalate	0.38	J	9.6	0.23	ug/L	1		8270E	Total/NA
Dimethyl phthalate	1.4	J	9.6	0.16	ug/L	1		8270E	Total/NA
Phenol	54	*1	9.6	2.5	ug/L	1		8270E	Total/NA

Client Sample ID: P93C-ROX-120123-DUP — Lab Sample ID: 400-247655-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene - RA	67000		500	250	ug/L	500		8260D	Total/NA
Benzoic acid	15	J *1	29	7.0	ug/L	1		8270E	Total/NA
Diethyl phthalate	0.36	J	9.5	0.23	ug/L	1		8270E	Total/NA
Dimethyl phthalate	1.3	J	9.5	0.16	ug/L	1		8270E	Total/NA
Phenol	43	*1	9.5	2.5	ug/L	1		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Pensacola

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

Job ID: 400-247655-1

Client Sample ID: TB-ROX-120123-8260-A
Date Collected: 12/01/23 12:00
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/06/23 15:21	1
Acrolein	ND		20	3.3	ug/L			12/06/23 15:21	1
Acrylonitrile	ND		10	2.8	ug/L			12/06/23 15:21	1
Benzene	ND		1.0	0.50	ug/L			12/06/23 15:21	1
Bromobenzene	ND		1.0	0.54	ug/L			12/06/23 15:21	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/06/23 15:21	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/06/23 15:21	1
Bromoform	ND		5.0	0.25	ug/L			12/06/23 15:21	1
Bromomethane	ND		1.0	0.98	ug/L			12/06/23 15:21	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/06/23 15:21	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/06/23 15:21	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/06/23 15:21	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/06/23 15:21	1
Chloroethane	ND		1.0	0.76	ug/L			12/06/23 15:21	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/06/23 15:21	1
Chloroform	ND		1.0	0.90	ug/L			12/06/23 15:21	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/06/23 15:21	1
Chloromethane	ND		1.0	0.90	ug/L			12/06/23 15:21	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/06/23 15:21	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/06/23 15:21	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/06/23 15:21	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/06/23 15:21	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/06/23 15:21	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/06/23 15:21	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/06/23 15:21	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/06/23 15:21	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/06/23 15:21	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 15:21	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 15:21	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 15:21	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 15:21	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/06/23 15:21	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/06/23 15:21	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/06/23 15:21	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/06/23 15:21	1
2-Hexanone	ND		25	1.4	ug/L			12/06/23 15:21	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/06/23 15:21	1
Methylene bromide	ND		5.0	0.22	ug/L			12/06/23 15:21	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/06/23 15:21	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/06/23 15:21	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/06/23 15:21	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/06/23 15:21	1
Naphthalene	ND		5.0	3.0	ug/L			12/06/23 15:21	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/06/23 15:21	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/06/23 15:21	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/06/23 15:21	1
o-Xylene	ND		5.0	0.60	ug/L			12/06/23 15:21	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/06/23 15:21	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/06/23 15:21	1

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

Job ID: 400-247655-1

Client Sample ID: TB-ROX-120123-8260-A
Date Collected: 12/01/23 12:00
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/06/23 15:21	1
Styrene	ND		1.0	1.0	ug/L			12/06/23 15:21	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/06/23 15:21	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/06/23 15:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/06/23 15:21	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/06/23 15:21	1
Toluene	ND		1.0	0.90	ug/L			12/06/23 15:21	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 15:21	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/06/23 15:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/06/23 15:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/06/23 15:21	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/06/23 15:21	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/06/23 15:21	1
Trichloroethene	ND		1.0	0.15	ug/L			12/06/23 15:21	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/06/23 15:21	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/06/23 15:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/06/23 15:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/06/23 15:21	1
Vinyl acetate	ND		25	0.93	ug/L			12/06/23 15:21	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/06/23 15:21	1
Xylenes, Total	ND		10	1.6	ug/L			12/06/23 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*72 - 130*		*12/06/23 15:21*	*1*
Dibromofluoromethane	*111*		*75 - 126*		*12/06/23 15:21*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*12/06/23 15:21*	*1*

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

Job ID: 400-247655-1

Client Sample ID: TB-ROX-120123-8011-A
Date Collected: 12/01/23 12:00
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-2
Matrix: Water

Method: EPA 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		12/05/23 11:19	12/06/23 17:02	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 11:19	12/06/23 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*115*		*51 - 149*	*12/05/23 11:19*	*12/06/23 17:02*	*1*

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

Job ID: 400-247655-1

Client Sample ID: P56-ROX-120123
Date Collected: 12/01/23 09:25
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**20**	**J**	25	10	ug/L			12/06/23 16:29	1
Acrolein	ND		20	3.3	ug/L			12/06/23 16:29	1
Acrylonitrile	ND		10	2.8	ug/L			12/06/23 16:29	1
Benzene	ND		1.0	0.50	ug/L			12/06/23 16:29	1
Bromobenzene	ND		1.0	0.54	ug/L			12/06/23 16:29	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/06/23 16:29	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/06/23 16:29	1
Bromoform	ND		5.0	0.25	ug/L			12/06/23 16:29	1
Bromomethane	ND		1.0	0.98	ug/L			12/06/23 16:29	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/06/23 16:29	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/06/23 16:29	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/06/23 16:29	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/06/23 16:29	1
Chloroethane	ND		1.0	0.76	ug/L			12/06/23 16:29	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/06/23 16:29	1
Chloroform	ND		1.0	0.90	ug/L			12/06/23 16:29	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/06/23 16:29	1
Chloromethane	ND		1.0	0.90	ug/L			12/06/23 16:29	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/06/23 16:29	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/06/23 16:29	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/06/23 16:29	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/06/23 16:29	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/06/23 16:29	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/06/23 16:29	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/06/23 16:29	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/06/23 16:29	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/06/23 16:29	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 16:29	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 16:29	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 16:29	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 16:29	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/06/23 16:29	1
Ethylbenzene	**0.51**	**J**	1.0	0.50	ug/L			12/06/23 16:29	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/06/23 16:29	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/06/23 16:29	1
2-Hexanone	ND		25	1.4	ug/L			12/06/23 16:29	1
Isopropylbenzene	**11**		1.0	0.53	ug/L			12/06/23 16:29	1
Methylene bromide	ND		5.0	0.22	ug/L			12/06/23 16:29	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/06/23 16:29	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/06/23 16:29	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/06/23 16:29	1
m-Xylene & p-Xylene	**6.6**		5.0	0.63	ug/L			12/06/23 16:29	1
Naphthalene	ND		5.0	3.0	ug/L			12/06/23 16:29	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/06/23 16:29	1
N-Propylbenzene	**12**		1.0	0.69	ug/L			12/06/23 16:29	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/06/23 16:29	1
o-Xylene	ND		5.0	0.60	ug/L			12/06/23 16:29	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/06/23 16:29	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/06/23 16:29	1

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

Job ID: 400-247655-1

Client Sample ID: P56-ROX-120123
Date Collected: 12/01/23 09:25
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**1.8**		1.0	0.70	ug/L			12/06/23 16:29	1
Styrene	ND		1.0	1.0	ug/L			12/06/23 16:29	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/06/23 16:29	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/06/23 16:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/06/23 16:29	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/06/23 16:29	1
Toluene	ND		1.0	0.90	ug/L			12/06/23 16:29	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 16:29	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/06/23 16:29	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/06/23 16:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/06/23 16:29	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/06/23 16:29	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/06/23 16:29	1
Trichloroethene	ND		1.0	0.15	ug/L			12/06/23 16:29	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/06/23 16:29	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/06/23 16:29	1
1,2,4-Trimethylbenzene	**1.7**		1.0	0.82	ug/L			12/06/23 16:29	1
1,3,5-Trimethylbenzene	**1.0**		1.0	0.56	ug/L			12/06/23 16:29	1
Vinyl acetate	ND		25	0.93	ug/L			12/06/23 16:29	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/06/23 16:29	1
Xylenes, Total	**6.9**	**J**	10	1.6	ug/L			12/06/23 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*12/06/23 16:29*	*1*
Dibromofluoromethane	*95*		*75 - 126*		*12/06/23 16:29*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*12/06/23 16:29*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.39**		0.19	0.094	ug/L		12/07/23 14:39	12/11/23 18:59	1
Acenaphthylene	ND		0.19	0.042	ug/L		12/07/23 14:39	12/11/23 18:59	1
Anthracene	**0.10**	**J**	0.19	0.045	ug/L		12/07/23 14:39	12/11/23 18:59	1
Benzo[a]anthracene	**0.057**	**J**	0.19	0.032	ug/L		12/07/23 14:39	12/11/23 18:59	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		12/07/23 14:39	12/11/23 18:59	1
Benzo[b]fluoranthene	**0.052**	**J**	0.19	0.035	ug/L		12/07/23 14:39	12/11/23 18:59	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		12/07/23 14:39	12/11/23 18:59	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		12/07/23 14:39	12/11/23 18:59	1
Chrysene	ND		0.19	0.031	ug/L		12/07/23 14:39	12/11/23 18:59	1
Dibenz(a,h)anthracene	**0.061**	**J**	0.19	0.045	ug/L		12/07/23 14:39	12/11/23 18:59	1
Fluoranthene	ND		0.19	0.032	ug/L		12/07/23 14:39	12/11/23 18:59	1
Fluorene	**0.21**		0.19	0.084	ug/L		12/07/23 14:39	12/11/23 18:59	1
Indeno[1,2,3-cd]pyrene	**0.074**	**J**	0.19	0.032	ug/L		12/07/23 14:39	12/11/23 18:59	1
Phenanthrene	**0.32**		0.19	0.085	ug/L		12/07/23 14:39	12/11/23 18:59	1
Pyrene	ND		0.19	0.037	ug/L		12/07/23 14:39	12/11/23 18:59	1
1-Methylnaphthalene	**3.0**		0.19	0.076	ug/L		12/07/23 14:39	12/11/23 18:59	1
2-Methylnaphthalene	**2.3**		0.19	0.063	ug/L		12/07/23 14:39	12/11/23 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*52*		*18 - 147*	*12/07/23 14:39*	*12/11/23 18:59*	*1*
2-Fluorobiphenyl	*51*		*15 - 128*	*12/07/23 14:39*	*12/11/23 18:59*	*1*

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

Job ID: 400-247655-1

Client Sample ID: P56-ROX-120123
Date Collected: 12/01/23 09:25
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-3
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*68*		*10 - 144*	*12/07/23 14:39*	*12/11/23 18:59*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.5	3.6	ug/L		12/07/23 14:39	12/11/23 19:40	1
Benzenethiol	ND	*- *1	9.5	1.6	ug/L		12/07/23 14:39	12/11/23 19:40	1
Benzoic acid	ND	*1	28	6.9	ug/L		12/07/23 14:39	12/11/23 19:40	1
Benzyl alcohol	ND		9.5	1.9	ug/L		12/07/23 14:39	12/11/23 19:40	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		12/07/23 14:39	12/11/23 19:40	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		12/07/23 14:39	12/11/23 19:40	1
bis (2-chloroisopropyl) ether	ND	*-	9.5	0.15	ug/L		12/07/23 14:39	12/11/23 19:40	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		12/07/23 14:39	12/11/23 19:40	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		12/07/23 14:39	12/11/23 19:40	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		12/07/23 14:39	12/11/23 19:40	1
4-Chloroaniline	ND		9.5	3.2	ug/L		12/07/23 14:39	12/11/23 19:40	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		12/07/23 14:39	12/11/23 19:40	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		12/07/23 14:39	12/11/23 19:40	1
2-Chlorophenol	ND	*1	9.5	2.1	ug/L		12/07/23 14:39	12/11/23 19:40	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		12/07/23 14:39	12/11/23 19:40	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		12/07/23 14:39	12/11/23 19:40	1
Dibenzofuran	ND		9.5	0.16	ug/L		12/07/23 14:39	12/11/23 19:40	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		12/07/23 14:39	12/11/23 19:40	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		12/07/23 14:39	12/11/23 19:40	1
Diethyl phthalate	**0.41**	**J**	9.5	0.23	ug/L		12/07/23 14:39	12/11/23 19:40	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		12/07/23 14:39	12/11/23 19:40	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		12/07/23 14:39	12/11/23 19:40	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		12/07/23 14:39	12/11/23 19:40	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		12/07/23 14:39	12/11/23 19:40	1
2,4-Dinitrophenol	ND	*1	28	3.2	ug/L		12/07/23 14:39	12/11/23 19:40	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		12/07/23 14:39	12/11/23 19:40	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		12/07/23 14:39	12/11/23 19:40	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		12/07/23 14:39	12/11/23 19:40	1
1,4-Dioxane	ND	*1	9.5	0.95	ug/L		12/07/23 14:39	12/11/23 19:40	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		12/07/23 14:39	12/11/23 19:40	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		12/07/23 14:39	12/11/23 19:40	1
Hexachlorocyclopentadiene	ND	*1	19	2.5	ug/L		12/07/23 14:39	12/11/23 19:40	1
Hexachloroethane	ND	*1	9.5	4.0	ug/L		12/07/23 14:39	12/11/23 19:40	1
Indene	ND		9.5	0.95	ug/L		12/07/23 14:39	12/11/23 19:40	1
Isophorone	ND		9.5	0.13	ug/L		12/07/23 14:39	12/11/23 19:40	1
2-Methylphenol	ND		9.5	1.7	ug/L		12/07/23 14:39	12/11/23 19:40	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		12/07/23 14:39	12/11/23 19:40	1
2-Nitroaniline	ND		9.5	2.1	ug/L		12/07/23 14:39	12/11/23 19:40	1
3-Nitroaniline	ND		9.5	1.7	ug/L		12/07/23 14:39	12/11/23 19:40	1
4-Nitroaniline	ND		9.5	1.4	ug/L		12/07/23 14:39	12/11/23 19:40	1
Nitrobenzene	ND		9.5	0.12	ug/L		12/07/23 14:39	12/11/23 19:40	1
2-Nitrophenol	ND		9.5	4.9	ug/L		12/07/23 14:39	12/11/23 19:40	1
4-Nitrophenol	ND		9.5	2.0	ug/L		12/07/23 14:39	12/11/23 19:40	1
N-Nitrosodimethylamine	ND	*1	9.5	3.3	ug/L		12/07/23 14:39	12/11/23 19:40	1

Client Sample ID: P56-ROX-120123

Date Collected: 12/01/23 09:25
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-3

Matrix: Water

Method: SW846 8270E - 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		12/07/23 14:39	12/11/23 19:40	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		12/07/23 14:39	12/11/23 19:40	1
Pentachlorophenol	ND		19	1.3	ug/L		12/07/23 14:39	12/11/23 19:40	1
Phenol	ND	*1	9.5	2.5	ug/L		12/07/23 14:39	12/11/23 19:40	1
Pyridine	ND	*1	9.5	3.0	ug/L		12/07/23 14:39	12/11/23 19:40	1
Quinoline	ND		9.5	4.3	ug/L		12/07/23 14:39	12/11/23 19:40	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		12/07/23 14:39	12/11/23 19:40	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		12/07/23 14:39	12/11/23 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*46 - 124*	*12/07/23 14:39*	*12/11/23 19:40*	*1*
2-Fluorophenol	*31*		*13 - 113*	*12/07/23 14:39*	*12/11/23 19:40*	*1*
Nitrobenzene-d5	*55*		*36 - 126*	*12/07/23 14:39*	*12/11/23 19:40*	*1*
Phenol-d5	*46*		*17 - 127*	*12/07/23 14:39*	*12/11/23 19:40*	*1*
Terphenyl-d14	*62*		*44 - 149*	*12/07/23 14:39*	*12/11/23 19:40*	*1*
2,4,6-Tribromophenol	*83*		*26 - 150*	*12/07/23 14:39*	*12/11/23 19:40*	*1*

Method: EPA 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		12/05/23 11:19	12/06/23 10:47	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 11:19	12/06/23 10:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*51 - 149*	*12/05/23 11:19*	*12/06/23 10:47*	*1*

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

Job ID: 400-247655-1

Client Sample ID: P93A-ROX-120123

Date Collected: 12/01/23 10:10
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-4

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/06/23 16:52	1
Acrolein	ND		20	3.3	ug/L			12/06/23 16:52	1
Acrylonitrile	ND		10	2.8	ug/L			12/06/23 16:52	1
Benzene	**2.1**		1.0	0.50	ug/L			12/06/23 16:52	1
Bromobenzene	ND		1.0	0.54	ug/L			12/06/23 16:52	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/06/23 16:52	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/06/23 16:52	1
Bromoform	ND		5.0	0.25	ug/L			12/06/23 16:52	1
Bromomethane	ND		1.0	0.98	ug/L			12/06/23 16:52	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/06/23 16:52	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/06/23 16:52	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/06/23 16:52	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/06/23 16:52	1
Chloroethane	ND		1.0	0.76	ug/L			12/06/23 16:52	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/06/23 16:52	1
Chloroform	ND		1.0	0.90	ug/L			12/06/23 16:52	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/06/23 16:52	1
Chloromethane	ND		1.0	0.90	ug/L			12/06/23 16:52	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/06/23 16:52	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/06/23 16:52	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/06/23 16:52	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/06/23 16:52	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/06/23 16:52	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/06/23 16:52	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/06/23 16:52	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/06/23 16:52	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/06/23 16:52	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 16:52	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 16:52	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 16:52	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 16:52	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/06/23 16:52	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/06/23 16:52	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/06/23 16:52	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/06/23 16:52	1
2-Hexanone	ND		25	1.4	ug/L			12/06/23 16:52	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/06/23 16:52	1
Methylene bromide	ND		5.0	0.22	ug/L			12/06/23 16:52	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/06/23 16:52	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/06/23 16:52	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/06/23 16:52	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/06/23 16:52	1
Naphthalene	ND		5.0	3.0	ug/L			12/06/23 16:52	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/06/23 16:52	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/06/23 16:52	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/06/23 16:52	1
o-Xylene	ND		5.0	0.60	ug/L			12/06/23 16:52	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/06/23 16:52	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/06/23 16:52	1

Client Sample ID: P93A-ROX-120123
Date Collected: 12/01/23 10:10
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/06/23 16:52	1
Styrene	ND		1.0	1.0	ug/L			12/06/23 16:52	1
tert-Butylbenzene	**0.94**	**J**	1.0	0.63	ug/L			12/06/23 16:52	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/06/23 16:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/06/23 16:52	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/06/23 16:52	1
Toluene	ND		1.0	0.90	ug/L			12/06/23 16:52	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 16:52	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/06/23 16:52	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/06/23 16:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/06/23 16:52	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/06/23 16:52	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/06/23 16:52	1
Trichloroethene	ND		1.0	0.15	ug/L			12/06/23 16:52	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/06/23 16:52	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/06/23 16:52	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/06/23 16:52	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/06/23 16:52	1
Vinyl acetate	ND		25	0.93	ug/L			12/06/23 16:52	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/06/23 16:52	1
Xylenes, Total	ND		10	1.6	ug/L			12/06/23 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*12/06/23 16:52*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*12/06/23 16:52*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*12/06/23 16:52*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.095	ug/L		12/07/23 14:39	12/11/23 19:19	1
Acenaphthylene	ND		0.19	0.042	ug/L		12/07/23 14:39	12/11/23 19:19	1
Anthracene	ND		0.19	0.045	ug/L		12/07/23 14:39	12/11/23 19:19	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		12/07/23 14:39	12/11/23 19:19	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		12/07/23 14:39	12/11/23 19:19	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		12/07/23 14:39	12/11/23 19:19	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		12/07/23 14:39	12/11/23 19:19	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		12/07/23 14:39	12/11/23 19:19	1
Chrysene	ND		0.19	0.032	ug/L		12/07/23 14:39	12/11/23 19:19	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		12/07/23 14:39	12/11/23 19:19	1
Fluoranthene	ND		0.19	0.033	ug/L		12/07/23 14:39	12/11/23 19:19	1
Fluorene	ND		0.19	0.085	ug/L		12/07/23 14:39	12/11/23 19:19	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		12/07/23 14:39	12/11/23 19:19	1
Phenanthrene	ND		0.19	0.086	ug/L		12/07/23 14:39	12/11/23 19:19	1
Pyrene	ND		0.19	0.037	ug/L		12/07/23 14:39	12/11/23 19:19	1
1-Methylnaphthalene	ND		0.19	0.077	ug/L		12/07/23 14:39	12/11/23 19:19	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		12/07/23 14:39	12/11/23 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*103*		*18 - 147*	*12/07/23 14:39*	*12/11/23 19:19*	*1*
2-Fluorobiphenyl	*69*		*15 - 128*	*12/07/23 14:39*	*12/11/23 19:19*	*1*

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

Job ID: 400-247655-1

Client Sample ID: P93A-ROX-120123
Date Collected: 12/01/23 10:10
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-4
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*77*		*10 - 144*	*12/07/23 14:39*	*12/11/23 19:19*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.6	3.6	ug/L		12/07/23 14:39	12/11/23 20:05	1
Benzenethiol	ND	*- *1	9.6	1.6	ug/L		12/07/23 14:39	12/11/23 20:05	1
Benzoic acid	ND	*1	29	7.0	ug/L		12/07/23 14:39	12/11/23 20:05	1
Benzyl alcohol	ND		9.6	1.9	ug/L		12/07/23 14:39	12/11/23 20:05	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		12/07/23 14:39	12/11/23 20:05	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		12/07/23 14:39	12/11/23 20:05	1
bis (2-chloroisopropyl) ether	ND	*-	9.6	0.15	ug/L		12/07/23 14:39	12/11/23 20:05	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		12/07/23 14:39	12/11/23 20:05	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		12/07/23 14:39	12/11/23 20:05	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		12/07/23 14:39	12/11/23 20:05	1
4-Chloroaniline	ND		9.6	3.3	ug/L		12/07/23 14:39	12/11/23 20:05	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		12/07/23 14:39	12/11/23 20:05	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		12/07/23 14:39	12/11/23 20:05	1
2-Chlorophenol	ND	*1	9.6	2.1	ug/L		12/07/23 14:39	12/11/23 20:05	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		12/07/23 14:39	12/11/23 20:05	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		12/07/23 14:39	12/11/23 20:05	1
Dibenzofuran	ND		9.6	0.16	ug/L		12/07/23 14:39	12/11/23 20:05	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		12/07/23 14:39	12/11/23 20:05	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		12/07/23 14:39	12/11/23 20:05	1
Diethyl phthalate	ND		9.6	0.23	ug/L		12/07/23 14:39	12/11/23 20:05	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		12/07/23 14:39	12/11/23 20:05	1
Dimethyl phthalate	**1.1**	**J**	9.6	0.16	ug/L		12/07/23 14:39	12/11/23 20:05	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		12/07/23 14:39	12/11/23 20:05	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		12/07/23 14:39	12/11/23 20:05	1
2,4-Dinitrophenol	ND	*1	29	3.3	ug/L		12/07/23 14:39	12/11/23 20:05	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		12/07/23 14:39	12/11/23 20:05	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		12/07/23 14:39	12/11/23 20:05	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		12/07/23 14:39	12/11/23 20:05	1
1,4-Dioxane	ND	*1	9.6	0.96	ug/L		12/07/23 14:39	12/11/23 20:05	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		12/07/23 14:39	12/11/23 20:05	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		12/07/23 14:39	12/11/23 20:05	1
Hexachlorocyclopentadiene	ND	*1	19	2.5	ug/L		12/07/23 14:39	12/11/23 20:05	1
Hexachloroethane	ND	*1	9.6	4.0	ug/L		12/07/23 14:39	12/11/23 20:05	1
Indene	ND		9.6	0.96	ug/L		12/07/23 14:39	12/11/23 20:05	1
Isophorone	ND		9.6	0.13	ug/L		12/07/23 14:39	12/11/23 20:05	1
2-Methylphenol	ND		9.6	1.7	ug/L		12/07/23 14:39	12/11/23 20:05	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		12/07/23 14:39	12/11/23 20:05	1
2-Nitroaniline	ND		9.6	2.1	ug/L		12/07/23 14:39	12/11/23 20:05	1
3-Nitroaniline	ND		9.6	1.7	ug/L		12/07/23 14:39	12/11/23 20:05	1
4-Nitroaniline	ND		9.6	1.4	ug/L		12/07/23 14:39	12/11/23 20:05	1
Nitrobenzene	ND		9.6	0.12	ug/L		12/07/23 14:39	12/11/23 20:05	1
2-Nitrophenol	ND		9.6	5.0	ug/L		12/07/23 14:39	12/11/23 20:05	1
4-Nitrophenol	ND		9.6	2.0	ug/L		12/07/23 14:39	12/11/23 20:05	1
N-Nitrosodimethylamine	ND	*1	9.6	3.3	ug/L		12/07/23 14:39	12/11/23 20:05	1

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

Job ID: 400-247655-1

Client Sample ID: P93A-ROX-120123
Date Collected: 12/01/23 10:10
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-4
Matrix: Water

Method: SW846 8270E - 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		12/07/23 14:39	12/11/23 20:05	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		12/07/23 14:39	12/11/23 20:05	1
Pentachlorophenol	ND		19	1.3	ug/L		12/07/23 14:39	12/11/23 20:05	1
Phenol	ND	*1	9.6	2.5	ug/L		12/07/23 14:39	12/11/23 20:05	1
Pyridine	ND	*1	9.6	3.1	ug/L		12/07/23 14:39	12/11/23 20:05	1
Quinoline	ND		9.6	4.3	ug/L		12/07/23 14:39	12/11/23 20:05	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		12/07/23 14:39	12/11/23 20:05	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		12/07/23 14:39	12/11/23 20:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*46 - 124*	*12/07/23 14:39*	*12/11/23 20:05*	*1*
2-Fluorophenol	*17*		*13 - 113*	*12/07/23 14:39*	*12/11/23 20:05*	*1*
Nitrobenzene-d5	*62*		*36 - 126*	*12/07/23 14:39*	*12/11/23 20:05*	*1*
Phenol-d5	*41*		*17 - 127*	*12/07/23 14:39*	*12/11/23 20:05*	*1*
Terphenyl-d14	*99*		*44 - 149*	*12/07/23 14:39*	*12/11/23 20:05*	*1*
2,4,6-Tribromophenol	*88*		*26 - 150*	*12/07/23 14:39*	*12/11/23 20:05*	*1*

Method: EPA 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		12/05/23 11:19	12/06/23 11:08	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 11:19	12/06/23 11:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*51 - 149*	*12/05/23 11:19*	*12/06/23 11:08*	*1*

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

Job ID: 400-247655-1

Client Sample ID: P93C-ROX-120123
Date Collected: 12/01/23 10:55
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		13000	5000	ug/L			12/06/23 18:22	500
Acrolein	ND		10000	1700	ug/L			12/06/23 18:22	500
Acrylonitrile	ND		5000	1400	ug/L			12/06/23 18:22	500
Benzene	**49000**		500	250	ug/L			12/06/23 18:22	500
Bromobenzene	ND		500	270	ug/L			12/06/23 18:22	500
Bromochloromethane	ND		500	110	ug/L			12/06/23 18:22	500
Bromodichloromethane	ND		500	250	ug/L			12/06/23 18:22	500
Bromoform	ND		2500	130	ug/L			12/06/23 18:22	500
Bromomethane	ND		500	490	ug/L			12/06/23 18:22	500
2-Butanone (MEK)	ND		13000	1300	ug/L			12/06/23 18:22	500
Carbon disulfide	ND		500	250	ug/L			12/06/23 18:22	500
Carbon tetrachloride	ND		500	95	ug/L			12/06/23 18:22	500
Chlorobenzene	ND		500	450	ug/L			12/06/23 18:22	500
Chloroethane	ND		500	380	ug/L			12/06/23 18:22	500
2-Chloroethyl vinyl ether	ND		2500	1000	ug/L			12/06/23 18:22	500
Chloroform	ND		500	450	ug/L			12/06/23 18:22	500
1-Chlorohexane	ND		500	160	ug/L			12/06/23 18:22	500
Chloromethane	ND		500	450	ug/L			12/06/23 18:22	500
cis-1,2-Dichloroethene	ND		500	100	ug/L			12/06/23 18:22	500
cis-1,3-Dichloropropene	ND		2500	250	ug/L			12/06/23 18:22	500
Dibromochloromethane	ND		500	120	ug/L			12/06/23 18:22	500
1,2-Dichlorobenzene	ND		500	250	ug/L			12/06/23 18:22	500
1,3-Dichlorobenzene	ND		500	270	ug/L			12/06/23 18:22	500
1,4-Dichlorobenzene	ND		500	320	ug/L			12/06/23 18:22	500
Dichlorodifluoromethane	ND		500	430	ug/L			12/06/23 18:22	500
1,1-Dichloroethane	ND		500	250	ug/L			12/06/23 18:22	500
1,2-Dichloroethane	ND		500	95	ug/L			12/06/23 18:22	500
1,1-Dichloroethene	ND		500	250	ug/L			12/06/23 18:22	500
1,2-Dichloropropane	ND		500	250	ug/L			12/06/23 18:22	500
1,3-Dichloropropane	ND		500	250	ug/L			12/06/23 18:22	500
2,2-Dichloropropane	ND		500	250	ug/L			12/06/23 18:22	500
1,1-Dichloropropene	ND		500	250	ug/L			12/06/23 18:22	500
Ethylbenzene	ND		500	250	ug/L			12/06/23 18:22	500
Ethyl methacrylate	ND		500	300	ug/L			12/06/23 18:22	500
Hexachlorobutadiene	ND		2500	450	ug/L			12/06/23 18:22	500
2-Hexanone	ND		13000	700	ug/L			12/06/23 18:22	500
Isopropylbenzene	ND		500	270	ug/L			12/06/23 18:22	500
Methylene bromide	ND		2500	110	ug/L			12/06/23 18:22	500
Methylene Chloride	ND		2500	1500	ug/L			12/06/23 18:22	500
4-Methyl-2-pentanone (MIBK)	ND		13000	900	ug/L			12/06/23 18:22	500
Methyl tert-butyl ether	ND		500	110	ug/L			12/06/23 18:22	500
m-Xylene & p-Xylene	ND		2500	320	ug/L			12/06/23 18:22	500
Naphthalene	ND		2500	1500	ug/L			12/06/23 18:22	500
n-Butylbenzene	ND		500	380	ug/L			12/06/23 18:22	500
N-Propylbenzene	ND		500	350	ug/L			12/06/23 18:22	500
o-Chlorotoluene	ND		500	290	ug/L			12/06/23 18:22	500
o-Xylene	ND		2500	300	ug/L			12/06/23 18:22	500
p-Chlorotoluene	ND		500	280	ug/L			12/06/23 18:22	500
p-Isopropyltoluene	ND		500	360	ug/L			12/06/23 18:22	500

Client Sample ID: P93C-ROX-120123
Date Collected: 12/01/23 10:55
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		500	350	ug/L			12/06/23 18:22	500
Styrene	ND		500	500	ug/L			12/06/23 18:22	500
tert-Butylbenzene	ND		500	320	ug/L			12/06/23 18:22	500
1,1,1,2-Tetrachloroethane	ND		500	80	ug/L			12/06/23 18:22	500
1,1,2,2-Tetrachloroethane	ND		500	250	ug/L			12/06/23 18:22	500
Tetrachloroethene	ND		500	450	ug/L			12/06/23 18:22	500
Toluene	ND		500	450	ug/L			12/06/23 18:22	500
trans-1,2-Dichloroethene	ND		500	250	ug/L			12/06/23 18:22	500
trans-1,3-Dichloropropene	ND		2500	100	ug/L			12/06/23 18:22	500
1,2,3-Trichlorobenzene	ND		500	450	ug/L			12/06/23 18:22	500
1,2,4-Trichlorobenzene	ND		500	410	ug/L			12/06/23 18:22	500
1,1,1-Trichloroethane	ND		500	90	ug/L			12/06/23 18:22	500
1,1,2-Trichloroethane	ND		2500	110	ug/L			12/06/23 18:22	500
Trichloroethene	ND		500	75	ug/L			12/06/23 18:22	500
Trichlorofluoromethane	ND		500	260	ug/L			12/06/23 18:22	500
1,2,3-Trichloropropane	ND		2500	420	ug/L			12/06/23 18:22	500
1,2,4-Trimethylbenzene	ND		500	410	ug/L			12/06/23 18:22	500
1,3,5-Trimethylbenzene	ND		500	280	ug/L			12/06/23 18:22	500
Vinyl acetate	ND		13000	470	ug/L			12/06/23 18:22	500
Vinyl chloride	ND		500	250	ug/L			12/06/23 18:22	500
Xylenes, Total	ND		5000	800	ug/L			12/06/23 18:22	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*72 - 130*		*12/06/23 18:22*	*500*
Dibromofluoromethane	*106*		*75 - 126*		*12/06/23 18:22*	*500*
Toluene-d8 (Surr)	*96*		*64 - 132*		*12/06/23 18:22*	*500*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.095	ug/L		12/07/23 14:39	12/11/23 19:39	1
Acenaphthylene	ND		0.19	0.042	ug/L		12/07/23 14:39	12/11/23 19:39	1
Anthracene	ND		0.19	0.045	ug/L		12/07/23 14:39	12/11/23 19:39	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		12/07/23 14:39	12/11/23 19:39	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		12/07/23 14:39	12/11/23 19:39	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		12/07/23 14:39	12/11/23 19:39	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		12/07/23 14:39	12/11/23 19:39	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		12/07/23 14:39	12/11/23 19:39	1
Chrysene	ND		0.19	0.032	ug/L		12/07/23 14:39	12/11/23 19:39	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		12/07/23 14:39	12/11/23 19:39	1
Fluoranthene	ND		0.19	0.033	ug/L		12/07/23 14:39	12/11/23 19:39	1
Fluorene	ND		0.19	0.085	ug/L		12/07/23 14:39	12/11/23 19:39	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		12/07/23 14:39	12/11/23 19:39	1
Phenanthrene	ND		0.19	0.086	ug/L		12/07/23 14:39	12/11/23 19:39	1
Pyrene	ND		0.19	0.037	ug/L		12/07/23 14:39	12/11/23 19:39	1
1-Methylnaphthalene	ND		0.19	0.077	ug/L		12/07/23 14:39	12/11/23 19:39	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		12/07/23 14:39	12/11/23 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*53*		*18 - 147*	*12/07/23 14:39*	*12/11/23 19:39*	*1*
2-Fluorobiphenyl	*55*		*15 - 128*	*12/07/23 14:39*	*12/11/23 19:39*	*1*

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

Job ID: 400-247655-1

Client Sample ID: P93C-ROX-120123
Date Collected: 12/01/23 10:55
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-5
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	80		10 - 144	12/07/23 14:39	12/11/23 19:39	1

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.6	3.6	ug/L		12/07/23 14:39	12/11/23 20:30	1
Benzenethiol	ND	*- *1	9.6	1.6	ug/L		12/07/23 14:39	12/11/23 20:30	1
Benzoic acid	**15**	**J *1**	29	7.0	ug/L		12/07/23 14:39	12/11/23 20:30	1
Benzyl alcohol	ND		9.6	1.9	ug/L		12/07/23 14:39	12/11/23 20:30	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		12/07/23 14:39	12/11/23 20:30	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		12/07/23 14:39	12/11/23 20:30	1
bis (2-chloroisopropyl) ether	ND	*-	9.6	0.15	ug/L		12/07/23 14:39	12/11/23 20:30	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		12/07/23 14:39	12/11/23 20:30	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		12/07/23 14:39	12/11/23 20:30	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		12/07/23 14:39	12/11/23 20:30	1
4-Chloroaniline	ND		9.6	3.3	ug/L		12/07/23 14:39	12/11/23 20:30	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		12/07/23 14:39	12/11/23 20:30	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		12/07/23 14:39	12/11/23 20:30	1
2-Chlorophenol	ND	*1	9.6	2.1	ug/L		12/07/23 14:39	12/11/23 20:30	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		12/07/23 14:39	12/11/23 20:30	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		12/07/23 14:39	12/11/23 20:30	1
Dibenzofuran	ND		9.6	0.16	ug/L		12/07/23 14:39	12/11/23 20:30	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		12/07/23 14:39	12/11/23 20:30	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		12/07/23 14:39	12/11/23 20:30	1
Diethyl phthalate	**0.38**	**J**	9.6	0.23	ug/L		12/07/23 14:39	12/11/23 20:30	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		12/07/23 14:39	12/11/23 20:30	1
Dimethyl phthalate	**1.4**	**J**	9.6	0.16	ug/L		12/07/23 14:39	12/11/23 20:30	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		12/07/23 14:39	12/11/23 20:30	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		12/07/23 14:39	12/11/23 20:30	1
2,4-Dinitrophenol	ND	*1	29	3.3	ug/L		12/07/23 14:39	12/11/23 20:30	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		12/07/23 14:39	12/11/23 20:30	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		12/07/23 14:39	12/11/23 20:30	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		12/07/23 14:39	12/11/23 20:30	1
1,4-Dioxane	ND	*1	9.6	0.96	ug/L		12/07/23 14:39	12/11/23 20:30	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		12/07/23 14:39	12/11/23 20:30	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		12/07/23 14:39	12/11/23 20:30	1
Hexachlorocyclopentadiene	ND	*1	19	2.5	ug/L		12/07/23 14:39	12/11/23 20:30	1
Hexachloroethane	ND	*1	9.6	4.0	ug/L		12/07/23 14:39	12/11/23 20:30	1
Indene	ND		9.6	0.96	ug/L		12/07/23 14:39	12/11/23 20:30	1
Isophorone	ND		9.6	0.13	ug/L		12/07/23 14:39	12/11/23 20:30	1
2-Methylphenol	ND		9.6	1.7	ug/L		12/07/23 14:39	12/11/23 20:30	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		12/07/23 14:39	12/11/23 20:30	1
2-Nitroaniline	ND		9.6	2.1	ug/L		12/07/23 14:39	12/11/23 20:30	1
3-Nitroaniline	ND		9.6	1.7	ug/L		12/07/23 14:39	12/11/23 20:30	1
4-Nitroaniline	ND		9.6	1.4	ug/L		12/07/23 14:39	12/11/23 20:30	1
Nitrobenzene	ND		9.6	0.12	ug/L		12/07/23 14:39	12/11/23 20:30	1
2-Nitrophenol	ND		9.6	5.0	ug/L		12/07/23 14:39	12/11/23 20:30	1
4-Nitrophenol	ND		9.6	2.0	ug/L		12/07/23 14:39	12/11/23 20:30	1
N-Nitrosodimethylamine	ND	*1	9.6	3.3	ug/L		12/07/23 14:39	12/11/23 20:30	1

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

Job ID: 400-247655-1

Client Sample ID: P93C-ROX-120123
Date Collected: 12/01/23 10:55
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-5
Matrix: Water

Method: SW846 8270E - 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		12/07/23 14:39	12/11/23 20:30	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		12/07/23 14:39	12/11/23 20:30	1
Pentachlorophenol	ND		19	1.3	ug/L		12/07/23 14:39	12/11/23 20:30	1
Phenol	**54**	***1**	9.6	2.5	ug/L		12/07/23 14:39	12/11/23 20:30	1
Pyridine	ND	*1	9.6	3.1	ug/L		12/07/23 14:39	12/11/23 20:30	1
Quinoline	ND		9.6	4.3	ug/L		12/07/23 14:39	12/11/23 20:30	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		12/07/23 14:39	12/11/23 20:30	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		12/07/23 14:39	12/11/23 20:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*46 - 124*	*12/07/23 14:39*	*12/11/23 20:30*	*1*
2-Fluorophenol	*31*		*13 - 113*	*12/07/23 14:39*	*12/11/23 20:30*	*1*
Nitrobenzene-d5	*63*		*36 - 126*	*12/07/23 14:39*	*12/11/23 20:30*	*1*
Phenol-d5	*49*		*17 - 127*	*12/07/23 14:39*	*12/11/23 20:30*	*1*
Terphenyl-d14	*62*		*44 - 149*	*12/07/23 14:39*	*12/11/23 20:30*	*1*
2,4,6-Tribromophenol	*95*		*26 - 150*	*12/07/23 14:39*	*12/11/23 20:30*	*1*

Method: EPA 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		12/05/23 12:31	12/06/23 12:52	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 12:31	12/06/23 12:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*51 - 149*	*12/05/23 12:31*	*12/06/23 12:52*	*1*

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

Job ID: 400-247655-1

Client Sample ID: P93C-ROX-120123-DUP
Date Collected: 12/01/23 10:55
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		13000	5000	ug/L			12/06/23 18:45	500
Acrolein	ND		10000	1700	ug/L			12/06/23 18:45	500
Acrylonitrile	ND		5000	1400	ug/L			12/06/23 18:45	500
Bromobenzene	ND		500	270	ug/L			12/06/23 18:45	500
Bromochloromethane	ND		500	110	ug/L			12/06/23 18:45	500
Bromodichloromethane	ND		500	250	ug/L			12/06/23 18:45	500
Bromoform	ND		2500	130	ug/L			12/06/23 18:45	500
Bromomethane	ND		500	490	ug/L			12/06/23 18:45	500
2-Butanone (MEK)	ND		13000	1300	ug/L			12/06/23 18:45	500
Carbon disulfide	ND		500	250	ug/L			12/06/23 18:45	500
Carbon tetrachloride	ND		500	95	ug/L			12/06/23 18:45	500
Chlorobenzene	ND		500	450	ug/L			12/06/23 18:45	500
Chloroethane	ND		500	380	ug/L			12/06/23 18:45	500
2-Chloroethyl vinyl ether	ND		2500	1000	ug/L			12/06/23 18:45	500
Chloroform	ND		500	450	ug/L			12/06/23 18:45	500
1-Chlorohexane	ND		500	160	ug/L			12/06/23 18:45	500
Chloromethane	ND		500	450	ug/L			12/06/23 18:45	500
cis-1,2-Dichloroethene	ND		500	100	ug/L			12/06/23 18:45	500
cis-1,3-Dichloropropene	ND		2500	250	ug/L			12/06/23 18:45	500
Dibromochloromethane	ND		500	120	ug/L			12/06/23 18:45	500
1,2-Dichlorobenzene	ND		500	250	ug/L			12/06/23 18:45	500
1,3-Dichlorobenzene	ND		500	270	ug/L			12/06/23 18:45	500
1,4-Dichlorobenzene	ND		500	320	ug/L			12/06/23 18:45	500
Dichlorodifluoromethane	ND		500	430	ug/L			12/06/23 18:45	500
1,1-Dichloroethane	ND		500	250	ug/L			12/06/23 18:45	500
1,2-Dichloroethane	ND		500	95	ug/L			12/06/23 18:45	500
1,1-Dichloroethene	ND		500	250	ug/L			12/06/23 18:45	500
1,2-Dichloropropane	ND		500	250	ug/L			12/06/23 18:45	500
1,3-Dichloropropane	ND		500	250	ug/L			12/06/23 18:45	500
2,2-Dichloropropane	ND		500	250	ug/L			12/06/23 18:45	500
1,1-Dichloropropene	ND		500	250	ug/L			12/06/23 18:45	500
Ethylbenzene	ND		500	250	ug/L			12/06/23 18:45	500
Ethyl methacrylate	ND		500	300	ug/L			12/06/23 18:45	500
Hexachlorobutadiene	ND		2500	450	ug/L			12/06/23 18:45	500
2-Hexanone	ND		13000	700	ug/L			12/06/23 18:45	500
Isopropylbenzene	ND		500	270	ug/L			12/06/23 18:45	500
Methylene bromide	ND		2500	110	ug/L			12/06/23 18:45	500
Methylene Chloride	ND		2500	1500	ug/L			12/06/23 18:45	500
4-Methyl-2-pentanone (MIBK)	ND		13000	900	ug/L			12/06/23 18:45	500
Methyl tert-butyl ether	ND		500	110	ug/L			12/06/23 18:45	500
m-Xylene & p-Xylene	ND		2500	320	ug/L			12/06/23 18:45	500
Naphthalene	ND		2500	1500	ug/L			12/06/23 18:45	500
n-Butylbenzene	ND		500	380	ug/L			12/06/23 18:45	500
N-Propylbenzene	ND		500	350	ug/L			12/06/23 18:45	500
o-Chlorotoluene	ND		500	290	ug/L			12/06/23 18:45	500
o-Xylene	ND		2500	300	ug/L			12/06/23 18:45	500
p-Chlorotoluene	ND		500	280	ug/L			12/06/23 18:45	500
p-Isopropyltoluene	ND		500	360	ug/L			12/06/23 18:45	500
sec-Butylbenzene	ND		500	350	ug/L			12/06/23 18:45	500

Client Sample ID: P93C-ROX-120123-DUP

Date Collected: 12/01/23 10:55
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-6

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		500	500	ug/L			12/06/23 18:45	500
tert-Butylbenzene	ND		500	320	ug/L			12/06/23 18:45	500
1,1,1,2-Tetrachloroethane	ND		500	80	ug/L			12/06/23 18:45	500
1,1,2,2-Tetrachloroethane	ND		500	250	ug/L			12/06/23 18:45	500
Tetrachloroethene	ND		500	450	ug/L			12/06/23 18:45	500
Toluene	ND		500	450	ug/L			12/06/23 18:45	500
trans-1,2-Dichloroethene	ND		500	250	ug/L			12/06/23 18:45	500
trans-1,3-Dichloropropene	ND		2500	100	ug/L			12/06/23 18:45	500
1,2,3-Trichlorobenzene	ND		500	450	ug/L			12/06/23 18:45	500
1,2,4-Trichlorobenzene	ND		500	410	ug/L			12/06/23 18:45	500
1,1,1-Trichloroethane	ND		500	90	ug/L			12/06/23 18:45	500
1,1,2-Trichloroethane	ND		2500	110	ug/L			12/06/23 18:45	500
Trichloroethene	ND		500	75	ug/L			12/06/23 18:45	500
Trichlorofluoromethane	ND		500	260	ug/L			12/06/23 18:45	500
1,2,3-Trichloropropane	ND		2500	420	ug/L			12/06/23 18:45	500
1,2,4-Trimethylbenzene	ND		500	410	ug/L			12/06/23 18:45	500
1,3,5-Trimethylbenzene	ND		500	280	ug/L			12/06/23 18:45	500
Vinyl acetate	ND		13000	470	ug/L			12/06/23 18:45	500
Vinyl chloride	ND		500	250	ug/L			12/06/23 18:45	500
Xylenes, Total	ND		5000	800	ug/L			12/06/23 18:45	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 130*		*12/06/23 18:45*	*500*
Dibromofluoromethane	*105*		*75 - 126*		*12/06/23 18:45*	*500*
Toluene-d8 (Surr)	*96*		*64 - 132*		*12/06/23 18:45*	*500*

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**67000**		500	250	ug/L			12/12/23 15:28	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 130*		*12/12/23 15:28*	*500*
Dibromofluoromethane	*95*		*75 - 126*		*12/12/23 15:28*	*500*
Toluene-d8 (Surr)	*96*		*64 - 132*		*12/12/23 15:28*	*500*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.094	ug/L		12/07/23 14:39	12/11/23 20:00	1
Acenaphthylene	ND		0.19	0.042	ug/L		12/07/23 14:39	12/11/23 20:00	1
Anthracene	ND		0.19	0.045	ug/L		12/07/23 14:39	12/11/23 20:00	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		12/07/23 14:39	12/11/23 20:00	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		12/07/23 14:39	12/11/23 20:00	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		12/07/23 14:39	12/11/23 20:00	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		12/07/23 14:39	12/11/23 20:00	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		12/07/23 14:39	12/11/23 20:00	1
Chrysene	ND		0.19	0.031	ug/L		12/07/23 14:39	12/11/23 20:00	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		12/07/23 14:39	12/11/23 20:00	1
Fluoranthene	ND		0.19	0.032	ug/L		12/07/23 14:39	12/11/23 20:00	1
Fluorene	ND		0.19	0.085	ug/L		12/07/23 14:39	12/11/23 20:00	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		12/07/23 14:39	12/11/23 20:00	1

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

Job ID: 400-247655-1

Client Sample ID: P93C-ROX-120123-DUP

Date Collected: 12/01/23 10:55
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-6

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		0.19	0.086	ug/L		12/07/23 14:39	12/11/23 20:00	1
Pyrene	ND		0.19	0.037	ug/L		12/07/23 14:39	12/11/23 20:00	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		12/07/23 14:39	12/11/23 20:00	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		12/07/23 14:39	12/11/23 20:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*60*		*18 - 147*	*12/07/23 14:39*	*12/11/23 20:00*	*1*
2-Fluorobiphenyl	*53*		*15 - 128*	*12/07/23 14:39*	*12/11/23 20:00*	*1*
Nitrobenzene-d5	*73*		*10 - 144*	*12/07/23 14:39*	*12/11/23 20:00*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.5	3.6	ug/L		12/07/23 14:39	12/11/23 20:55	1
Benzenethiol	ND	*- *1	9.5	1.6	ug/L		12/07/23 14:39	12/11/23 20:55	1
Benzoic acid	**15**	**J *1**	29	7.0	ug/L		12/07/23 14:39	12/11/23 20:55	1
Benzyl alcohol	ND		9.5	1.9	ug/L		12/07/23 14:39	12/11/23 20:55	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		12/07/23 14:39	12/11/23 20:55	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		12/07/23 14:39	12/11/23 20:55	1
bis (2-chloroisopropyl) ether	ND	*-	9.5	0.15	ug/L		12/07/23 14:39	12/11/23 20:55	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		12/07/23 14:39	12/11/23 20:55	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		12/07/23 14:39	12/11/23 20:55	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		12/07/23 14:39	12/11/23 20:55	1
4-Chloroaniline	ND		9.5	3.2	ug/L		12/07/23 14:39	12/11/23 20:55	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		12/07/23 14:39	12/11/23 20:55	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		12/07/23 14:39	12/11/23 20:55	1
2-Chlorophenol	ND	*1	9.5	2.1	ug/L		12/07/23 14:39	12/11/23 20:55	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		12/07/23 14:39	12/11/23 20:55	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		12/07/23 14:39	12/11/23 20:55	1
Dibenzofuran	ND		9.5	0.16	ug/L		12/07/23 14:39	12/11/23 20:55	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		12/07/23 14:39	12/11/23 20:55	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		12/07/23 14:39	12/11/23 20:55	1
Diethyl phthalate	**0.36**	**J**	9.5	0.23	ug/L		12/07/23 14:39	12/11/23 20:55	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		12/07/23 14:39	12/11/23 20:55	1
Dimethyl phthalate	**1.3**	**J**	9.5	0.16	ug/L		12/07/23 14:39	12/11/23 20:55	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		12/07/23 14:39	12/11/23 20:55	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		12/07/23 14:39	12/11/23 20:55	1
2,4-Dinitrophenol	ND	*1	29	3.2	ug/L		12/07/23 14:39	12/11/23 20:55	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		12/07/23 14:39	12/11/23 20:55	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		12/07/23 14:39	12/11/23 20:55	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		12/07/23 14:39	12/11/23 20:55	1
1,4-Dioxane	ND	*1	9.5	0.95	ug/L		12/07/23 14:39	12/11/23 20:55	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		12/07/23 14:39	12/11/23 20:55	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		12/07/23 14:39	12/11/23 20:55	1
Hexachlorocyclopentadiene	ND	*1	19	2.5	ug/L		12/07/23 14:39	12/11/23 20:55	1
Hexachloroethane	ND	*1	9.5	4.0	ug/L		12/07/23 14:39	12/11/23 20:55	1
Indene	ND		9.5	0.95	ug/L		12/07/23 14:39	12/11/23 20:55	1
Isophorone	ND		9.5	0.13	ug/L		12/07/23 14:39	12/11/23 20:55	1
2-Methylphenol	ND		9.5	1.7	ug/L		12/07/23 14:39	12/11/23 20:55	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		12/07/23 14:39	12/11/23 20:55	1

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

Job ID: 400-247655-1

Client Sample ID: P93C-ROX-120123-DUP
Date Collected: 12/01/23 10:55
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-6
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		9.5	2.1	ug/L		12/07/23 14:39	12/11/23 20:55	1
3-Nitroaniline	ND		9.5	1.7	ug/L		12/07/23 14:39	12/11/23 20:55	1
4-Nitroaniline	ND		9.5	1.4	ug/L		12/07/23 14:39	12/11/23 20:55	1
Nitrobenzene	ND		9.5	0.12	ug/L		12/07/23 14:39	12/11/23 20:55	1
2-Nitrophenol	ND		9.5	5.0	ug/L		12/07/23 14:39	12/11/23 20:55	1
4-Nitrophenol	ND		9.5	2.0	ug/L		12/07/23 14:39	12/11/23 20:55	1
N-Nitrosodimethylamine	ND	*1	9.5	3.3	ug/L		12/07/23 14:39	12/11/23 20:55	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		12/07/23 14:39	12/11/23 20:55	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		12/07/23 14:39	12/11/23 20:55	1
Pentachlorophenol	ND		19	1.3	ug/L		12/07/23 14:39	12/11/23 20:55	1
Phenol	**43**	***1**	9.5	2.5	ug/L		12/07/23 14:39	12/11/23 20:55	1
Pyridine	ND	*1	9.5	3.1	ug/L		12/07/23 14:39	12/11/23 20:55	1
Quinoline	ND		9.5	4.3	ug/L		12/07/23 14:39	12/11/23 20:55	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		12/07/23 14:39	12/11/23 20:55	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		12/07/23 14:39	12/11/23 20:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*46 - 124*	*12/07/23 14:39*	*12/11/23 20:55*	*1*
2-Fluorophenol	*14*		*13 - 113*	*12/07/23 14:39*	*12/11/23 20:55*	*1*
Nitrobenzene-d5	*61*		*36 - 126*	*12/07/23 14:39*	*12/11/23 20:55*	*1*
Phenol-d5	*37*		*17 - 127*	*12/07/23 14:39*	*12/11/23 20:55*	*1*
Terphenyl-d14	*69*		*44 - 149*	*12/07/23 14:39*	*12/11/23 20:55*	*1*
2,4,6-Tribromophenol	*88*		*26 - 150*	*12/07/23 14:39*	*12/11/23 20:55*	*1*

Method: EPA 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		12/05/23 12:31	12/06/23 17:44	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 12:31	12/06/23 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*51 - 149*	*12/05/23 12:31*	*12/06/23 17:44*	*1*

Definitions/Glossary

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

Job ID: 400-247655-1

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, low 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.

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 MONTHLY GW

Job ID: 400-247655-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-130)	(75-126)	(64-132)
400-247655-1	TB-ROX-120123-8260-A	108	111	96
400-247655-3	P56-ROX-120123	106	95	99
400-247655-4	P93A-ROX-120123	106	109	96
400-247655-5	P93C-ROX-120123	108	106	96
400-247655-6	P93C-ROX-120123-DUP	107	105	96
400-247655-6 - RA	P93C-ROX-120123-DUP	93	95	96
LCS 400-653111/1001	Lab Control Sample	103	95	99
LCS 400-653927/1002	Lab Control Sample	101	91	98
MB 400-653111/3	Method Blank	105	110	95
MB 400-653927/6	Method Blank	94	100	95

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - 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)
400-247655-3	P56-ROX-120123	70	31	55	46	62	83
400-247655-4	P93A-ROX-120123	83	17	62	41	99	88
400-247655-5	P93C-ROX-120123	79	31	63	49	62	95
400-247655-6	P93C-ROX-120123-DUP	80	14	61	37	69	88
LCS 400-653399/19-A	Lab Control Sample	88	22	70	45	112	91
LCS 400-653399/2-A	Lab Control Sample	87	47	75	64	105	117
LCSD 400-653399/20-A	Lab Control Sample Dup	84	43	65	61	103	93
LCSD 400-653399/3-A	Lab Control Sample Dup	67	20	56	44	88	91
MB 400-653399/1-A	Method Blank	72	13	53	37	100	71

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-247655-3	P56-ROX-120123	52	51	68
400-247655-4	P93A-ROX-120123	103	69	77
400-247655-5	P93C-ROX-120123	53	55	80
400-247655-6	P93C-ROX-120123-DUP	60	53	73
LCS 400-653399/2-A	Lab Control Sample	76	76	84

Surrogate Summary

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

Job ID: 400-247655-1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
LCSD 400-653399/3-A	Lab Control Sample Dup	58	57	72
MB 400-653399/1-A	Method Blank	92	59	75

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-247655-2	TB-ROX-120123-8011-A	115
400-247655-3	P56-ROX-120123	109
400-247655-4	P93A-ROX-120123	108
400-247655-5	P93C-ROX-120123	110
400-247655-6	P93C-ROX-120123-DUP	114
LCS 400-652995/2-A	Lab Control Sample	79
LCS 400-653011/2-A	Lab Control Sample	88
LCSD 400-652995/3-A	Lab Control Sample Dup	76
LCSD 400-653011/3-A	Lab Control Sample Dup	86
MB 400-652995/1-A	Method Blank	97
MB 400-653011/1-A	Method Blank	97

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-247655-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

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

Job ID: 400-247655-1

Client Sample ID: TB-ROX-120123-8260-A
Lab Sample ID: 400-247655-1
Date Collected: 12/01/23 12:00
Matrix: Water
Date Received: 12/02/23 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653111	12/06/23 15:21	BPO	EET PEN

Client Sample ID: TB-ROX-120123-8011-A
Lab Sample ID: 400-247655-2
Date Collected: 12/01/23 12:00
Matrix: Water
Date Received: 12/02/23 08:23

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	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653100	12/06/23 17:02	PG	EET PEN

Client Sample ID: P56-ROX-120123
Lab Sample ID: 400-247655-3
Date Collected: 12/01/23 09:25
Matrix: Water
Date Received: 12/02/23 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653111	12/06/23 16:29	BPO	EET PEN
Total/NA	Prep	3520C			264 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 19:40	S1B	EET PEN
Total/NA	Prep	3520C			264 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653755	12/11/23 18:59	S1B	EET PEN
Total/NA	Prep	8011			34.5 mL	35 mL	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653100	12/06/23 10:47	PG	EET PEN

Client Sample ID: P93A-ROX-120123
Lab Sample ID: 400-247655-4
Date Collected: 12/01/23 10:10
Matrix: Water
Date Received: 12/02/23 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653111	12/06/23 16:52	BPO	EET PEN
Total/NA	Prep	3520C			261.4 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 20:05	S1B	EET PEN
Total/NA	Prep	3520C			261.4 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653755	12/11/23 19:19	S1B	EET PEN
Total/NA	Prep	8011			35.1 mL	35 mL	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653100	12/06/23 11:08	PG	EET PEN

Client Sample ID: P93C-ROX-120123
Lab Sample ID: 400-247655-5
Date Collected: 12/01/23 10:55
Matrix: Water
Date Received: 12/02/23 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		500	5 mL	5 mL	653111	12/06/23 18:22	BPO	EET PEN
Total/NA	Prep	3520C			261.2 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 20:30	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-247655-1

Client Sample ID: P93C-ROX-120123
Date Collected: 12/01/23 10:55
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-5
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			261.2 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653755	12/11/23 19:39	S1B	EET PEN
Total/NA	Prep	8011			35.7 mL	35 mL	653011	12/05/23 12:31	PG	EET PEN
Total/NA	Analysis	8011		1			653100	12/06/23 12:52	PG	EET PEN

Client Sample ID: P93C-ROX-120123-DUP
Date Collected: 12/01/23 10:55
Date Received: 12/02/23 08:23

Lab Sample ID: 400-247655-6
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	8260D		500	5 mL	5 mL	653111	12/06/23 18:45	BPO	EET PEN
Total/NA	Analysis	8260D	RA	500	5 mL	5 mL	653927	12/12/23 15:28	CAR	EET PEN
Total/NA	Prep	3520C			262.2 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 20:55	S1B	EET PEN
Total/NA	Prep	3520C			262.2 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653755	12/11/23 20:00	S1B	EET PEN
Total/NA	Prep	8011			35 mL	35 mL	653011	12/05/23 12:31	PG	EET PEN
Total/NA	Analysis	8011		1			653100	12/06/23 17:44	PG	EET PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-652995/1-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	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653060	12/05/23 15:58	PG	EET PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-653011/1-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	653011	12/05/23 12:31	PG	EET PEN
Total/NA	Analysis	8011		1			653100	12/06/23 11:50	PG	EET PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-653111/3
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	8260D		1	5 mL	5 mL	653111	12/06/23 10:26	BPO	EET PEN

Lab Chronicle

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

Job ID: 400-247655-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-653399/1-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	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 16:45	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653755	12/11/23 15:57	S1B	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-653927/6
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	8260D		1	5 mL	5 mL	653927	12/12/23 14:25	CAR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-652995/2-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	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653060	12/05/23 16:19	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653011/2-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	653011	12/05/23 12:31	PG	EET PEN
Total/NA	Analysis	8011		1			653100	12/06/23 12:11	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653111/1001
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	8260D		1	5 mL	5 mL	653111	12/06/23 09:23	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653399/19-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	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 18:01	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-247655-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653399/2-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	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 17:10	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	653755	12/11/23 16:17	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653927/1002
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	8260D		1	5 mL	5 mL	653927	12/12/23 12:49	CAR	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-652995/3-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	652995	12/05/23 11:19	PG	EET PEN
Total/NA	Analysis	8011		1			653060	12/05/23 16:40	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653011/3-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	653011	12/05/23 12:31	PG	EET PEN
Total/NA	Analysis	8011		1			653100	12/06/23 12:31	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653399/20-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	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 18:25	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653399/3-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	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 17:36	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	653755	12/11/23 16:37	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-247655-1

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 653111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247655-1	TB-ROX-120123-8260-A	Total/NA	Water	8260D	
400-247655-3	P56-ROX-120123	Total/NA	Water	8260D	
400-247655-4	P93A-ROX-120123	Total/NA	Water	8260D	
400-247655-5	P93C-ROX-120123	Total/NA	Water	8260D	
400-247655-6	P93C-ROX-120123-DUP	Total/NA	Water	8260D	
MB 400-653111/3	Method Blank	Total/NA	Water	8260D	
LCS 400-653111/1001	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 653927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247655-6 - RA	P93C-ROX-120123-DUP	Total/NA	Water	8260D	
MB 400-653927/6	Method Blank	Total/NA	Water	8260D	
LCS 400-653927/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 653399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247655-3	P56-ROX-120123	Total/NA	Water	3520C	
400-247655-4	P93A-ROX-120123	Total/NA	Water	3520C	
400-247655-5	P93C-ROX-120123	Total/NA	Water	3520C	
400-247655-6	P93C-ROX-120123-DUP	Total/NA	Water	3520C	
MB 400-653399/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-653399/19-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-653399/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-653399/20-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-653399/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 653755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247655-3	P56-ROX-120123	Total/NA	Water	8270E SIM	653399
400-247655-4	P93A-ROX-120123	Total/NA	Water	8270E SIM	653399
400-247655-5	P93C-ROX-120123	Total/NA	Water	8270E SIM	653399
400-247655-6	P93C-ROX-120123-DUP	Total/NA	Water	8270E SIM	653399
MB 400-653399/1-A	Method Blank	Total/NA	Water	8270E SIM	653399
LCS 400-653399/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	653399
LCSD 400-653399/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	653399

Analysis Batch: 653805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247655-3	P56-ROX-120123	Total/NA	Water	8270E	653399
400-247655-4	P93A-ROX-120123	Total/NA	Water	8270E	653399
400-247655-5	P93C-ROX-120123	Total/NA	Water	8270E	653399
400-247655-6	P93C-ROX-120123-DUP	Total/NA	Water	8270E	653399
MB 400-653399/1-A	Method Blank	Total/NA	Water	8270E	653399
LCS 400-653399/19-A	Lab Control Sample	Total/NA	Water	8270E	653399
LCS 400-653399/2-A	Lab Control Sample	Total/NA	Water	8270E	653399
LCSD 400-653399/20-A	Lab Control Sample Dup	Total/NA	Water	8270E	653399
LCSD 400-653399/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	653399

GC Semi VOA

Prep Batch: 652995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247655-2	TB-ROX-120123-8011-A	Total/NA	Water	8011	
400-247655-3	P56-ROX-120123	Total/NA	Water	8011	
400-247655-4	P93A-ROX-120123	Total/NA	Water	8011	
MB 400-652995/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-652995/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-652995/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Prep Batch: 653011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247655-5	P93C-ROX-120123	Total/NA	Water	8011	
400-247655-6	P93C-ROX-120123-DUP	Total/NA	Water	8011	
MB 400-653011/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-653011/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-653011/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 653060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-652995/1-A	Method Blank	Total/NA	Water	8011	652995
LCS 400-652995/2-A	Lab Control Sample	Total/NA	Water	8011	652995
LCSD 400-652995/3-A	Lab Control Sample Dup	Total/NA	Water	8011	652995

Analysis Batch: 653100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247655-2	TB-ROX-120123-8011-A	Total/NA	Water	8011	652995
400-247655-3	P56-ROX-120123	Total/NA	Water	8011	652995
400-247655-4	P93A-ROX-120123	Total/NA	Water	8011	652995
400-247655-5	P93C-ROX-120123	Total/NA	Water	8011	653011
400-247655-6	P93C-ROX-120123-DUP	Total/NA	Water	8011	653011
MB 400-653011/1-A	Method Blank	Total/NA	Water	8011	653011
LCS 400-653011/2-A	Lab Control Sample	Total/NA	Water	8011	653011
LCSD 400-653011/3-A	Lab Control Sample Dup	Total/NA	Water	8011	653011

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-653111/3
Matrix: Water
Analysis Batch: 653111

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			12/06/23 10:26	1
Acrolein	ND		20	3.3	ug/L			12/06/23 10:26	1
Acrylonitrile	ND		10	2.8	ug/L			12/06/23 10:26	1
Benzene	ND		1.0	0.50	ug/L			12/06/23 10:26	1
Bromobenzene	ND		1.0	0.54	ug/L			12/06/23 10:26	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/06/23 10:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/06/23 10:26	1
Bromoform	ND		5.0	0.25	ug/L			12/06/23 10:26	1
Bromomethane	ND		1.0	0.98	ug/L			12/06/23 10:26	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/06/23 10:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/06/23 10:26	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/06/23 10:26	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/06/23 10:26	1
Chloroethane	ND		1.0	0.76	ug/L			12/06/23 10:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/06/23 10:26	1
Chloroform	ND		1.0	0.90	ug/L			12/06/23 10:26	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/06/23 10:26	1
Chloromethane	ND		1.0	0.90	ug/L			12/06/23 10:26	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/06/23 10:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/06/23 10:26	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/06/23 10:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/06/23 10:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/06/23 10:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/06/23 10:26	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/06/23 10:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/06/23 10:26	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/06/23 10:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 10:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 10:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 10:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/06/23 10:26	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/06/23 10:26	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/06/23 10:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/06/23 10:26	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/06/23 10:26	1
2-Hexanone	ND		25	1.4	ug/L			12/06/23 10:26	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/06/23 10:26	1
Methylene bromide	ND		5.0	0.22	ug/L			12/06/23 10:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/06/23 10:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/06/23 10:26	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/06/23 10:26	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/06/23 10:26	1
Naphthalene	ND		5.0	3.0	ug/L			12/06/23 10:26	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/06/23 10:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/06/23 10:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/06/23 10:26	1
o-Xylene	ND		5.0	0.60	ug/L			12/06/23 10:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/06/23 10:26	1

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

Lab Sample ID: MB 400-653111/3
Matrix: Water
Analysis Batch: 653111

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			12/06/23 10:26	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/06/23 10:26	1
Styrene	ND		1.0	1.0	ug/L			12/06/23 10:26	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/06/23 10:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/06/23 10:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/06/23 10:26	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/06/23 10:26	1
Toluene	ND		1.0	0.90	ug/L			12/06/23 10:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/06/23 10:26	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/06/23 10:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/06/23 10:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/06/23 10:26	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/06/23 10:26	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/06/23 10:26	1
Trichloroethene	ND		1.0	0.15	ug/L			12/06/23 10:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/06/23 10:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/06/23 10:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/06/23 10:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/06/23 10:26	1
Vinyl acetate	ND		25	0.93	ug/L			12/06/23 10:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/06/23 10:26	1
Xylenes, Total	ND		10	1.6	ug/L			12/06/23 10:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*12/06/23 10:26*	*1*
Dibromofluoromethane	*110*		*75 - 126*		*12/06/23 10:26*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*12/06/23 10:26*	*1*

Lab Sample ID: LCS 400-653111/1001
Matrix: Water
Analysis Batch: 653111

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	242		ug/L		121	43 - 160
Acrolein	500	518		ug/L		104	38 - 160
Acrylonitrile	500	543		ug/L		109	64 - 142
Benzene	50.0	52.5		ug/L		105	70 - 130
Bromobenzene	50.0	51.2		ug/L		102	70 - 132
Bromochloromethane	50.0	52.0		ug/L		104	70 - 130
Bromodichloromethane	50.0	54.1		ug/L		108	67 - 133
Bromoform	50.0	52.8		ug/L		106	57 - 140
Bromomethane	50.0	30.9		ug/L		62	10 - 160
2-Butanone (MEK)	200	246		ug/L		123	61 - 145
Carbon disulfide	50.0	43.5		ug/L		87	61 - 137
Carbon tetrachloride	50.0	46.3		ug/L		93	61 - 137
Chlorobenzene	50.0	50.7		ug/L		101	70 - 130
Chloroethane	50.0	38.2		ug/L		76	55 - 141
2-Chloroethyl vinyl ether	50.0	65.1		ug/L		130	10 - 160

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

Lab Sample ID: LCS 400-653111/1001
Matrix: Water
Analysis Batch: 653111

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	51.7		ug/L		103	69 - 130
1-Chlorohexane	50.0	49.7		ug/L		99	69 - 130
Chloromethane	50.0	49.0		ug/L		98	58 - 137
cis-1,2-Dichloroethene	50.0	51.4		ug/L		103	68 - 130
cis-1,3-Dichloropropene	50.0	55.7		ug/L		111	69 - 132
Dibromochloromethane	50.0	54.1		ug/L		108	67 - 135
1,2-Dichlorobenzene	50.0	50.6		ug/L		101	67 - 130
1,3-Dichlorobenzene	50.0	50.8		ug/L		102	70 - 130
1,4-Dichlorobenzene	50.0	50.2		ug/L		100	70 - 130
Dichlorodifluoromethane	50.0	46.1		ug/L		92	41 - 146
1,1-Dichloroethane	50.0	51.2		ug/L		102	70 - 130
1,2-Dichloroethane	50.0	52.4		ug/L		105	69 - 130
1,1-Dichloroethene	50.0	46.5		ug/L		93	63 - 134
1,2-Dichloropropane	50.0	54.7		ug/L		109	70 - 130
1,3-Dichloropropane	50.0	57.3		ug/L		115	70 - 130
2,2-Dichloropropane	50.0	42.2		ug/L		84	52 - 135
1,1-Dichloropropene	50.0	51.6		ug/L		103	70 - 130
Ethylbenzene	50.0	52.2		ug/L		104	70 - 130
Ethyl methacrylate	50.0	54.0		ug/L		108	68 - 130
Hexachlorobutadiene	50.0	53.1		ug/L		106	53 - 140
2-Hexanone	200	254		ug/L		127	65 - 137
Isopropylbenzene	50.0	50.4		ug/L		101	70 - 130
Methylene bromide	50.0	51.9		ug/L		104	70 - 130
Methylene Chloride	50.0	52.2		ug/L		104	66 - 135
4-Methyl-2-pentanone (MIBK)	200	223		ug/L		112	69 - 138
Methyl tert-butyl ether	50.0	53.2		ug/L		106	66 - 130
m-Xylene & p-Xylene	50.0	52.0		ug/L		104	70 - 130
Naphthalene	50.0	48.2		ug/L		96	47 - 149
n-Butylbenzene	50.0	51.0		ug/L		102	67 - 130
N-Propylbenzene	50.0	50.4		ug/L		101	70 - 130
o-Chlorotoluene	50.0	50.8		ug/L		102	70 - 130
o-Xylene	50.0	52.8		ug/L		106	70 - 130
p-Chlorotoluene	50.0	51.2		ug/L		102	70 - 130
p-Isopropyltoluene	50.0	50.0		ug/L		100	65 - 130
sec-Butylbenzene	50.0	48.9		ug/L		98	66 - 130
Styrene	50.0	53.5		ug/L		107	70 - 130
tert-Butylbenzene	50.0	46.0		ug/L		92	64 - 139
1,1,1,2-Tetrachloroethane	50.0	50.6		ug/L		101	67 - 131
1,1,2,2-Tetrachloroethane	50.0	53.3		ug/L		107	70 - 131
Tetrachloroethene	50.0	50.2		ug/L		100	65 - 130
Toluene	50.0	50.7		ug/L		101	70 - 130
trans-1,2-Dichloroethene	50.0	49.7		ug/L		99	70 - 130
trans-1,3-Dichloropropene	50.0	54.9		ug/L		110	63 - 130
1,2,3-Trichlorobenzene	50.0	47.7		ug/L		95	60 - 138
1,2,4-Trichlorobenzene	50.0	45.9		ug/L		92	60 - 140
1,1,1-Trichloroethane	50.0	48.2		ug/L		96	68 - 130
1,1,2-Trichloroethane	50.0	56.4		ug/L		113	70 - 130
Trichloroethene	50.0	50.3		ug/L		101	70 - 130
Trichlorofluoromethane	50.0	43.8		ug/L		88	65 - 138

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

Lab Sample ID: LCS 400-653111/1001
Matrix: Water
Analysis Batch: 653111

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	52.2		ug/L		104	70 - 130
1,2,4-Trimethylbenzene	50.0	51.1		ug/L		102	70 - 130
1,3,5-Trimethylbenzene	50.0	50.1		ug/L		100	69 - 130
Vinyl acetate	100	117		ug/L		117	26 - 160
Vinyl chloride	50.0	50.0		ug/L		100	59 - 136
Xylenes, Total	100	105		ug/L		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*72 - 130*
Dibromofluoromethane	*95*		*75 - 126*
Toluene-d8 (Surr)	*99*		*64 - 132*

Lab Sample ID: MB 400-653927/6
Matrix: Water
Analysis Batch: 653927

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.50	ug/L			12/12/23 14:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*12/12/23 14:25*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*12/12/23 14:25*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*12/12/23 14:25*	*1*

Lab Sample ID: LCS 400-653927/1002
Matrix: Water
Analysis Batch: 653927

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	25.0	23.8		ug/L		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*72 - 130*
Dibromofluoromethane	*91*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-653399/1-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653399

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		12/07/23 14:39	12/11/23 16:45	1
Benzenethiol	ND		10	1.7	ug/L		12/07/23 14:39	12/11/23 16:45	1
Benzoic acid	ND		30	7.3	ug/L		12/07/23 14:39	12/11/23 16:45	1
Benzyl alcohol	ND		10	2.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/07/23 14:39	12/11/23 16:45	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-653399/1-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653399

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		12/07/23 14:39	12/11/23 16:45	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		12/07/23 14:39	12/11/23 16:45	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/07/23 14:39	12/11/23 16:45	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/07/23 14:39	12/11/23 16:45	1
4-Chloroaniline	ND		10	3.4	ug/L		12/07/23 14:39	12/11/23 16:45	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		12/07/23 14:39	12/11/23 16:45	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/07/23 14:39	12/11/23 16:45	1
2-Chlorophenol	ND		10	2.2	ug/L		12/07/23 14:39	12/11/23 16:45	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
Dibenzofuran	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 16:45	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
Diethyl phthalate	ND		10	0.24	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		12/07/23 14:39	12/11/23 16:45	1
Dimethyl phthalate	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 16:45	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		12/07/23 14:39	12/11/23 16:45	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/07/23 14:39	12/11/23 16:45	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 16:45	1
1,4-Dioxane	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 16:45	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/07/23 14:39	12/11/23 16:45	1
Hexachloroethane	ND		10	4.2	ug/L		12/07/23 14:39	12/11/23 16:45	1
Indene	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
Isophorone	ND		10	0.14	ug/L		12/07/23 14:39	12/11/23 16:45	1
2-Methylphenol	ND		10	1.8	ug/L		12/07/23 14:39	12/11/23 16:45	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		12/07/23 14:39	12/11/23 16:45	1
2-Nitroaniline	ND		10	2.2	ug/L		12/07/23 14:39	12/11/23 16:45	1
3-Nitroaniline	ND		10	1.8	ug/L		12/07/23 14:39	12/11/23 16:45	1
4-Nitroaniline	ND		10	1.5	ug/L		12/07/23 14:39	12/11/23 16:45	1
Nitrobenzene	ND		10	0.13	ug/L		12/07/23 14:39	12/11/23 16:45	1
2-Nitrophenol	ND		10	5.2	ug/L		12/07/23 14:39	12/11/23 16:45	1
4-Nitrophenol	ND		10	2.1	ug/L		12/07/23 14:39	12/11/23 16:45	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		12/07/23 14:39	12/11/23 16:45	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		12/07/23 14:39	12/11/23 16:45	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/07/23 14:39	12/11/23 16:45	1
Pentachlorophenol	ND		20	1.4	ug/L		12/07/23 14:39	12/11/23 16:45	1
Phenol	ND		10	2.6	ug/L		12/07/23 14:39	12/11/23 16:45	1
Pyridine	ND		10	3.2	ug/L		12/07/23 14:39	12/11/23 16:45	1
Quinoline	ND		10	4.5	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		12/07/23 14:39	12/11/23 16:45	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-653399/1-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653399

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	72		46 - 124	12/07/23 14:39	12/11/23 16:45	1
2-Fluorophenol	13		13 - 113	12/07/23 14:39	12/11/23 16:45	1
Nitrobenzene-d5	53		36 - 126	12/07/23 14:39	12/11/23 16:45	1
Phenol-d5	37		17 - 127	12/07/23 14:39	12/11/23 16:45	1
Terphenyl-d14	100		44 - 149	12/07/23 14:39	12/11/23 16:45	1
2,4,6-Tribromophenol	71		26 - 150	12/07/23 14:39	12/11/23 16:45	1

Lab Sample ID: LCS 400-653399/19-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	3.26	J *-	ug/L		3	10 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	88		46 - 124
2-Fluorophenol	22		13 - 113
Nitrobenzene-d5	70		36 - 126
Phenol-d5	45		17 - 127
Terphenyl-d14	112		44 - 149
2,4,6-Tribromophenol	91		26 - 150

Lab Sample ID: LCS 400-653399/2-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	75.9		ug/L		63	21 - 120
Benzoic acid	120	101		ug/L		84	10 - 144
Benzyl alcohol	120	86.6		ug/L		72	28 - 120
Bis(2-chloroethoxy)methane	120	80.4		ug/L		67	47 - 120
Bis(2-chloroethyl)ether	120	78.9		ug/L		66	44 - 120
bis (2-chloroisopropyl) ether	120	45.4		ug/L		38	33 - 121
Bis(2-ethylhexyl) phthalate	120	113		ug/L		94	52 - 147
4-Bromophenyl phenyl ether	120	114		ug/L		95	54 - 122
Butyl benzyl phthalate	120	112		ug/L		93	54 - 133
4-Chloroaniline	120	81.9		ug/L		68	26 - 120
4-Chloro-3-methylphenol	120	104		ug/L		87	48 - 131
2-Chloronaphthalene	120	108		ug/L		90	52 - 121
2-Chlorophenol	120	80.7		ug/L		67	40 - 120
4-Chlorophenyl phenyl ether	120	118		ug/L		98	56 - 125
Dibenz[a,h]acridine	120	121		ug/L		101	31 - 150
Dibenzofuran	120	107		ug/L		89	56 - 122
3,3'-Dichlorobenzidine	160	113		ug/L		71	36 - 132
2,4-Dichlorophenol	120	101		ug/L		85	49 - 120
Diethyl phthalate	120	112		ug/L		93	50 - 137
2,4-Dimethylphenol	120	90.3		ug/L		75	48 - 120
Dimethyl phthalate	120	108		ug/L		90	57 - 124

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-653399/2-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653399

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Di-n-butyl phthalate			120	115		ug/L		96	58 - 126		
4,6-Dinitro-ortho-cresol			240	196		ug/L		81	23 - 148		
2,4-Dinitrophenol			240	200		ug/L		83	10 - 150		
2,4-Dinitrotoluene			120	121		ug/L		101	54 - 142		
2,6-Dinitrotoluene			120	112		ug/L		94	55 - 130		
Di-n-octyl phthalate			120	117		ug/L		98	57 - 138		
1,4-Dioxane			120	62.6		ug/L		52	31 - 120		
1,2-Diphenylhydrazine (as Azobenzene)			120	77.0		ug/L		64	45 - 124		
Hexachlorobenzene			120	122		ug/L		102	52 - 129		
Hexachlorocyclopentadiene			120	101		ug/L		84	10 - 134		
Hexachloroethane			120	87.1		ug/L		73	20 - 120		
Indene			120	99.1		ug/L		83	49 - 120		
Isophorone			120	78.1		ug/L		65	48 - 120		
2-Methylphenol			120	88.1		ug/L		73	46 - 124		
3 & 4 Methylphenol			120	84.6		ug/L		70	45 - 120		
2-Nitroaniline			120	83.0		ug/L		69	51 - 145		
3-Nitroaniline			120	69.2		ug/L		58	37 - 127		
4-Nitroaniline			120	95.3		ug/L		79	36 - 137		
Nitrobenzene			120	79.5		ug/L		66	45 - 120		
2-Nitrophenol			120	98.8		ug/L		82	40 - 124		
4-Nitrophenol			240	259		ug/L		108	23 - 146		
N-Nitrosodimethylamine			120	59.9		ug/L		50	29 - 137		
N-Nitrosodi-n-propylamine			120	77.0		ug/L		64	45 - 120		
N-Nitrosodiphenylamine			119	98.0		ug/L		82	54 - 120		
Pentachlorophenol			240	233		ug/L		97	31 - 130		
Phenol			120	74.8		ug/L		62	11 - 120		
Pyridine			240	109		ug/L		45	16 - 120		
Quinoline			120	108		ug/L		90	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	*87*		*46 - 124*
2-Fluorophenol	*47*		*13 - 113*
Nitrobenzene-d5	*75*		*36 - 126*
Phenol-d5	*64*		*17 - 127*
Terphenyl-d14	*105*		*44 - 149*
2,4,6-Tribromophenol	*117*		*26 - 150*

Lab Sample ID: LCSD 400-653399/20-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653399

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	6.16	J *- *1	ug/L		5	10 - 120	61	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-653399/20-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653399

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	84		46 - 124
2-Fluorophenol	43		13 - 113
Nitrobenzene-d5	65		36 - 126
Phenol-d5	61		17 - 127
Terphenyl-d14	103		44 - 149
2,4,6-Tribromophenol	93		26 - 150

Lab Sample ID: LCSD 400-653399/3-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653399

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	54.8	*1	ug/L		46	21 - 120	32	30
Benzoic acid			120	65.1	*1	ug/L		54	10 - 144	43	30
Benzyl alcohol			120	65.4		ug/L		54	28 - 120	28	30
Bis(2-chloroethoxy)methane			120	61.5		ug/L		51	47 - 120	27	30
Bis(2-chloroethyl)ether			120	61.7		ug/L		51	44 - 120	25	30
bis (2-chloroisopropyl) ether			120	34.3	*-	ug/L		29	33 - 121	28	30
Bis(2-ethylhexyl) phthalate			120	87.8		ug/L		73	52 - 147	25	30
4-Bromophenyl phenyl ether			120	88.5		ug/L		74	54 - 122	25	30
Butyl benzyl phthalate			120	86.9		ug/L		72	54 - 133	25	30
4-Chloroaniline			120	66.8		ug/L		56	26 - 120	20	30
4-Chloro-3-methylphenol			120	81.0		ug/L		68	48 - 131	25	30
2-Chloronaphthalene			120	80.6		ug/L		67	52 - 121	29	30
2-Chlorophenol			120	50.4	*1	ug/L		42	40 - 120	46	30
4-Chlorophenyl phenyl ether			120	90.9		ug/L		76	56 - 125	26	30
Dibenz[a,h]acridine			120	92.5		ug/L		77	31 - 150	27	30
Dibenzofuran			120	83.5		ug/L		70	56 - 122	25	30
3,3'-Dichlorobenzidine			160	96.9		ug/L		61	36 - 132	16	30
2,4-Dichlorophenol			120	75.2		ug/L		63	49 - 120	30	30
Diethyl phthalate			120	87.1		ug/L		73	50 - 137	25	30
2,4-Dimethylphenol			120	70.3		ug/L		59	48 - 120	25	30
Dimethyl phthalate			120	85.9		ug/L		72	57 - 124	23	30
Di-n-butyl phthalate			120	90.3		ug/L		75	58 - 126	24	30
4,6-Dinitro-ortho-cresol			240	145		ug/L		60	23 - 148	30	30
2,4-Dinitrophenol			240	129	*1	ug/L		54	10 - 150	43	30
2,4-Dinitrotoluene			120	92.7		ug/L		77	54 - 142	27	30
2,6-Dinitrotoluene			120	86.2		ug/L		72	55 - 130	26	30
Di-n-octyl phthalate			120	87.5		ug/L		73	57 - 138	29	30
1,4-Dioxane			120	44.5	*1	ug/L		37	31 - 120	34	30
1,2-Diphenylhydrazine (as Azobenzene)			120	60.7		ug/L		51	45 - 124	24	30
Hexachlorobenzene			120	95.8		ug/L		80	52 - 129	24	30
Hexachlorocyclopentadiene			120	67.6	*1	ug/L		56	10 - 134	39	30
Hexachloroethane			120	63.8	*1	ug/L		53	20 - 120	31	30
Indene			120	74.3		ug/L		62	49 - 120	29	30
Isophorone			120	60.2		ug/L		50	48 - 120	26	30
2-Methylphenol			120	65.9		ug/L		55	46 - 124	29	30
3 & 4 Methylphenol			120	63.5		ug/L		53	45 - 120	28	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-653399/3-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653399

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Nitroaniline			120	63.6		ug/L		53	51 - 145	27	30
3-Nitroaniline			120	55.8		ug/L		46	37 - 127	21	30
4-Nitroaniline			120	75.3		ug/L		63	36 - 137	23	30
Nitrobenzene			120	60.4		ug/L		50	45 - 120	27	30
2-Nitrophenol			120	75.7		ug/L		63	40 - 124	26	30
4-Nitrophenol			240	193		ug/L		80	23 - 146	29	30
N-Nitrosodimethylamine			120	44.0	*1	ug/L		37	29 - 137	31	30
N-Nitrosodi-n-propylamine			120	59.6		ug/L		50	45 - 120	25	30
N-Nitrosodiphenylamine			119	77.4		ug/L		65	54 - 120	23	30
Pentachlorophenol			240	178		ug/L		74	31 - 130	27	30
Phenol			120	50.5	*1	ug/L		42	11 - 120	39	30
Pyridine			240	77.8	*1	ug/L		32	16 - 120	33	30
Quinoline			120	79.7		ug/L		67	49 - 130	30	30
2,4,5-Trichlorophenol			120	91.1		ug/L		76	51 - 136	25	30
2,4,6-Trichlorophenol			120	88.2		ug/L		73	50 - 127	26	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*46 - 124*
2-Fluorophenol	*20*		*13 - 113*
Nitrobenzene-d5	*56*		*36 - 126*
Phenol-d5	*44*		*17 - 127*
Terphenyl-d14	*88*		*44 - 149*
2,4,6-Tribromophenol	*91*		*26 - 150*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-653399/1-A
Matrix: Water
Analysis Batch: 653755

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653399

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		12/07/23 14:39	12/11/23 15:57	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/07/23 14:39	12/11/23 15:57	1
Anthracene	ND		0.20	0.047	ug/L		12/07/23 14:39	12/11/23 15:57	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/07/23 14:39	12/11/23 15:57	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		12/07/23 14:39	12/11/23 15:57	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/07/23 14:39	12/11/23 15:57	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/07/23 14:39	12/11/23 15:57	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/07/23 14:39	12/11/23 15:57	1
Chrysene	ND		0.20	0.033	ug/L		12/07/23 14:39	12/11/23 15:57	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/07/23 14:39	12/11/23 15:57	1
Fluoranthene	ND		0.20	0.034	ug/L		12/07/23 14:39	12/11/23 15:57	1
Fluorene	ND		0.20	0.089	ug/L		12/07/23 14:39	12/11/23 15:57	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/07/23 14:39	12/11/23 15:57	1
Phenanthrene	ND		0.20	0.090	ug/L		12/07/23 14:39	12/11/23 15:57	1
Pyrene	ND		0.20	0.039	ug/L		12/07/23 14:39	12/11/23 15:57	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		12/07/23 14:39	12/11/23 15:57	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		12/07/23 14:39	12/11/23 15:57	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 400-653399/1-A
Matrix: Water
Analysis Batch: 653755

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653399

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	92		18 - 147	12/07/23 14:39	12/11/23 15:57	1
2-Fluorobiphenyl	59		15 - 128	12/07/23 14:39	12/11/23 15:57	1
Nitrobenzene-d5	75		10 - 144	12/07/23 14:39	12/11/23 15:57	1

Lab Sample ID: LCS 400-653399/2-A
Matrix: Water
Analysis Batch: 653755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	102		ug/L		85	40 - 140
Acenaphthylene	120	111		ug/L		93	40 - 140
Anthracene	120	97.4		ug/L		81	40 - 140
Benzo[a]anthracene	120	114		ug/L		95	40 - 140
Benzo[a]pyrene	120	92.2		ug/L		77	40 - 140
Benzo[b]fluoranthene	120	91.2		ug/L		76	40 - 140
Benzo[g,h,i]perylene	120	115		ug/L		96	40 - 140
Benzo[k]fluoranthene	120	108		ug/L		90	40 - 140
Chrysene	120	102		ug/L		85	40 - 140
Dibenz(a,h)anthracene	120	98.1		ug/L		82	40 - 140
Fluoranthene	120	89.5		ug/L		75	40 - 140
Fluorene	120	102		ug/L		85	40 - 140
Indeno[1,2,3-cd]pyrene	120	107		ug/L		89	40 - 140
Phenanthrene	120	93.3		ug/L		78	40 - 140
Pyrene	120	138		ug/L		115	40 - 140
1-Methylnaphthalene	120	79.1		ug/L		66	40 - 140
2-Methylnaphthalene	120	80.0		ug/L		67	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	76		18 - 147
2-Fluorobiphenyl	76		15 - 128
Nitrobenzene-d5	84		10 - 144

Lab Sample ID: LCSD 400-653399/3-A
Matrix: Water
Analysis Batch: 653755

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653399

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	120	78.4		ug/L		65	40 - 140	27	40
Acenaphthylene	120	85.2		ug/L		71	40 - 140	26	40
Anthracene	120	76.4		ug/L		64	40 - 140	24	40
Benzo[a]anthracene	120	87.3		ug/L		73	40 - 140	26	40
Benzo[a]pyrene	120	69.0		ug/L		58	40 - 140	29	40
Benzo[b]fluoranthene	120	67.8		ug/L		57	40 - 140	29	40
Benzo[g,h,i]perylene	120	86.2		ug/L		72	40 - 140	29	40
Benzo[k]fluoranthene	120	79.2		ug/L		66	40 - 140	31	40
Chrysene	120	79.1		ug/L		66	40 - 140	25	40
Dibenz(a,h)anthracene	120	77.9		ug/L		65	40 - 140	23	40
Fluoranthene	120	70.2		ug/L		59	40 - 140	24	40

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 400-653399/3-A
Matrix: Water
Analysis Batch: 653755

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653399

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluorene			120	80.1		ug/L		67	40 - 140	24	40
Indeno[1,2,3-cd]pyrene			120	80.5		ug/L		67	40 - 140	28	40
Phenanthrene			120	73.7		ug/L		61	40 - 140	23	40
Pyrene			120	108		ug/L		90	40 - 140	25	40
1-Methylnaphthalene			120	80.3		ug/L		67	40 - 140	2	40
2-Methylnaphthalene			120	81.6		ug/L		68	40 - 140	2	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*58*		*18 - 147*
2-Fluorobiphenyl	*57*		*15 - 128*
Nitrobenzene-d5	*72*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-652995/1-A
Matrix: Water
Analysis Batch: 653060

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652995

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		12/05/23 11:19	12/05/23 15:58	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 11:19	12/05/23 15:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*51 - 149*	*12/05/23 11:19*	*12/05/23 15:58*	*1*

Lab Sample ID: LCS 400-652995/2-A
Matrix: Water
Analysis Batch: 653060

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652995

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0967		ug/L		96	60 - 140		
1,2-Dibromoethane			0.100	0.0994		ug/L		99	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*79*		*51 - 149*

Lab Sample ID: LCSD 400-652995/3-A
Matrix: Water
Analysis Batch: 653060

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 652995

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0922		ug/L		92	60 - 140	5	30
1,2-Dibromoethane			0.100	0.0956		ug/L		95	60 - 140	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*76*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-653011/1-A
Matrix: Water
Analysis Batch: 653100

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653011

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		12/05/23 12:31	12/06/23 11:50	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/05/23 12:31	12/06/23 11:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*51 - 149*	*12/05/23 12:31*	*12/06/23 11:50*	*1*

Lab Sample ID: LCS 400-653011/2-A
Matrix: Water
Analysis Batch: 653100

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653011

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.108		ug/L		108	60 - 140		
1,2-Dibromoethane			0.100	0.108		ug/L		108	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*88*		*51 - 149*

Lab Sample ID: LCSD 400-653011/3-A
Matrix: Water
Analysis Batch: 653100

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653011

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0994		ug/L		99	60 - 140	8	30
1,2-Dibromoethane			0.100	0.0975		ug/L		97	60 - 140	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*86*		*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 EDG | ☐ PIPELINE | ☐ RETAIL
☐ CHEMICALS | ☐ CONSULTANT | ☐ LUBES
☐ TRANSPORTATION | ☑ OTHER _ENV. SERVICES_____

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 12/1/2023
PO #	**GSAP Project ID**	PAGE: 2 of 2
60697537 – 3.4.2	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 Monthly GW 60697537 – 3.4.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions | PHONE NO.: 314-802-1207 | E-MAIL: melissa.remiger@aecom.com | AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

SAMPLER NAME(S) (Print): M. Massa, T. Jones | LAB USE ONLY

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

* Please include "J" values on Reports.
* Please provide sample receipt upon login.
* Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

400-247655 COC

LAB USE ONLY 560-247655	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 8270 SIMS
52	TB-ROX-120123-8260-B	12/1/2023	0000	Water	2					2	X			
	TB-ROX-120123-8011-B	12/1/2023	0000	Water	2					2		X		
	P56-ROX-120123	12/1/2023	0925	Water	6			2		8	X	X	X	X
	P93A-ROX-120123	12/1/2023	1010	Water	6			2		8	X	X	X	X
	P93C-ROX-120123	12/1/2023	1055	Water	6			2		8	X	X	X	X
	P93C-ROX-120123-DUP	12/1/2023	1055	Water	6			2		8	X	X	X	X

Relinquished by: (Signature) MARY MASSA	Received by: (Signature) FEDEX: See page 1	Date: 12/1/2023	Time: 1600
Relinquished by: (Signature)	Received by: (Signature) BP	Date: 12/2/23	Time: 823
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: See page 1

0.0°C IR6

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc. Job Number: 400-247655-1

Login Number: 247655 **List Source: Eurofins Pensacola**
List Number: 1
Creator: Roberts, Alexis J

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	0.0°C IR8
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").	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. Job ID: 400-247655-1
Project/Site: ROXANA MONTHLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Roxana Groundwater Monthly – November/December 2023 Data Review

Laboratory SDG: 400-247720-1

Data Reviewer: Adelina Gita

Peer Reviewer: Cheyana Cokley

Date Reviewed: 1/9/2024

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

Sample Identification	Sample Identification
TB-ROX-120423-8260-A	TB-ROX-120423-8011-A
MW4-ROX-120423-EB	MW4-ROX-120423
MW25-ROX-120423	MW7-ROX-120423
MW7-ROX-120423-DUP	P93D-ROX-120423
TB-ROX-120423-8260-B	TB-ROX-120423-8011-B
P57-ROX-120423	P74-ROX-120423
T12-ROX-120423	T12-ROX-120423-DUP
P59-ROX-120423	--

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 were re-extracted outside extraction time criteria in sample MW25-ROX-120423; SVOCs in sample MW25-ROX-120423 were also re-extracted outside of the extraction time criteria. bis(2-Ethylhexyl) phthalate in samples MW7-ROX-120423-DUP and T12-ROX-120423 were re-extracted outside of the extraction time criteria. Dimethyl phthalate was detected in equipment blank MW4-ROX-120423-EB and method blank MB 400-653593/1-A. Several SVOC LCS/LCSD recoveries, and/or SVOC LCS/LCSD RPDs, were outside evaluation criteria. Several SVOC surrogate recoveries were outside criteria in several investigative and quality control samples. Several VOC MS/MSD recoveries were outside evaluation criteria in sample MW4-ROX-120423. Results for phenol in field duplicate pair MW7-ROX-120423/MW7-ROX-120423-DUP were qualified as estimated **(J/J)** due to field duplicate RPD above evaluation criteria. The continuing calibration verification (CCV) for n-nitrosodimethylamine was outside evaluation criteria, biased low. The continuing calibration verification (CCV) for benzo[a]anthracene was outside evaluation criteria, biased high. VOCs in field duplicate pair MW7-ROX-120423/MW7-ROX-120423-DUP were diluted to bring target analytes into calibration range of the instrument. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (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, PAHs in sample MW25-ROX-120423 were re-extracted 2 days outside of extraction time criteria (7 days) for confirmation; the samples were re-extracted out of hold time and the results were non-detect. Holding time exceedances were not greater than two times (2X) criteria; both sets of data are reported.

With regard to initial MW25-ROX-120423 PAH data, the laboratory previously issued a Corrective Action Report (CAR) stating that through confirmation analyses, many previous detections were not confirmed and were therefore deemed laboratory contamination. Based on professional judgement, the results from the re-analysis were used for the purposes of this report.

SVOCs in sample MW25-ROX-120423 were re-extracted 2 days outside of extraction time criteria (7 days) due to initial failing surrogate recoveries. Holding time exceedances were not greater than two times (2X) criteria; both sets of data are reported. The results for the re-extracted and re-analyzed SVOCs in sample MW25-ROX-120423 were comparable to the initial results. Therefore, using professional judgement, SVOCs in sample MW25-ROX-120423 were reported from the initial run; qualifications due to surrogate recovery are reported in Section 6.0 of this data review.

Additionally, bis(2-ethylhexyl) phthalate in samples MW7-ROX-120423-DUP and T12-ROX-120423 were re-extracted between 2 to 9 days outside extraction holding time criteria (7 days) and then re-analyzed for confirmation. Based on professional judgement, the results from the re-analysis were used for the purposes of this report.

Data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW25-ROX-120423—RERA	PAHs	All non-detects	**UJ**
MW7-ROX-120423-DUP—RERA	SVOCs	bis(2-ethylhexyl) phthalate	**UJ**
T12-ROX-120423—RERA	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
MW4-ROX-120423-EB	SVOCs	Dimethyl phthalate	0.68 ug/L
MB 400-653593/1-A	SVOCs	Dimethyl phthalate	1.06 ug/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. Equipment blanks are quality control samples and do not require qualification.

Sample ID	Parameter	Analyte	New Reporting Limit (RL)	Qualification
MW4-ROX-120423	SVOCs	Dimethyl phthalate	-	U
P93D-ROX-120423	SVOCs	Dimethyl phthalate	-	U
P74-ROX-120423	SVOCs	Dimethyl phthalate	-	U
T12-ROX-120423	SVOCs	Dimethyl 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/LCSD 400-653399/19-A/20-A	SVOCs	Benzenethiol	**3/5**	**61**	10-120/30
LCS/LCSD 400-653912/6-A/7-A	SVOCs	Benzenethiol	**5**/13	**95**	10-120/30
LCS/LCSD 400-653912/2-A/3-A	SVOCs	4-Chloro-3-methylphenol	81/58	**33**	48-131/30
LCS/LCSD 400-653912/2-A/3-A	SVOCs	Benzoic acid	73/29	**88**	10-144/30
LCS/LCSD 400-653912/2-A/3-A	SVOCs	2-Chlorophenol	62/**30**	**71**	40-120/30
LCS/LCSD 400-653912/2-A/3-A	SVOCs	2,4-Dichlorophenol	76/**41**	**60**	49-120/30
LCS/LCSD 400-653912/2-A/3-A	SVOCs	2,4-Dinitrophenol	79/55	**37**	10-150/30
LCS/LCSD 400-653912/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	62/**6**	**163**	10-134/30
LCS/LCSD 400-653912/2-A/3-A	SVOCs	2-Methylphenol	74/51	**37**	46-124/30
LCS/LCSD 400-653912/2-A/3-A	SVOCs	3 & 4 Methylphenol	76/49	**42**	45-120/30
LCS/LCSD 400-653912/2-A/3-A	SVOCs	2-Nitrophenol	80/**38**	**71**	40-124/30
LCS/LCSD 400-653912/2-A/3-A	SVOCs	Pentachlorophenol	86/58	**39**	31-130/30
LCS/LCSD 400-653912/2-A/3-A	SVOCs	Phenol	64/38	**51**	11-120/30
LCS/LCSD 400-653912/2-A/3-A	SVOCs	Quinoline	101/70	**37**	49-130/30
LCS/LCSD 400-653912/2-A/3-A	SVOCs	2,4,5-Trichlorophenol	87/60	**36**	51-136/30
LCS/LCSD 400-653912/2-A/3-A	SVOCs	2,4,6-Trichlorophenol	86/58	**41**	50-127/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	Aniline	63/46	**32**	21-120/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	Benzoic acid	84/54	**43**	10-144/30

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS/LCSD 400-653399/2-A/3-A	SVOCs	2-Chlorophenol	67/42	**46**	40-120/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	2,4-Dinitrophenol	83/54	**43**	10-150/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	1,4-Dioxane	52/37	**34**	31-120/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	84/56	**39**	10-134/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	Hexachloroethane	73/53	**31**	20-120/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	n-Nitrosodimethylamine	50/37	**31**	29-137/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	Phenol	62/42	**39**	11-120/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	Pyridine	45/32	**33**	16-120/30
LCS/LCSD 400-653399/2-A/3-A	SVOCs	bis(2-Chloroisopropyl) ether	38/**29**	28	33-121/30
LCS/LCSD 400-653593/4-A/5-A	SVOCs	Benzenethiol	51/34	**39**	10-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol below evaluation criteria; benzenethiol has been identified as a poor performing analyte under Method 8270. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW25-ROX-120423	SVOCs	Benzenethiol	**UJ**
MW7-ROX-120423	SVOCs	Benzenethiol	**UJ**
MW7-ROX-120423-DUP	SVOCs	Benzenethiol	**UJ**
MW25-ROX-120423	SVOCs	bis(2-Chloroisopropyl) ether	**UJ**
MW7-ROX-120423	SVOCs	bis(2-Chloroisopropyl) ether	**UJ**
MW7-ROX-120423-DUP	SVOCs	bis(2-Chloroisopropyl) ether	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW25-ROX-120423	SVOCs	2-Fluorophenol	**0.9**	13-113
MW25-ROX-120423	SVOCs	Phenol-d_5	**9**	17-127
MW7-ROX-120423-DUP	SVOCs	2-Fluorophenol	**10**	13-113
MB 400-653912/1-A	SVOCs	2-Fluorophenol	**11**	13-113

Analytical data that required qualification based on surrogate data are included in the table below. Professional judgement was used to qualify as estimated, however, not

reject SVOC MW25-ROX-120423 data associated with poor surrogate recoveries. Qualifications due to surrogate recoveries were not required if only one of three base/neutral and/or acid surrogate recoveries were outside evaluation criteria. Method blanks are quality control samples and do not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW25-ROX-120423	SVOCs	Benzyl alcohol	**UJ**
MW25-ROX-120423	SVOCs	4-Chloro-3-methylphenol	**UJ**
MW25-ROX-120423	SVOCs	2-Chlorophenol	**UJ**
MW25-ROX-120423	SVOCs	2,4-Dichlorophenol	**UJ**
MW25-ROX-120423	SVOCs	2,4-Dimethylphenol	**UJ**
MW25-ROX-120423	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW25-ROX-120423	SVOCs	2,4-Dinitrophenol	**UJ**
MW25-ROX-120423	SVOCs	2-Methylphenol	**UJ**
MW25-ROX-120423	SVOCs	3&4-Methylphenol	**UJ**
MW25-ROX-120423	SVOCs	2-Nitrophenol	**UJ**
MW25-ROX-120423	SVOCs	4-Nitrophenol	**UJ**
MW25-ROX-120423	SVOCs	Pentachlorophenol	**UJ**
MW25-ROX-120423	SVOCs	Phenol	**UJ**
MW25-ROX-120423	SVOCs	2,4,5-Trichlorophenol	**UJ**
MW25-ROX-120423	SVOCs	2,4,6-Trichlorophenol	**UJ**
MW25-ROX-120423	SVOCs	Benzoic Acid	**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 MW4-ROX-120423 was spiked and duplicated for Method 8260B VOCs.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW4-ROX-120423 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW4-ROX-120423 MS/MSD	VOCs	2-Hexanone	**60/58**	4	65-140/30

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 analyte 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
MW4-ROX-120423	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW4-ROX-120423	VOCs	2-Hexanone	**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
MW7-ROX-120423	MW7-ROX-120423-DUP
T12-ROX-120423	T12-ROX-120423-DUP

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
MW7-ROX-120423	MW7-ROX-120423-DUP	SVOCs	Phenol	**37**	**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 MW7-ROX-120423/MW7-ROX-120423-DUP to bring benzene into calibration range of the instrument. VOCs were non-detect at a dilution factor of 2000X, with raised reporting limits of between 2000 and 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, the continuing calibration verification (CCV) for n-nitrosodimethylamine was outside evaluation criteria, biased low. The continuing calibration verification (CCV) for benzo[a]anthracene was outside evaluation criteria, biased high. Benzo[g,h,i]perylene in sample MW25-ROX-120423-RERA was previously qualified in Section 3.0 of this data review due to holding time exceedances; no further qualification is required. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW25-ROX-120423	SVOCs	n-Nitrosodimethylamine	**UJ**
MW7-ROX-120423	SVOCs	n-Nitrosodimethylamine	**UJ**
MW7-ROX-120423-DUP	SVOCs	n-Nitrosodimethylamine	**UJ**
P59-ROX-120423	PAHs	Benzo[a]anthracene	**J**

Additionally, VOCs in field duplicate pair MW7-ROX-120423/MW7-ROX-120423-DUP were qualified as estimated non-detect due to sample dilution and historical detections.

Sample ID	Parameter	Analyte	Qualification
MW7-ROX-120423	VOCs	All non-detect	**UJ**
MW7-ROX-120423-DUP	VOCs	All non-detect	**UJ**

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ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
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JOB DESCRIPTION

ROXANA MONTHLY GW

JOB NUMBER

400-247720-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

my EOL

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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Job Narrative
400-247720-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 12/5/2023 9:22 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 2.6°C

GC/MS VOA
Method 8260D: The initial calibration verification (ICV) analyzed in batch 400-633903 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW7-ROX-120423 (400-247720-6), MW7-ROX-120423-DUP (400-247720-7), P74-ROX-120423 (400-247720-12), T12-ROX-120423 (400-247720-13), T12-ROX-120423-DUP (400-247720-14) and P59-ROX-120423 (400-247720-15). Elevated reporting limits (RLs) are provided.

Method 8260D: 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-120423-8260-A (400-247720-1), MW4-ROX-120423-EB (400-247720-3), MW4-ROX-120423 (400-247720-4), MW25-ROX-120423 (400-247720-5), MW7-ROX-120423 (400-247720-6), MW7-ROX-120423-DUP (400-247720-7), P93D-ROX-120423 (400-247720-8), TB-ROX-120423-8260-B (400-247720-9), P57-ROX-120423 (400-247720-11), P74-ROX-120423 (400-247720-12), T12-ROX-120423 (400-247720-13), T12-ROX-120423-DUP (400-247720-14) and P59-ROX-120423 (400-247720-15). 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 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recovery for analytical batch 400-653443 was outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-653443 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260D: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-653443 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 8270E: The following analyte(s) recovered outside control limits for the LCSD associated with preparation batch 400-653399 and analytical batch 400-653805: bis (2-chloroisopropyl) ether. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-653399 and 400-653399 and analytical batch 400-653805 recovered outside control limits for the following analytes: Hexachloroethane, N-Nitrosodimethylamine, 2,4-Dinitrophenol, Phenol, Benzoic acid, Benzenethiol,Hexachlorocyclopentadiene, 2-Chlorophenol, 1,4-Dioxane, Pyridine and Aniline.

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch

400-653399 and analytical batch 400-653805 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 8270E: The continuing calibration verification (CCV) associated with batch 400-653805 recovered outside acceptance criteria, low biased, for N-Nitrosodimethylamine. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-653805 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-653805 recovered above the upper control limit for 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 4-Chlorophenyl phenyl ether, Hexachlorobenzene, 2,4-Dinitrotoluene, Hexachlorocyclopentadiene, 4-Nitrophenol and Di-n-octyl 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 400-653805/3).

Method 8270E: 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: MW7-ROX-120423-DUP (400-247720-7). These results have been reported and qualified.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-653593 and analytical batch 400-654186 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270E: The method blank for preparation batch 400-653593 and analytical batch 400-654186 contained Dimethyl phthalate above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-652826 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: Surrogate recovery for the following sample was outside control limits: MW25-ROX-120423 (400-247720-5). Re-extraction and/or re-analysis was performed outside of holding time with acceptable results. Both sets of data have been reported.

Method 8270E: 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: (MB 400-653912/1-A). These results have been reported and qualified.

Method 8270E: The laboratory control sample (LCS) for preparation batch 400-653912 and analytical batch 400-654340 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 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-653912 and analytical batch 400-654340 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-653222 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: Sample T12-ROX-120423 (400-247720-13) was re-analyzed to confirm a detection of Bis(2-ethylhexyl) phthalate. The associated sample(s) was re-prepared and/or re-analyzed outside holding time. Both sets of data have been

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-653755 recovered above the upper control limit for Benzo[g,h,i]perylene and Dibenz(a,h)anthracene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-654224 recovered above the upper control limit for Benzo[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene and Dibenz(a,h)anthracene. The samples associated

with this CCV were below the reporting limit for the affected analytes; therefore, the data have been reported.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-654319 recovered above the upper control limit for Benzo[a]anthracene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-654319 recovered outside acceptance criteria, low biased, for Benzo[g,h,i]perylene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E_SIM: The following sample was re-prepared outside of preparation holding time for confirmation: MW25-ROX-120423 (400-247720-5). Both sets of data are reported.

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

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

Sample Summary

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

Job ID: 400-247720-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-247720-1	TB-ROX-120423-8260-A	Water	12/04/23 12:00	12/05/23 09:22
400-247720-2	TB-ROX-120423-8011-A	Water	12/04/23 12:00	12/05/23 09:22
400-247720-3	MW4-ROX-120423-EB	Water	12/04/23 08:40	12/05/23 09:22
400-247720-4	MW4-ROX-120423	Water	12/04/23 09:40	12/05/23 09:22
400-247720-5	MW25-ROX-120423	Water	12/04/23 10:25	12/05/23 09:22
400-247720-6	MW7-ROX-120423	Water	12/04/23 11:15	12/05/23 09:22
400-247720-7	MW7-ROX-120423-DUP	Water	12/04/23 11:15	12/05/23 09:22
400-247720-8	P93D-ROX-120423	Water	12/04/23 13:40	12/05/23 09:22
400-247720-9	TB-ROX-120423-8260-B	Water	12/04/23 12:00	12/05/23 09:22
400-247720-10	TB-ROX-120423-8011-B	Water	12/04/23 12:00	12/05/23 09:22
400-247720-11	P57-ROX-120423	Water	12/04/23 09:30	12/05/23 09:22
400-247720-12	P74-ROX-120423	Water	12/04/23 11:15	12/05/23 09:22
400-247720-13	T12-ROX-120423	Water	12/04/23 12:20	12/05/23 09:22
400-247720-14	T12-ROX-120423-DUP	Water	12/04/23 12:20	12/05/23 09:22
400-247720-15	P59-ROX-120423	Water	12/04/23 13:25	12/05/23 09:22

Detection Summary

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

Job ID: 400-247720-1

Client Sample ID: TB-ROX-120423-8260-A — Lab Sample ID: 400-247720-1

No Detections.

Client Sample ID: TB-ROX-120423-8011-A — Lab Sample ID: 400-247720-2

No Detections.

Client Sample ID: MW4-ROX-120423-EB — Lab Sample ID: 400-247720-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dimethyl phthalate	0.68	J B	10	0.17	ug/L	1		8270E	Total/NA

Client Sample ID: MW4-ROX-120423 — Lab Sample ID: 400-247720-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	0.30	J	10	0.24	ug/L	1		8270E	Total/NA
Dimethyl phthalate	0.94	J B	10	0.17	ug/L	1		8270E	Total/NA

Client Sample ID: MW25-ROX-120423 — Lab Sample ID: 400-247720-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	47		1.0	0.50	ug/L	1		8260D	Total/NA
Methyl tert-butyl ether	0.34	J	1.0	0.22	ug/L	1		8260D	Total/NA
Benzo[a]anthracene	0.14	J	0.20	0.035	ug/L	1		8270E SIM	Total/NA
Benzo[a]pyrene	0.16	J	0.20	0.065	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.12	J	0.20	0.038	ug/L	1		8270E SIM	Total/NA
Benzo[g,h,i]perylene	0.065	J	0.20	0.028	ug/L	1		8270E SIM	Total/NA
Benzo[k]fluoranthene	0.092	J	0.20	0.063	ug/L	1		8270E SIM	Total/NA
Chrysene	0.049	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Dibenz(a,h)anthracene	0.11	J	0.20	0.049	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.037	J	0.20	0.035	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.13	J	0.20	0.035	ug/L	1		8270E SIM	Total/NA
Pyrene	0.040	J	0.20	0.040	ug/L	1		8270E SIM	Total/NA
Diethyl phthalate - RERA	0.24	J H	10	0.24	ug/L	1		8270E	Total/NA
Dimethyl phthalate - RERA	0.63	J H	10	0.17	ug/L	1		8270E	Total/NA

Client Sample ID: MW7-ROX-120423 — Lab Sample ID: 400-247720-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene - DL	750000		5000	2500	ug/L	5000		8260D	Total/NA
Acenaphthylene	0.14	J	0.20	0.045	ug/L	1		8270E SIM	Total/NA
Anthracene	0.083	J	0.20	0.048	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.043	J	0.20	0.035	ug/L	1		8270E SIM	Total/NA
Fluorene	0.096	J	0.20	0.091	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.14	J	0.20	0.092	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	1.0		0.20	0.082	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	1.5		0.20	0.067	ug/L	1		8270E SIM	Total/NA
Diethyl phthalate	0.43	J	10	0.25	ug/L	1		8270E	Total/NA
Dimethyl phthalate	1.7	J	10	0.17	ug/L	1		8270E	Total/NA
Phenol	97	*1	10	2.7	ug/L	1		8270E	Total/NA

Client Sample ID: MW7-ROX-120423-DUP — Lab Sample ID: 400-247720-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene - DL	860000		5000	2500	ug/L	5000		8260D	Total/NA
Acenaphthene	0.13	J	0.21	0.11	ug/L	1		8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW7-ROX-120423-DUP (Continued) — Lab Sample ID: 400-247720-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.14	J	0.21	0.047	ug/L	1		8270E SIM	Total/NA
Anthracene	0.095	J	0.21	0.050	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.12	J	0.21	0.096	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	1.1		0.21	0.086	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	1.5		0.21	0.071	ug/L	1		8270E SIM	Total/NA
Bis(2-ethylhexyl) phthalate	12		11	5.4	ug/L	1		8270E	Total/NA
Diethyl phthalate	0.55	J	11	0.26	ug/L	1		8270E	Total/NA
Phenol	67	*1	11	2.8	ug/L	1		8270E	Total/NA

Client Sample ID: P93D-ROX-120423 — Lab Sample ID: 400-247720-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.85	J	1.0	0.22	ug/L	1		8260D	Total/NA
Acenaphthylene	0.056	J	0.21	0.045	ug/L	1		8270E SIM	Total/NA
Dimethyl phthalate	0.91	J B	10	0.17	ug/L	1		8270E	Total/NA

Client Sample ID: TB-ROX-120423-8260-B — Lab Sample ID: 400-247720-9

No Detections.

Client Sample ID: TB-ROX-120423-8011-B — Lab Sample ID: 400-247720-10

No Detections.

Client Sample ID: P57-ROX-120423 — Lab Sample ID: 400-247720-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	7.0		1.0	0.50	ug/L	1		8260D	Total/NA
Ethylbenzene	0.62	J	1.0	0.50	ug/L	1		8260D	Total/NA
Isopropylbenzene	18		1.0	0.53	ug/L	1		8260D	Total/NA
n-Butylbenzene	1.7		1.0	0.76	ug/L	1		8260D	Total/NA
N-Propylbenzene	19		1.0	0.69	ug/L	1		8260D	Total/NA
sec-Butylbenzene	4.0		1.0	0.70	ug/L	1		8260D	Total/NA
tert-Butylbenzene	4.4		1.0	0.63	ug/L	1		8260D	Total/NA
Toluene	2.7		1.0	0.90	ug/L	1		8260D	Total/NA
Acenaphthene	0.16	J	0.20	0.097	ug/L	1		8270E SIM	Total/NA
Fluorene	0.28		0.20	0.088	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	7.9		0.20	0.079	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	1.2		0.20	0.065	ug/L	1		8270E SIM	Total/NA
Dibenzofuran	0.38	J	9.8	0.17	ug/L	1		8270E	Total/NA

Client Sample ID: P74-ROX-120423 — Lab Sample ID: 400-247720-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1000		5.0	2.5	ug/L	5		8260D	Total/NA
Ethylbenzene	10		5.0	2.5	ug/L	5		8260D	Total/NA
4-Methyl-2-pentanone (MIBK)	10	J	130	9.0	ug/L	5		8260D	Total/NA
Methyl tert-butyl ether	9.2		5.0	1.1	ug/L	5		8260D	Total/NA
m-Xylene & p-Xylene	33		25	3.2	ug/L	5		8260D	Total/NA
Toluene	14		5.0	4.5	ug/L	5		8260D	Total/NA
1,2,4-Trimethylbenzene	6.1		5.0	4.1	ug/L	5		8260D	Total/NA
Xylenes, Total	35	J	50	8.0	ug/L	5		8260D	Total/NA
1-Methylnaphthalene	0.32		0.20	0.078	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	0.24		0.20	0.065	ug/L	1		8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: P74-ROX-120423 (Continued) — Lab Sample ID: 400-247720-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	0.26	J	9.8	0.24	ug/L	1		8270E	Total/NA
2,4-Dimethylphenol	4.7	J	9.8	3.4	ug/L	1		8270E	Total/NA
Dimethyl phthalate	0.68	J B	9.8	0.17	ug/L	1		8270E	Total/NA
Phenol	3.9	J	9.8	2.5	ug/L	1		8270E	Total/NA

Client Sample ID: T12-ROX-120423 — Lab Sample ID: 400-247720-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1300		10	5.0	ug/L	10		8260D	Total/NA
Ethylbenzene	5.7	J	10	5.0	ug/L	10		8260D	Total/NA
Isopropylbenzene	11		10	5.3	ug/L	10		8260D	Total/NA
m-Xylene & p-Xylene	32	J	50	6.3	ug/L	10		8260D	Total/NA
N-Propylbenzene	10		10	6.9	ug/L	10		8260D	Total/NA
Toluene	23		10	9.0	ug/L	10		8260D	Total/NA
Xylenes, Total	35	J	100	16	ug/L	10		8260D	Total/NA
Acenaphthene	0.25		0.20	0.097	ug/L	1		8270E SIM	Total/NA
Anthracene	0.069	J	0.20	0.046	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.043	J	0.20	0.033	ug/L	1		8270E SIM	Total/NA
Fluorene	0.26		0.20	0.088	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.43		0.20	0.089	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	14		0.20	0.079	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	19		0.20	0.065	ug/L	1		8270E SIM	Total/NA
Bis(2-ethylhexyl) phthalate	6.4	J	9.8	4.9	ug/L	1		8270E	Total/NA
Dibenzofuran	0.21	J	9.8	0.17	ug/L	1		8270E	Total/NA
Dimethyl phthalate	1.3	J B	9.8	0.17	ug/L	1		8270E	Total/NA
3 & 4 Methylphenol	0.45	J	20	0.38	ug/L	1		8270E	Total/NA
Phenol	35		9.8	2.6	ug/L	1		8270E	Total/NA

Client Sample ID: T12-ROX-120423-DUP — Lab Sample ID: 400-247720-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1300		10	5.0	ug/L	10		8260D	Total/NA
Isopropylbenzene	9.2	J	10	5.3	ug/L	10		8260D	Total/NA
m-Xylene & p-Xylene	28	J	50	6.3	ug/L	10		8260D	Total/NA
N-Propylbenzene	7.6	J	10	6.9	ug/L	10		8260D	Total/NA
Toluene	21		10	9.0	ug/L	10		8260D	Total/NA
Xylenes, Total	30	J	100	16	ug/L	10		8260D	Total/NA
Acenaphthene	0.28		0.20	0.098	ug/L	1		8270E SIM	Total/NA
Anthracene	0.068	J	0.20	0.047	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.035	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Fluorene	0.21		0.20	0.088	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.46		0.20	0.089	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	14		0.20	0.079	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	19		0.20	0.065	ug/L	1		8270E SIM	Total/NA
Dibenzofuran	0.27	J	9.9	0.17	ug/L	1		8270E	Total/NA
3 & 4 Methylphenol	0.47	J	20	0.39	ug/L	1		8270E	Total/NA
Phenol	39		9.9	2.6	ug/L	1		8270E	Total/NA

Client Sample ID: P59-ROX-120423 — Lab Sample ID: 400-247720-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1200		5.0	2.5	ug/L	5		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: P59-ROX-120423 (Continued)

Lab Sample ID: 400-247720-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	63		5.0	2.5	ug/L	5		8260D	Total/NA
Isopropylbenzene	31		5.0	2.7	ug/L	5		8260D	Total/NA
m-Xylene & p-Xylene	72		25	3.2	ug/L	5		8260D	Total/NA
Naphthalene	16	J	25	15	ug/L	5		8260D	Total/NA
N-Propylbenzene	48		5.0	3.5	ug/L	5		8260D	Total/NA
Toluene	49		5.0	4.5	ug/L	5		8260D	Total/NA
1,2,4-Trimethylbenzene	10		5.0	4.1	ug/L	5		8260D	Total/NA
1,3,5-Trimethylbenzene	19		5.0	2.8	ug/L	5		8260D	Total/NA
Xylenes, Total	75		50	8.0	ug/L	5		8260D	Total/NA
Acenaphthene	0.38		0.19	0.095	ug/L	1		8270E SIM	Total/NA
Anthracene	0.23		0.19	0.045	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.052	J	0.19	0.033	ug/L	1		8270E SIM	Total/NA
Chrysene	0.055	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.18	J	0.19	0.033	ug/L	1		8270E SIM	Total/NA
Fluorene	0.31		0.19	0.086	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.49		0.19	0.087	ug/L	1		8270E SIM	Total/NA
Pyrene	0.24		0.19	0.038	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	6.6		0.19	0.077	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	7.9		0.19	0.064	ug/L	1		8270E SIM	Total/NA
Diethyl phthalate	0.49	J	9.6	0.23	ug/L	1		8270E	Total/NA
Phenol	24		9.6	2.5	ug/L	1		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-247720-1

Client Sample ID: TB-ROX-120423-8260-A
Date Collected: 12/04/23 12:00
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/08/23 14:43	1
Acrolein	ND		20	3.3	ug/L			12/08/23 14:43	1
Acrylonitrile	ND		10	2.8	ug/L			12/08/23 14:43	1
Benzene	ND		1.0	0.50	ug/L			12/08/23 14:43	1
Bromobenzene	ND		1.0	0.54	ug/L			12/08/23 14:43	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/08/23 14:43	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/08/23 14:43	1
Bromoform	ND		5.0	0.25	ug/L			12/08/23 14:43	1
Bromomethane	ND		1.0	0.98	ug/L			12/08/23 14:43	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/08/23 14:43	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/08/23 14:43	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/08/23 14:43	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/08/23 14:43	1
Chloroethane	ND		1.0	0.76	ug/L			12/08/23 14:43	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/08/23 14:43	1
Chloroform	ND		1.0	0.90	ug/L			12/08/23 14:43	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/08/23 14:43	1
Chloromethane	ND		1.0	0.90	ug/L			12/08/23 14:43	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/08/23 14:43	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/08/23 14:43	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/08/23 14:43	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/08/23 14:43	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/08/23 14:43	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/08/23 14:43	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/08/23 14:43	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/08/23 14:43	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/08/23 14:43	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/08/23 14:43	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 14:43	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 14:43	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 14:43	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/08/23 14:43	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/08/23 14:43	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/08/23 14:43	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/08/23 14:43	1
2-Hexanone	ND		25	1.4	ug/L			12/08/23 14:43	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/08/23 14:43	1
Methylene bromide	ND		5.0	0.22	ug/L			12/08/23 14:43	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/08/23 14:43	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/08/23 14:43	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/08/23 14:43	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/08/23 14:43	1
Naphthalene	ND		5.0	3.0	ug/L			12/08/23 14:43	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/08/23 14:43	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/08/23 14:43	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/08/23 14:43	1
o-Xylene	ND		5.0	0.60	ug/L			12/08/23 14:43	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/08/23 14:43	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/08/23 14:43	1

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

Job ID: 400-247720-1

Client Sample ID: TB-ROX-120423-8260-A
Date Collected: 12/04/23 12:00
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/08/23 14:43	1
Styrene	ND		1.0	1.0	ug/L			12/08/23 14:43	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/08/23 14:43	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/08/23 14:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/08/23 14:43	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/08/23 14:43	1
Toluene	ND		1.0	0.90	ug/L			12/08/23 14:43	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/08/23 14:43	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/08/23 14:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/08/23 14:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/08/23 14:43	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/08/23 14:43	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/08/23 14:43	1
Trichloroethene	ND		1.0	0.15	ug/L			12/08/23 14:43	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/08/23 14:43	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/08/23 14:43	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/08/23 14:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/08/23 14:43	1
Vinyl acetate	ND		25	0.93	ug/L			12/08/23 14:43	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/08/23 14:43	1
Xylenes, Total	ND		10	1.6	ug/L			12/08/23 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*12/08/23 14:43*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*12/08/23 14:43*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*12/08/23 14:43*	*1*

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

Job ID: 400-247720-1

Client Sample ID: TB-ROX-120423-8011-A
Date Collected: 12/04/23 12:00
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-2
Matrix: Water

Method: EPA 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		12/08/23 10:59	12/11/23 13:12	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/08/23 10:59	12/11/23 13:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*51 - 149*	*12/08/23 10:59*	*12/11/23 13:12*	*1*

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

Job ID: 400-247720-1

Client Sample ID: MW4-ROX-120423-EB
Date Collected: 12/04/23 08:40
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/08/23 10:49	1
Acrolein	ND		20	3.3	ug/L			12/08/23 10:49	1
Acrylonitrile	ND		10	2.8	ug/L			12/08/23 10:49	1
Benzene	ND		1.0	0.50	ug/L			12/08/23 10:49	1
Bromobenzene	ND		1.0	0.54	ug/L			12/08/23 10:49	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/08/23 10:49	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/08/23 10:49	1
Bromoform	ND		5.0	0.25	ug/L			12/08/23 10:49	1
Bromomethane	ND		1.0	0.98	ug/L			12/08/23 10:49	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/08/23 10:49	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/08/23 10:49	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/08/23 10:49	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/08/23 10:49	1
Chloroethane	ND		1.0	0.76	ug/L			12/08/23 10:49	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/08/23 10:49	1
Chloroform	ND		1.0	0.90	ug/L			12/08/23 10:49	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/08/23 10:49	1
Chloromethane	ND		1.0	0.90	ug/L			12/08/23 10:49	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/08/23 10:49	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/08/23 10:49	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/08/23 10:49	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/08/23 10:49	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/08/23 10:49	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/08/23 10:49	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/08/23 10:49	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/08/23 10:49	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/08/23 10:49	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/08/23 10:49	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 10:49	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 10:49	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 10:49	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/08/23 10:49	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/08/23 10:49	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/08/23 10:49	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/08/23 10:49	1
2-Hexanone	ND		25	1.4	ug/L			12/08/23 10:49	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/08/23 10:49	1
Methylene bromide	ND		5.0	0.22	ug/L			12/08/23 10:49	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/08/23 10:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/08/23 10:49	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/08/23 10:49	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/08/23 10:49	1
Naphthalene	ND		5.0	3.0	ug/L			12/08/23 10:49	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/08/23 10:49	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/08/23 10:49	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/08/23 10:49	1
o-Xylene	ND		5.0	0.60	ug/L			12/08/23 10:49	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/08/23 10:49	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/08/23 10:49	1

Client Sample ID: MW4-ROX-120423-EB
Date Collected: 12/04/23 08:40
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/08/23 10:49	1
Styrene	ND		1.0	1.0	ug/L			12/08/23 10:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/08/23 10:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/08/23 10:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/08/23 10:49	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/08/23 10:49	1
Toluene	ND		1.0	0.90	ug/L			12/08/23 10:49	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/08/23 10:49	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/08/23 10:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/08/23 10:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/08/23 10:49	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/08/23 10:49	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/08/23 10:49	1
Trichloroethene	ND		1.0	0.15	ug/L			12/08/23 10:49	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/08/23 10:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/08/23 10:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/08/23 10:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/08/23 10:49	1
Vinyl acetate	ND		25	0.93	ug/L			12/08/23 10:49	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/08/23 10:49	1
Xylenes, Total	ND		10	1.6	ug/L			12/08/23 10:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*12/08/23 10:49*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*12/08/23 10:49*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*12/08/23 10:49*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		12/08/23 15:23	12/13/23 22:48	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/08/23 15:23	12/13/23 22:48	1
Anthracene	ND		0.20	0.047	ug/L		12/08/23 15:23	12/13/23 22:48	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/08/23 15:23	12/13/23 22:48	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		12/08/23 15:23	12/13/23 22:48	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/08/23 15:23	12/13/23 22:48	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/08/23 15:23	12/13/23 22:48	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/08/23 15:23	12/13/23 22:48	1
Chrysene	ND		0.20	0.033	ug/L		12/08/23 15:23	12/13/23 22:48	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/08/23 15:23	12/13/23 22:48	1
Fluoranthene	ND		0.20	0.034	ug/L		12/08/23 15:23	12/13/23 22:48	1
Fluorene	ND		0.20	0.089	ug/L		12/08/23 15:23	12/13/23 22:48	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/08/23 15:23	12/13/23 22:48	1
Phenanthrene	ND		0.20	0.090	ug/L		12/08/23 15:23	12/13/23 22:48	1
Pyrene	ND		0.20	0.039	ug/L		12/08/23 15:23	12/13/23 22:48	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		12/08/23 15:23	12/13/23 22:48	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		12/08/23 15:23	12/13/23 22:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*68*		*18 - 147*	*12/08/23 15:23*	*12/13/23 22:48*	*1*
2-Fluorobiphenyl	*67*		*15 - 128*	*12/08/23 15:23*	*12/13/23 22:48*	*1*

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

Job ID: 400-247720-1

Client Sample ID: MW4-ROX-120423-EB

Date Collected: 12/04/23 08:40
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-3

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	62		10 - 144	12/08/23 15:23	12/13/23 22:48	1

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		12/08/23 15:23	12/13/23 20:53	1
Benzenethiol	ND	*1	10	1.7	ug/L		12/08/23 15:23	12/13/23 20:53	1
Benzoic acid	ND		30	7.3	ug/L		12/08/23 15:23	12/13/23 20:53	1
Benzyl alcohol	ND		10	2.0	ug/L		12/08/23 15:23	12/13/23 20:53	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/08/23 15:23	12/13/23 20:53	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		12/08/23 15:23	12/13/23 20:53	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		12/08/23 15:23	12/13/23 20:53	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		12/08/23 15:23	12/13/23 20:53	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/08/23 15:23	12/13/23 20:53	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/08/23 15:23	12/13/23 20:53	1
4-Chloroaniline	ND		10	3.4	ug/L		12/08/23 15:23	12/13/23 20:53	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		12/08/23 15:23	12/13/23 20:53	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/08/23 15:23	12/13/23 20:53	1
2-Chlorophenol	ND		10	2.2	ug/L		12/08/23 15:23	12/13/23 20:53	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/08/23 15:23	12/13/23 20:53	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/08/23 15:23	12/13/23 20:53	1
Dibenzofuran	ND		10	0.17	ug/L		12/08/23 15:23	12/13/23 20:53	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		12/08/23 15:23	12/13/23 20:53	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		12/08/23 15:23	12/13/23 20:53	1
Diethyl phthalate	ND		10	0.24	ug/L		12/08/23 15:23	12/13/23 20:53	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		12/08/23 15:23	12/13/23 20:53	1
Dimethyl phthalate	**0.68**	**J B**	10	0.17	ug/L		12/08/23 15:23	12/13/23 20:53	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		12/08/23 15:23	12/13/23 20:53	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/08/23 15:23	12/13/23 20:53	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		12/08/23 15:23	12/13/23 20:53	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/08/23 15:23	12/13/23 20:53	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/08/23 15:23	12/13/23 20:53	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/08/23 15:23	12/13/23 20:53	1
1,4-Dioxane	ND		10	1.0	ug/L		12/08/23 15:23	12/13/23 20:53	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/08/23 15:23	12/13/23 20:53	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/08/23 15:23	12/13/23 20:53	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/08/23 15:23	12/13/23 20:53	1
Hexachloroethane	ND		10	4.2	ug/L		12/08/23 15:23	12/13/23 20:53	1
Indene	ND		10	1.0	ug/L		12/08/23 15:23	12/13/23 20:53	1
Isophorone	ND		10	0.14	ug/L		12/08/23 15:23	12/13/23 20:53	1
2-Methylphenol	ND		10	1.8	ug/L		12/08/23 15:23	12/13/23 20:53	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		12/08/23 15:23	12/13/23 20:53	1
2-Nitroaniline	ND		10	2.2	ug/L		12/08/23 15:23	12/13/23 20:53	1
3-Nitroaniline	ND		10	1.8	ug/L		12/08/23 15:23	12/13/23 20:53	1
4-Nitroaniline	ND		10	1.5	ug/L		12/08/23 15:23	12/13/23 20:53	1
Nitrobenzene	ND		10	0.13	ug/L		12/08/23 15:23	12/13/23 20:53	1
2-Nitrophenol	ND		10	5.2	ug/L		12/08/23 15:23	12/13/23 20:53	1
4-Nitrophenol	ND		10	2.1	ug/L		12/08/23 15:23	12/13/23 20:53	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		12/08/23 15:23	12/13/23 20:53	1

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

Job ID: 400-247720-1

Client Sample ID: MW4-ROX-120423-EB

Date Collected: 12/04/23 08:40
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-3

Matrix: Water

Method: SW846 8270E - 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		12/08/23 15:23	12/13/23 20:53	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/08/23 15:23	12/13/23 20:53	1
Pentachlorophenol	ND		20	1.4	ug/L		12/08/23 15:23	12/13/23 20:53	1
Phenol	ND		10	2.6	ug/L		12/08/23 15:23	12/13/23 20:53	1
Pyridine	ND		10	3.2	ug/L		12/08/23 15:23	12/13/23 20:53	1
Quinoline	ND		10	4.5	ug/L		12/08/23 15:23	12/13/23 20:53	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		12/08/23 15:23	12/13/23 20:53	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		12/08/23 15:23	12/13/23 20:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*46 - 124*	*12/08/23 15:23*	*12/13/23 20:53*	*1*
2-Fluorophenol	*46*		*13 - 113*	*12/08/23 15:23*	*12/13/23 20:53*	*1*
Nitrobenzene-d5	*61*		*36 - 126*	*12/08/23 15:23*	*12/13/23 20:53*	*1*
Phenol-d5	*53*		*17 - 127*	*12/08/23 15:23*	*12/13/23 20:53*	*1*
Terphenyl-d14	*82*		*44 - 149*	*12/08/23 15:23*	*12/13/23 20:53*	*1*
2,4,6-Tribromophenol	*69*		*26 - 150*	*12/08/23 15:23*	*12/13/23 20:53*	*1*

Method: EPA 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		12/08/23 10:59	12/11/23 13:33	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/08/23 10:59	12/11/23 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*115*		*51 - 149*	*12/08/23 10:59*	*12/11/23 13:33*	*1*

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

Job ID: 400-247720-1

Client Sample ID: MW4-ROX-120423
Date Collected: 12/04/23 09:40
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/08/23 11:13	1
Acrolein	ND		20	3.3	ug/L			12/08/23 11:13	1
Acrylonitrile	ND		10	2.8	ug/L			12/08/23 11:13	1
Benzene	ND		1.0	0.50	ug/L			12/08/23 11:13	1
Bromobenzene	ND		1.0	0.54	ug/L			12/08/23 11:13	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/08/23 11:13	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/08/23 11:13	1
Bromoform	ND		5.0	0.25	ug/L			12/08/23 11:13	1
Bromomethane	ND		1.0	0.98	ug/L			12/08/23 11:13	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/08/23 11:13	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/08/23 11:13	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/08/23 11:13	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/08/23 11:13	1
Chloroethane	ND		1.0	0.76	ug/L			12/08/23 11:13	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			12/08/23 11:13	1
Chloroform	ND		1.0	0.90	ug/L			12/08/23 11:13	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/08/23 11:13	1
Chloromethane	ND		1.0	0.90	ug/L			12/08/23 11:13	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/08/23 11:13	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/08/23 11:13	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/08/23 11:13	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/08/23 11:13	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/08/23 11:13	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/08/23 11:13	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/08/23 11:13	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/08/23 11:13	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/08/23 11:13	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/08/23 11:13	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 11:13	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 11:13	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 11:13	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/08/23 11:13	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/08/23 11:13	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/08/23 11:13	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/08/23 11:13	1
2-Hexanone	ND	F1	25	1.4	ug/L			12/08/23 11:13	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/08/23 11:13	1
Methylene bromide	ND		5.0	0.22	ug/L			12/08/23 11:13	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/08/23 11:13	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/08/23 11:13	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/08/23 11:13	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/08/23 11:13	1
Naphthalene	ND		5.0	3.0	ug/L			12/08/23 11:13	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/08/23 11:13	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/08/23 11:13	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/08/23 11:13	1
o-Xylene	ND		5.0	0.60	ug/L			12/08/23 11:13	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/08/23 11:13	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/08/23 11:13	1

Client Sample ID: MW4-ROX-120423
Date Collected: 12/04/23 09:40
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/08/23 11:13	1
Styrene	ND		1.0	1.0	ug/L			12/08/23 11:13	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/08/23 11:13	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/08/23 11:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/08/23 11:13	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/08/23 11:13	1
Toluene	ND		1.0	0.90	ug/L			12/08/23 11:13	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/08/23 11:13	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/08/23 11:13	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/08/23 11:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/08/23 11:13	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/08/23 11:13	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/08/23 11:13	1
Trichloroethene	ND		1.0	0.15	ug/L			12/08/23 11:13	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/08/23 11:13	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/08/23 11:13	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/08/23 11:13	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/08/23 11:13	1
Vinyl acetate	ND		25	0.93	ug/L			12/08/23 11:13	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/08/23 11:13	1
Xylenes, Total	ND		10	1.6	ug/L			12/08/23 11:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*12/08/23 11:13*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*12/08/23 11:13*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*12/08/23 11:13*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		12/08/23 15:23	12/13/23 23:08	1
Acenaphthylene	ND		0.20	0.045	ug/L		12/08/23 15:23	12/13/23 23:08	1
Anthracene	ND		0.20	0.048	ug/L		12/08/23 15:23	12/13/23 23:08	1
Benzo[a]anthracene	ND		0.20	0.035	ug/L		12/08/23 15:23	12/13/23 23:08	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		12/08/23 15:23	12/13/23 23:08	1
Benzo[b]fluoranthene	ND		0.20	0.038	ug/L		12/08/23 15:23	12/13/23 23:08	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/08/23 15:23	12/13/23 23:08	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		12/08/23 15:23	12/13/23 23:08	1
Chrysene	ND		0.20	0.034	ug/L		12/08/23 15:23	12/13/23 23:08	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		12/08/23 15:23	12/13/23 23:08	1
Fluoranthene	ND		0.20	0.035	ug/L		12/08/23 15:23	12/13/23 23:08	1
Fluorene	ND		0.20	0.091	ug/L		12/08/23 15:23	12/13/23 23:08	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.035	ug/L		12/08/23 15:23	12/13/23 23:08	1
Phenanthrene	ND		0.20	0.092	ug/L		12/08/23 15:23	12/13/23 23:08	1
Pyrene	ND		0.20	0.040	ug/L		12/08/23 15:23	12/13/23 23:08	1
1-Methylnaphthalene	ND		0.20	0.081	ug/L		12/08/23 15:23	12/13/23 23:08	1
2-Methylnaphthalene	ND		0.20	0.067	ug/L		12/08/23 15:23	12/13/23 23:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*61*		*18 - 147*	*12/08/23 15:23*	*12/13/23 23:08*	*1*
2-Fluorobiphenyl	*67*		*15 - 128*	*12/08/23 15:23*	*12/13/23 23:08*	*1*

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

Job ID: 400-247720-1

Client Sample ID: MW4-ROX-120423

Date Collected: 12/04/23 09:40
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-4

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*63*		*10 - 144*	*12/08/23 15:23*	*12/13/23 23:08*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		12/08/23 15:23	12/13/23 21:18	1
Benzenethiol	ND	*1	10	1.7	ug/L		12/08/23 15:23	12/13/23 21:18	1
Benzoic acid	ND		31	7.4	ug/L		12/08/23 15:23	12/13/23 21:18	1
Benzyl alcohol	ND		10	2.0	ug/L		12/08/23 15:23	12/13/23 21:18	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/08/23 15:23	12/13/23 21:18	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		12/08/23 15:23	12/13/23 21:18	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		12/08/23 15:23	12/13/23 21:18	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		12/08/23 15:23	12/13/23 21:18	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/08/23 15:23	12/13/23 21:18	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/08/23 15:23	12/13/23 21:18	1
4-Chloroaniline	ND		10	3.5	ug/L		12/08/23 15:23	12/13/23 21:18	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		12/08/23 15:23	12/13/23 21:18	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/08/23 15:23	12/13/23 21:18	1
2-Chlorophenol	ND		10	2.2	ug/L		12/08/23 15:23	12/13/23 21:18	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/08/23 15:23	12/13/23 21:18	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/08/23 15:23	12/13/23 21:18	1
Dibenzofuran	ND		10	0.17	ug/L		12/08/23 15:23	12/13/23 21:18	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		12/08/23 15:23	12/13/23 21:18	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		12/08/23 15:23	12/13/23 21:18	1
Diethyl phthalate	**0.30**	**J**	10	0.24	ug/L		12/08/23 15:23	12/13/23 21:18	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		12/08/23 15:23	12/13/23 21:18	1
Dimethyl phthalate	**0.94**	**J B**	10	0.17	ug/L		12/08/23 15:23	12/13/23 21:18	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		12/08/23 15:23	12/13/23 21:18	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/08/23 15:23	12/13/23 21:18	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		12/08/23 15:23	12/13/23 21:18	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/08/23 15:23	12/13/23 21:18	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/08/23 15:23	12/13/23 21:18	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/08/23 15:23	12/13/23 21:18	1
1,4-Dioxane	ND		10	1.0	ug/L		12/08/23 15:23	12/13/23 21:18	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/08/23 15:23	12/13/23 21:18	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/08/23 15:23	12/13/23 21:18	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/08/23 15:23	12/13/23 21:18	1
Hexachloroethane	ND		10	4.3	ug/L		12/08/23 15:23	12/13/23 21:18	1
Indene	ND		10	1.0	ug/L		12/08/23 15:23	12/13/23 21:18	1
Isophorone	ND		10	0.14	ug/L		12/08/23 15:23	12/13/23 21:18	1
2-Methylphenol	ND		10	1.8	ug/L		12/08/23 15:23	12/13/23 21:18	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		12/08/23 15:23	12/13/23 21:18	1
2-Nitroaniline	ND		10	2.2	ug/L		12/08/23 15:23	12/13/23 21:18	1
3-Nitroaniline	ND		10	1.8	ug/L		12/08/23 15:23	12/13/23 21:18	1
4-Nitroaniline	ND		10	1.5	ug/L		12/08/23 15:23	12/13/23 21:18	1
Nitrobenzene	ND		10	0.13	ug/L		12/08/23 15:23	12/13/23 21:18	1
2-Nitrophenol	ND		10	5.3	ug/L		12/08/23 15:23	12/13/23 21:18	1
4-Nitrophenol	ND		10	2.1	ug/L		12/08/23 15:23	12/13/23 21:18	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		12/08/23 15:23	12/13/23 21:18	1

Client Sample ID: MW4-ROX-120423

Date Collected: 12/04/23 09:40
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-4

Matrix: Water

Method: SW846 8270E - 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		12/08/23 15:23	12/13/23 21:18	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/08/23 15:23	12/13/23 21:18	1
Pentachlorophenol	ND		20	1.4	ug/L		12/08/23 15:23	12/13/23 21:18	1
Phenol	ND		10	2.6	ug/L		12/08/23 15:23	12/13/23 21:18	1
Pyridine	ND		10	3.3	ug/L		12/08/23 15:23	12/13/23 21:18	1
Quinoline	ND		10	4.6	ug/L		12/08/23 15:23	12/13/23 21:18	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		12/08/23 15:23	12/13/23 21:18	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		12/08/23 15:23	12/13/23 21:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*46 - 124*	*12/08/23 15:23*	*12/13/23 21:18*	*1*
2-Fluorophenol	*48*		*13 - 113*	*12/08/23 15:23*	*12/13/23 21:18*	*1*
Nitrobenzene-d5	*61*		*36 - 126*	*12/08/23 15:23*	*12/13/23 21:18*	*1*
Phenol-d5	*55*		*17 - 127*	*12/08/23 15:23*	*12/13/23 21:18*	*1*
Terphenyl-d14	*76*		*44 - 149*	*12/08/23 15:23*	*12/13/23 21:18*	*1*
2,4,6-Tribromophenol	*78*		*26 - 150*	*12/08/23 15:23*	*12/13/23 21:18*	*1*

Method: EPA 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		12/08/23 10:59	12/11/23 13:54	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/08/23 10:59	12/11/23 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*51 - 149*	*12/08/23 10:59*	*12/11/23 13:54*	*1*

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

Job ID: 400-247720-1

Client Sample ID: MW25-ROX-120423

Date Collected: 12/04/23 10:25
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-5

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/08/23 11:35	1
Acrolein	ND		20	3.3	ug/L			12/08/23 11:35	1
Acrylonitrile	ND		10	2.8	ug/L			12/08/23 11:35	1
Benzene	**47**		1.0	0.50	ug/L			12/08/23 11:35	1
Bromobenzene	ND		1.0	0.54	ug/L			12/08/23 11:35	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/08/23 11:35	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/08/23 11:35	1
Bromoform	ND		5.0	0.25	ug/L			12/08/23 11:35	1
Bromomethane	ND		1.0	0.98	ug/L			12/08/23 11:35	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/08/23 11:35	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/08/23 11:35	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/08/23 11:35	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/08/23 11:35	1
Chloroethane	ND		1.0	0.76	ug/L			12/08/23 11:35	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/08/23 11:35	1
Chloroform	ND		1.0	0.90	ug/L			12/08/23 11:35	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/08/23 11:35	1
Chloromethane	ND		1.0	0.90	ug/L			12/08/23 11:35	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/08/23 11:35	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/08/23 11:35	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/08/23 11:35	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/08/23 11:35	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/08/23 11:35	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/08/23 11:35	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/08/23 11:35	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/08/23 11:35	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/08/23 11:35	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/08/23 11:35	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 11:35	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 11:35	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 11:35	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/08/23 11:35	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/08/23 11:35	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/08/23 11:35	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/08/23 11:35	1
2-Hexanone	ND		25	1.4	ug/L			12/08/23 11:35	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/08/23 11:35	1
Methylene bromide	ND		5.0	0.22	ug/L			12/08/23 11:35	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/08/23 11:35	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/08/23 11:35	1
Methyl tert-butyl ether	**0.34**	**J**	1.0	0.22	ug/L			12/08/23 11:35	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/08/23 11:35	1
Naphthalene	ND		5.0	3.0	ug/L			12/08/23 11:35	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/08/23 11:35	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/08/23 11:35	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/08/23 11:35	1
o-Xylene	ND		5.0	0.60	ug/L			12/08/23 11:35	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/08/23 11:35	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/08/23 11:35	1

Client Sample ID: MW25-ROX-120423
Date Collected: 12/04/23 10:25
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/08/23 11:35	1
Styrene	ND		1.0	1.0	ug/L			12/08/23 11:35	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/08/23 11:35	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/08/23 11:35	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/08/23 11:35	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/08/23 11:35	1
Toluene	ND		1.0	0.90	ug/L			12/08/23 11:35	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/08/23 11:35	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/08/23 11:35	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/08/23 11:35	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/08/23 11:35	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/08/23 11:35	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/08/23 11:35	1
Trichloroethene	ND		1.0	0.15	ug/L			12/08/23 11:35	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/08/23 11:35	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/08/23 11:35	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/08/23 11:35	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/08/23 11:35	1
Vinyl acetate	ND		25	0.93	ug/L			12/08/23 11:35	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/08/23 11:35	1
Xylenes, Total	ND		10	1.6	ug/L			12/08/23 11:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*12/08/23 11:35*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*12/08/23 11:35*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*12/08/23 11:35*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		12/07/23 14:39	12/11/23 20:20	1
Acenaphthylene	ND		0.20	0.045	ug/L		12/07/23 14:39	12/11/23 20:20	1
Anthracene	ND		0.20	0.048	ug/L		12/07/23 14:39	12/11/23 20:20	1
Benzo[a]anthracene	**0.14**	**J**	0.20	0.035	ug/L		12/07/23 14:39	12/11/23 20:20	1
Benzo[a]pyrene	**0.16**	**J**	0.20	0.065	ug/L		12/07/23 14:39	12/11/23 20:20	1
Benzo[b]fluoranthene	**0.12**	**J**	0.20	0.038	ug/L		12/07/23 14:39	12/11/23 20:20	1
Benzo[g,h,i]perylene	**0.065**	**J**	0.20	0.028	ug/L		12/07/23 14:39	12/11/23 20:20	1
Benzo[k]fluoranthene	**0.092**	**J**	0.20	0.063	ug/L		12/07/23 14:39	12/11/23 20:20	1
Chrysene	**0.049**	**J**	0.20	0.034	ug/L		12/07/23 14:39	12/11/23 20:20	1
Dibenz(a,h)anthracene	**0.11**	**J**	0.20	0.049	ug/L		12/07/23 14:39	12/11/23 20:20	1
Fluoranthene	**0.037**	**J**	0.20	0.035	ug/L		12/07/23 14:39	12/11/23 20:20	1
Fluorene	ND		0.20	0.091	ug/L		12/07/23 14:39	12/11/23 20:20	1
Indeno[1,2,3-cd]pyrene	**0.13**	**J**	0.20	0.035	ug/L		12/07/23 14:39	12/11/23 20:20	1
Phenanthrene	ND		0.20	0.092	ug/L		12/07/23 14:39	12/11/23 20:20	1
Pyrene	**0.040**	**J**	0.20	0.040	ug/L		12/07/23 14:39	12/11/23 20:20	1
1-Methylnaphthalene	ND		0.20	0.082	ug/L		12/07/23 14:39	12/11/23 20:20	1
2-Methylnaphthalene	ND		0.20	0.068	ug/L		12/07/23 14:39	12/11/23 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*18 - 147*	*12/07/23 14:39*	*12/11/23 20:20*	*1*
2-Fluorobiphenyl	*64*		*15 - 128*	*12/07/23 14:39*	*12/11/23 20:20*	*1*

Client Sample ID: MW25-ROX-120423

Date Collected: 12/04/23 10:25
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-5

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*72*		*10 - 144*	*12/07/23 14:39*	*12/11/23 20:20*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.20	0.10	ug/L		12/13/23 09:48	12/14/23 17:08	1
Acenaphthylene	ND	H	0.20	0.044	ug/L		12/13/23 09:48	12/14/23 17:08	1
Anthracene	ND	H	0.20	0.047	ug/L		12/13/23 09:48	12/14/23 17:08	1
Benzo[a]anthracene	ND	H	0.20	0.034	ug/L		12/13/23 09:48	12/14/23 17:08	1
Benzo[a]pyrene	ND	H	0.20	0.064	ug/L		12/13/23 09:48	12/14/23 17:08	1
Benzo[b]fluoranthene	ND	H	0.20	0.037	ug/L		12/13/23 09:48	12/14/23 17:08	1
Benzo[g,h,i]perylene	ND	H	0.20	0.027	ug/L		12/13/23 09:48	12/14/23 17:08	1
Benzo[k]fluoranthene	ND	H	0.20	0.062	ug/L		12/13/23 09:48	12/14/23 17:08	1
Chrysene	ND	H	0.20	0.033	ug/L		12/13/23 09:48	12/14/23 17:08	1
Dibenz(a,h)anthracene	ND	H	0.20	0.048	ug/L		12/13/23 09:48	12/14/23 17:08	1
Fluoranthene	ND	H	0.20	0.034	ug/L		12/13/23 09:48	12/14/23 17:08	1
Fluorene	ND	H	0.20	0.090	ug/L		12/13/23 09:48	12/14/23 17:08	1
Indeno[1,2,3-cd]pyrene	ND	H	0.20	0.034	ug/L		12/13/23 09:48	12/14/23 17:08	1
Phenanthrene	ND	H	0.20	0.091	ug/L		12/13/23 09:48	12/14/23 17:08	1
Pyrene	ND	H	0.20	0.039	ug/L		12/13/23 09:48	12/14/23 17:08	1
1-Methylnaphthalene	ND	H	0.20	0.081	ug/L		12/13/23 09:48	12/14/23 17:08	1
2-Methylnaphthalene	ND	H	0.20	0.066	ug/L		12/13/23 09:48	12/14/23 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*67*		*18 - 147*	*12/13/23 09:48*	*12/14/23 17:08*	*1*
2-Fluorobiphenyl	*72*		*15 - 128*	*12/13/23 09:48*	*12/14/23 17:08*	*1*
Nitrobenzene-d5	*72*		*10 - 144*	*12/13/23 09:48*	*12/14/23 17:08*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	10	3.9	ug/L		12/07/23 14:39	12/11/23 21:20	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		12/07/23 14:39	12/11/23 21:20	1
Benzoic acid	ND	*1	31	7.5	ug/L		12/07/23 14:39	12/11/23 21:20	1
Benzyl alcohol	ND		10	2.0	ug/L		12/07/23 14:39	12/11/23 21:20	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/07/23 14:39	12/11/23 21:20	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		12/07/23 14:39	12/11/23 21:20	1
bis (2-chloroisopropyl) ether	ND	*-	10	0.16	ug/L		12/07/23 14:39	12/11/23 21:20	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		12/07/23 14:39	12/11/23 21:20	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/07/23 14:39	12/11/23 21:20	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/07/23 14:39	12/11/23 21:20	1
4-Chloroaniline	ND		10	3.5	ug/L		12/07/23 14:39	12/11/23 21:20	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		12/07/23 14:39	12/11/23 21:20	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/07/23 14:39	12/11/23 21:20	1
2-Chlorophenol	ND	*1	10	2.3	ug/L		12/07/23 14:39	12/11/23 21:20	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/07/23 14:39	12/11/23 21:20	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 21:20	1
Dibenzofuran	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 21:20	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		12/07/23 14:39	12/11/23 21:20	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		12/07/23 14:39	12/11/23 21:20	1
Diethyl phthalate	ND		10	0.25	ug/L		12/07/23 14:39	12/11/23 21:20	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		12/07/23 14:39	12/11/23 21:20	1

Client Sample ID: MW25-ROX-120423
Date Collected: 12/04/23 10:25
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-5
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 21:20	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		12/07/23 14:39	12/11/23 21:20	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/07/23 14:39	12/11/23 21:20	1
2,4-Dinitrophenol	ND	*1	31	3.5	ug/L		12/07/23 14:39	12/11/23 21:20	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/07/23 14:39	12/11/23 21:20	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/07/23 14:39	12/11/23 21:20	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 21:20	1
1,4-Dioxane	ND	*1	10	1.0	ug/L		12/07/23 14:39	12/11/23 21:20	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 21:20	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 21:20	1
Hexachlorocyclopentadiene	ND	*1	20	2.7	ug/L		12/07/23 14:39	12/11/23 21:20	1
Hexachloroethane	ND	*1	10	4.3	ug/L		12/07/23 14:39	12/11/23 21:20	1
Indene	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 21:20	1
Isophorone	ND		10	0.14	ug/L		12/07/23 14:39	12/11/23 21:20	1
2-Methylphenol	ND		10	1.8	ug/L		12/07/23 14:39	12/11/23 21:20	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		12/07/23 14:39	12/11/23 21:20	1
2-Nitroaniline	ND		10	2.3	ug/L		12/07/23 14:39	12/11/23 21:20	1
3-Nitroaniline	ND		10	1.8	ug/L		12/07/23 14:39	12/11/23 21:20	1
4-Nitroaniline	ND		10	1.5	ug/L		12/07/23 14:39	12/11/23 21:20	1
Nitrobenzene	ND		10	0.13	ug/L		12/07/23 14:39	12/11/23 21:20	1
2-Nitrophenol	ND		10	5.3	ug/L		12/07/23 14:39	12/11/23 21:20	1
4-Nitrophenol	ND		10	2.1	ug/L		12/07/23 14:39	12/11/23 21:20	1
N-Nitrosodimethylamine	ND	*1	10	3.6	ug/L		12/07/23 14:39	12/11/23 21:20	1
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		12/07/23 14:39	12/11/23 21:20	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/07/23 14:39	12/11/23 21:20	1
Pentachlorophenol	ND		20	1.4	ug/L		12/07/23 14:39	12/11/23 21:20	1
Phenol	ND	*1	10	2.7	ug/L		12/07/23 14:39	12/11/23 21:20	1
Pyridine	ND	*1	10	3.3	ug/L		12/07/23 14:39	12/11/23 21:20	1
Quinoline	ND		10	4.6	ug/L		12/07/23 14:39	12/11/23 21:20	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		12/07/23 14:39	12/11/23 21:20	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		12/07/23 14:39	12/11/23 21:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*46 - 124*	*12/07/23 14:39*	*12/11/23 21:20*	*1*
2-Fluorophenol	*0.9*	*S1-*	*13 - 113*	*12/07/23 14:39*	*12/11/23 21:20*	*1*
Nitrobenzene-d5	*58*		*36 - 126*	*12/07/23 14:39*	*12/11/23 21:20*	*1*
Phenol-d5	*9*	*S1-*	*17 - 127*	*12/07/23 14:39*	*12/11/23 21:20*	*1*
Terphenyl-d14	*87*		*44 - 149*	*12/07/23 14:39*	*12/11/23 21:20*	*1*
2,4,6-Tribromophenol	*64*		*26 - 150*	*12/07/23 14:39*	*12/11/23 21:20*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	H	10	3.8	ug/L		12/13/23 09:48	12/14/23 21:43	1
Benzenethiol	ND	H *- *1	10	1.7	ug/L		12/13/23 09:48	12/14/23 21:43	1
Benzoic acid	ND	H *1	30	7.4	ug/L		12/13/23 09:48	12/14/23 21:43	1
Benzyl alcohol	ND	H	10	2.0	ug/L		12/13/23 09:48	12/14/23 21:43	1
Bis(2-chloroethoxy)methane	ND	H	10	0.16	ug/L		12/13/23 09:48	12/14/23 21:43	1
Bis(2-chloroethyl)ether	ND	H	10	2.7	ug/L		12/13/23 09:48	12/14/23 21:43	1
bis (2-chloroisopropyl) ether	ND	H	10	0.16	ug/L		12/13/23 09:48	12/14/23 21:43	1

Client Sample ID: MW25-ROX-120423
Date Collected: 12/04/23 10:25
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-5
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) - RERA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H	10	5.0	ug/L		12/13/23 09:48	12/14/23 21:43	1
4-Bromophenyl phenyl ether	ND	H	10	0.20	ug/L		12/13/23 09:48	12/14/23 21:43	1
Butyl benzyl phthalate	ND	H	10	0.19	ug/L		12/13/23 09:48	12/14/23 21:43	1
4-Chloroaniline	ND	H	10	3.4	ug/L		12/13/23 09:48	12/14/23 21:43	1
4-Chloro-3-methylphenol	ND	H *1	10	3.8	ug/L		12/13/23 09:48	12/14/23 21:43	1
2-Chloronaphthalene	ND	H	10	0.14	ug/L		12/13/23 09:48	12/14/23 21:43	1
2-Chlorophenol	ND	H *- *1	10	2.2	ug/L		12/13/23 09:48	12/14/23 21:43	1
4-Chlorophenyl phenyl ether	ND	H	10	2.0	ug/L		12/13/23 09:48	12/14/23 21:43	1
Dibenz[a,h]acridine	ND	H	10	1.0	ug/L		12/13/23 09:48	12/14/23 21:43	1
Dibenzofuran	ND	H	10	0.17	ug/L		12/13/23 09:48	12/14/23 21:43	1
3,3'-Dichlorobenzidine	ND	H	10	2.6	ug/L		12/13/23 09:48	12/14/23 21:43	1
2,4-Dichlorophenol	ND	H *- *1	10	3.0	ug/L		12/13/23 09:48	12/14/23 21:43	1
Diethyl phthalate	**0.24**	**J H**	10	0.24	ug/L		12/13/23 09:48	12/14/23 21:43	1
2,4-Dimethylphenol	ND	H	10	3.5	ug/L		12/13/23 09:48	12/14/23 21:43	1
Dimethyl phthalate	**0.63**	**J H**	10	0.17	ug/L		12/13/23 09:48	12/14/23 21:43	1
Di-n-butyl phthalate	ND	H	10	2.7	ug/L		12/13/23 09:48	12/14/23 21:43	1
4,6-Dinitro-ortho-cresol	ND	H	10	1.6	ug/L		12/13/23 09:48	12/14/23 21:43	1
2,4-Dinitrophenol	ND	H *1	30	3.4	ug/L		12/13/23 09:48	12/14/23 21:43	1
2,4-Dinitrotoluene	ND	H	10	1.9	ug/L		12/13/23 09:48	12/14/23 21:43	1
2,6-Dinitrotoluene	ND	H	10	1.9	ug/L		12/13/23 09:48	12/14/23 21:43	1
Di-n-octyl phthalate	ND	H	10	0.17	ug/L		12/13/23 09:48	12/14/23 21:43	1
1,4-Dioxane	ND	H	10	1.0	ug/L		12/13/23 09:48	12/14/23 21:43	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	H	10	1.0	ug/L		12/13/23 09:48	12/14/23 21:43	1
Hexachlorobenzene	ND	H	10	0.17	ug/L		12/13/23 09:48	12/14/23 21:43	1
Hexachlorocyclopentadiene	ND	H *- *1	20	2.6	ug/L		12/13/23 09:48	12/14/23 21:43	1
Hexachloroethane	ND	H	10	4.2	ug/L		12/13/23 09:48	12/14/23 21:43	1
Indene	ND	H	10	1.0	ug/L		12/13/23 09:48	12/14/23 21:43	1
Isophorone	ND	H	10	0.14	ug/L		12/13/23 09:48	12/14/23 21:43	1
2-Methylphenol	ND	H *1	10	1.8	ug/L		12/13/23 09:48	12/14/23 21:43	1
3 & 4 Methylphenol	ND	H *1	20	0.39	ug/L		12/13/23 09:48	12/14/23 21:43	1
2-Nitroaniline	ND	H	10	2.2	ug/L		12/13/23 09:48	12/14/23 21:43	1
3-Nitroaniline	ND	H	10	1.8	ug/L		12/13/23 09:48	12/14/23 21:43	1
4-Nitroaniline	ND	H	10	1.5	ug/L		12/13/23 09:48	12/14/23 21:43	1
Nitrobenzene	ND	H	10	0.13	ug/L		12/13/23 09:48	12/14/23 21:43	1
2-Nitrophenol	ND	H *- *1	10	5.2	ug/L		12/13/23 09:48	12/14/23 21:43	1
4-Nitrophenol	ND	H	10	2.1	ug/L		12/13/23 09:48	12/14/23 21:43	1
N-Nitrosodimethylamine	ND	H	10	3.5	ug/L		12/13/23 09:48	12/14/23 21:43	1
N-Nitrosodi-n-propylamine	ND	H	10	3.3	ug/L		12/13/23 09:48	12/14/23 21:43	1
N-Nitrosodiphenylamine	ND	H	10	0.18	ug/L		12/13/23 09:48	12/14/23 21:43	1
Pentachlorophenol	ND	H *1	20	1.4	ug/L		12/13/23 09:48	12/14/23 21:43	1
Phenol	ND	H *1	10	2.6	ug/L		12/13/23 09:48	12/14/23 21:43	1
Pyridine	ND	H	10	3.2	ug/L		12/13/23 09:48	12/14/23 21:43	1
Quinoline	ND	H *1	10	4.5	ug/L		12/13/23 09:48	12/14/23 21:43	1
2,4,5-Trichlorophenol	ND	H *1	10	3.7	ug/L		12/13/23 09:48	12/14/23 21:43	1
2,4,6-Trichlorophenol	ND	H *1	10	3.5	ug/L		12/13/23 09:48	12/14/23 21:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*46 - 124*	*12/13/23 09:48*	*12/14/23 21:43*	*1*
2-Fluorophenol	*20*		*13 - 113*	*12/13/23 09:48*	*12/14/23 21:43*	*1*

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

Job ID: 400-247720-1

Client Sample ID: MW25-ROX-120423
Date Collected: 12/04/23 10:25
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-5
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) - RERA (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*66*		*36 - 126*	*12/13/23 09:48*	*12/14/23 21:43*	*1*
Phenol-d5	*46*		*17 - 127*	*12/13/23 09:48*	*12/14/23 21:43*	*1*
Terphenyl-d14	*83*		*44 - 149*	*12/13/23 09:48*	*12/14/23 21:43*	*1*
2,4,6-Tribromophenol	*93*		*26 - 150*	*12/13/23 09:48*	*12/14/23 21:43*	*1*

Method: EPA 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		12/08/23 10:59	12/11/23 14:15	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/08/23 10:59	12/11/23 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*51 - 149*	*12/08/23 10:59*	*12/11/23 14:15*	*1*

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

Job ID: 400-247720-1

Client Sample ID: MW7-ROX-120423
Date Collected: 12/04/23 11:15
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		50000	20000	ug/L			12/08/23 17:32	2000
Acrolein	ND		40000	6600	ug/L			12/08/23 17:32	2000
Acrylonitrile	ND		20000	5600	ug/L			12/08/23 17:32	2000
Bromobenzene	ND		2000	1100	ug/L			12/08/23 17:32	2000
Bromochloromethane	ND		2000	420	ug/L			12/08/23 17:32	2000
Bromodichloromethane	ND		2000	1000	ug/L			12/08/23 17:32	2000
Bromoform	ND		10000	500	ug/L			12/08/23 17:32	2000
Bromomethane	ND		2000	2000	ug/L			12/08/23 17:32	2000
2-Butanone (MEK)	ND		50000	5200	ug/L			12/08/23 17:32	2000
Carbon disulfide	ND		2000	1000	ug/L			12/08/23 17:32	2000
Carbon tetrachloride	ND		2000	380	ug/L			12/08/23 17:32	2000
Chlorobenzene	ND		2000	1800	ug/L			12/08/23 17:32	2000
Chloroethane	ND		2000	1500	ug/L			12/08/23 17:32	2000
2-Chloroethyl vinyl ether	ND		10000	4000	ug/L			12/08/23 17:32	2000
Chloroform	ND		2000	1800	ug/L			12/08/23 17:32	2000
1-Chlorohexane	ND		2000	640	ug/L			12/08/23 17:32	2000
Chloromethane	ND		2000	1800	ug/L			12/08/23 17:32	2000
cis-1,2-Dichloroethene	ND		2000	400	ug/L			12/08/23 17:32	2000
cis-1,3-Dichloropropene	ND		10000	1000	ug/L			12/08/23 17:32	2000
Dibromochloromethane	ND		2000	480	ug/L			12/08/23 17:32	2000
1,2-Dichlorobenzene	ND		2000	1000	ug/L			12/08/23 17:32	2000
1,3-Dichlorobenzene	ND		2000	1100	ug/L			12/08/23 17:32	2000
1,4-Dichlorobenzene	ND		2000	1300	ug/L			12/08/23 17:32	2000
Dichlorodifluoromethane	ND		2000	1700	ug/L			12/08/23 17:32	2000
1,1-Dichloroethane	ND		2000	1000	ug/L			12/08/23 17:32	2000
1,2-Dichloroethane	ND		2000	380	ug/L			12/08/23 17:32	2000
1,1-Dichloroethene	ND		2000	1000	ug/L			12/08/23 17:32	2000
1,2-Dichloropropane	ND		2000	1000	ug/L			12/08/23 17:32	2000
1,3-Dichloropropane	ND		2000	1000	ug/L			12/08/23 17:32	2000
2,2-Dichloropropane	ND		2000	1000	ug/L			12/08/23 17:32	2000
1,1-Dichloropropene	ND		2000	1000	ug/L			12/08/23 17:32	2000
Ethylbenzene	ND		2000	1000	ug/L			12/08/23 17:32	2000
Ethyl methacrylate	ND		2000	1200	ug/L			12/08/23 17:32	2000
Hexachlorobutadiene	ND		10000	1800	ug/L			12/08/23 17:32	2000
2-Hexanone	ND		50000	2800	ug/L			12/08/23 17:32	2000
Isopropylbenzene	ND		2000	1100	ug/L			12/08/23 17:32	2000
Methylene bromide	ND		10000	440	ug/L			12/08/23 17:32	2000
Methylene Chloride	ND		10000	6000	ug/L			12/08/23 17:32	2000
4-Methyl-2-pentanone (MIBK)	ND		50000	3600	ug/L			12/08/23 17:32	2000
Methyl tert-butyl ether	ND		2000	440	ug/L			12/08/23 17:32	2000
m-Xylene & p-Xylene	ND		10000	1300	ug/L			12/08/23 17:32	2000
Naphthalene	ND		10000	6000	ug/L			12/08/23 17:32	2000
n-Butylbenzene	ND		2000	1500	ug/L			12/08/23 17:32	2000
N-Propylbenzene	ND		2000	1400	ug/L			12/08/23 17:32	2000
o-Chlorotoluene	ND		2000	1100	ug/L			12/08/23 17:32	2000
o-Xylene	ND		10000	1200	ug/L			12/08/23 17:32	2000
p-Chlorotoluene	ND		2000	1100	ug/L			12/08/23 17:32	2000
p-Isopropyltoluene	ND		2000	1400	ug/L			12/08/23 17:32	2000
sec-Butylbenzene	ND		2000	1400	ug/L			12/08/23 17:32	2000

Client Sample ID: MW7-ROX-120423

Lab Sample ID: 400-247720-6

Date Collected: 12/04/23 11:15

Matrix: Water

Date Received: 12/05/23 09:22

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		2000	2000	ug/L			12/08/23 17:32	2000
tert-Butylbenzene	ND		2000	1300	ug/L			12/08/23 17:32	2000
1,1,1,2-Tetrachloroethane	ND		2000	320	ug/L			12/08/23 17:32	2000
1,1,2,2-Tetrachloroethane	ND		2000	1000	ug/L			12/08/23 17:32	2000
Tetrachloroethene	ND		2000	1800	ug/L			12/08/23 17:32	2000
Toluene	ND		2000	1800	ug/L			12/08/23 17:32	2000
trans-1,2-Dichloroethene	ND		2000	1000	ug/L			12/08/23 17:32	2000
trans-1,3-Dichloropropene	ND		10000	400	ug/L			12/08/23 17:32	2000
1,2,3-Trichlorobenzene	ND		2000	1800	ug/L			12/08/23 17:32	2000
1,2,4-Trichlorobenzene	ND		2000	1600	ug/L			12/08/23 17:32	2000
1,1,1-Trichloroethane	ND		2000	360	ug/L			12/08/23 17:32	2000
1,1,2-Trichloroethane	ND		10000	420	ug/L			12/08/23 17:32	2000
Trichloroethene	ND		2000	300	ug/L			12/08/23 17:32	2000
Trichlorofluoromethane	ND		2000	1000	ug/L			12/08/23 17:32	2000
1,2,3-Trichloropropane	ND		10000	1700	ug/L			12/08/23 17:32	2000
1,2,4-Trimethylbenzene	ND		2000	1600	ug/L			12/08/23 17:32	2000
1,3,5-Trimethylbenzene	ND		2000	1100	ug/L			12/08/23 17:32	2000
Vinyl acetate	ND		50000	1900	ug/L			12/08/23 17:32	2000
Vinyl chloride	ND		2000	1000	ug/L			12/08/23 17:32	2000
Xylenes, Total	ND		20000	3200	ug/L			12/08/23 17:32	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*12/08/23 17:32*	*2000*
Dibromofluoromethane	*102*		*75 - 126*		*12/08/23 17:32*	*2000*
Toluene-d8 (Surr)	*91*		*64 - 132*		*12/08/23 17:32*	*2000*

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**750000**		5000	2500	ug/L			12/11/23 13:55	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*12/11/23 13:55*	*5000*
Dibromofluoromethane	*107*		*75 - 126*		*12/11/23 13:55*	*5000*
Toluene-d8 (Surr)	*85*		*64 - 132*		*12/11/23 13:55*	*5000*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		12/07/23 14:39	12/11/23 20:40	1
Acenaphthylene	**0.14**	**J**	0.20	0.045	ug/L		12/07/23 14:39	12/11/23 20:40	1
Anthracene	**0.083**	**J**	0.20	0.048	ug/L		12/07/23 14:39	12/11/23 20:40	1
Benzo[a]anthracene	ND		0.20	0.035	ug/L		12/07/23 14:39	12/11/23 20:40	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		12/07/23 14:39	12/11/23 20:40	1
Benzo[b]fluoranthene	ND		0.20	0.038	ug/L		12/07/23 14:39	12/11/23 20:40	1
Benzo[g,h,i]perylene	ND		0.20	0.028	ug/L		12/07/23 14:39	12/11/23 20:40	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		12/07/23 14:39	12/11/23 20:40	1
Chrysene	ND		0.20	0.034	ug/L		12/07/23 14:39	12/11/23 20:40	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		12/07/23 14:39	12/11/23 20:40	1
Fluoranthene	**0.043**	**J**	0.20	0.035	ug/L		12/07/23 14:39	12/11/23 20:40	1
Fluorene	**0.096**	**J**	0.20	0.091	ug/L		12/07/23 14:39	12/11/23 20:40	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.035	ug/L		12/07/23 14:39	12/11/23 20:40	1

Client Sample ID: MW7-ROX-120423
Date Collected: 12/04/23 11:15
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-6
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	**0.14**	**J**	0.20	0.092	ug/L		12/07/23 14:39	12/11/23 20:40	1
Pyrene	ND		0.20	0.040	ug/L		12/07/23 14:39	12/11/23 20:40	1
1-Methylnaphthalene	**1.0**		0.20	0.082	ug/L		12/07/23 14:39	12/11/23 20:40	1
2-Methylnaphthalene	**1.5**		0.20	0.067	ug/L		12/07/23 14:39	12/11/23 20:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*63*		*18 - 147*	*12/07/23 14:39*	*12/11/23 20:40*	*1*
2-Fluorobiphenyl	*62*		*15 - 128*	*12/07/23 14:39*	*12/11/23 20:40*	*1*
Nitrobenzene-d5	*71*		*10 - 144*	*12/07/23 14:39*	*12/11/23 20:40*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	10	3.9	ug/L		12/07/23 14:39	12/11/23 21:45	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		12/07/23 14:39	12/11/23 21:45	1
Benzoic acid	ND	*1	31	7.5	ug/L		12/07/23 14:39	12/11/23 21:45	1
Benzyl alcohol	ND		10	2.0	ug/L		12/07/23 14:39	12/11/23 21:45	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/07/23 14:39	12/11/23 21:45	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		12/07/23 14:39	12/11/23 21:45	1
bis (2-chloroisopropyl) ether	ND	*-	10	0.16	ug/L		12/07/23 14:39	12/11/23 21:45	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		12/07/23 14:39	12/11/23 21:45	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/07/23 14:39	12/11/23 21:45	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/07/23 14:39	12/11/23 21:45	1
4-Chloroaniline	ND		10	3.5	ug/L		12/07/23 14:39	12/11/23 21:45	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		12/07/23 14:39	12/11/23 21:45	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/07/23 14:39	12/11/23 21:45	1
2-Chlorophenol	ND	*1	10	2.2	ug/L		12/07/23 14:39	12/11/23 21:45	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/07/23 14:39	12/11/23 21:45	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 21:45	1
Dibenzofuran	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 21:45	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		12/07/23 14:39	12/11/23 21:45	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		12/07/23 14:39	12/11/23 21:45	1
Diethyl phthalate	**0.43**	**J**	10	0.25	ug/L		12/07/23 14:39	12/11/23 21:45	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		12/07/23 14:39	12/11/23 21:45	1
Dimethyl phthalate	**1.7**	**J**	10	0.17	ug/L		12/07/23 14:39	12/11/23 21:45	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		12/07/23 14:39	12/11/23 21:45	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/07/23 14:39	12/11/23 21:45	1
2,4-Dinitrophenol	ND	*1	31	3.5	ug/L		12/07/23 14:39	12/11/23 21:45	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/07/23 14:39	12/11/23 21:45	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/07/23 14:39	12/11/23 21:45	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 21:45	1
1,4-Dioxane	ND	*1	10	1.0	ug/L		12/07/23 14:39	12/11/23 21:45	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 21:45	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 21:45	1
Hexachlorocyclopentadiene	ND	*1	20	2.7	ug/L		12/07/23 14:39	12/11/23 21:45	1
Hexachloroethane	ND	*1	10	4.3	ug/L		12/07/23 14:39	12/11/23 21:45	1
Indene	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 21:45	1
Isophorone	ND		10	0.14	ug/L		12/07/23 14:39	12/11/23 21:45	1
2-Methylphenol	ND		10	1.8	ug/L		12/07/23 14:39	12/11/23 21:45	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		12/07/23 14:39	12/11/23 21:45	1

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

Job ID: 400-247720-1

Client Sample ID: MW7-ROX-120423
Date Collected: 12/04/23 11:15
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-6
Matrix: Water

Method: SW846 8270E - 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		12/07/23 14:39	12/11/23 21:45	1
3-Nitroaniline	ND		10	1.8	ug/L		12/07/23 14:39	12/11/23 21:45	1
4-Nitroaniline	ND		10	1.5	ug/L		12/07/23 14:39	12/11/23 21:45	1
Nitrobenzene	ND		10	0.13	ug/L		12/07/23 14:39	12/11/23 21:45	1
2-Nitrophenol	ND		10	5.3	ug/L		12/07/23 14:39	12/11/23 21:45	1
4-Nitrophenol	ND		10	2.1	ug/L		12/07/23 14:39	12/11/23 21:45	1
N-Nitrosodimethylamine	ND	*1	10	3.6	ug/L		12/07/23 14:39	12/11/23 21:45	1
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		12/07/23 14:39	12/11/23 21:45	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/07/23 14:39	12/11/23 21:45	1
Pentachlorophenol	ND		20	1.4	ug/L		12/07/23 14:39	12/11/23 21:45	1
Phenol	**97**	***1**	10	2.7	ug/L		12/07/23 14:39	12/11/23 21:45	1
Pyridine	ND	*1	10	3.3	ug/L		12/07/23 14:39	12/11/23 21:45	1
Quinoline	ND		10	4.6	ug/L		12/07/23 14:39	12/11/23 21:45	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		12/07/23 14:39	12/11/23 21:45	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		12/07/23 14:39	12/11/23 21:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*46 - 124*	*12/07/23 14:39*	*12/11/23 21:45*	*1*
2-Fluorophenol	*33*		*13 - 113*	*12/07/23 14:39*	*12/11/23 21:45*	*1*
Nitrobenzene-d5	*67*		*36 - 126*	*12/07/23 14:39*	*12/11/23 21:45*	*1*
Phenol-d5	*56*		*17 - 127*	*12/07/23 14:39*	*12/11/23 21:45*	*1*
Terphenyl-d14	*76*		*44 - 149*	*12/07/23 14:39*	*12/11/23 21:45*	*1*
2,4,6-Tribromophenol	*112*		*26 - 150*	*12/07/23 14:39*	*12/11/23 21:45*	*1*

Method: EPA 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		12/08/23 10:59	12/11/23 14:35	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/08/23 10:59	12/11/23 14:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*12/08/23 10:59*	*12/11/23 14:35*	*1*

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

Job ID: 400-247720-1

Client Sample ID: MW7-ROX-120423-DUP
Date Collected: 12/04/23 11:15
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-7
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		50000	20000	ug/L			12/08/23 17:57	2000
Acrolein	ND		40000	6600	ug/L			12/08/23 17:57	2000
Acrylonitrile	ND		20000	5600	ug/L			12/08/23 17:57	2000
Bromobenzene	ND		2000	1100	ug/L			12/08/23 17:57	2000
Bromochloromethane	ND		2000	420	ug/L			12/08/23 17:57	2000
Bromodichloromethane	ND		2000	1000	ug/L			12/08/23 17:57	2000
Bromoform	ND		10000	500	ug/L			12/08/23 17:57	2000
Bromomethane	ND		2000	2000	ug/L			12/08/23 17:57	2000
2-Butanone (MEK)	ND		50000	5200	ug/L			12/08/23 17:57	2000
Carbon disulfide	ND		2000	1000	ug/L			12/08/23 17:57	2000
Carbon tetrachloride	ND		2000	380	ug/L			12/08/23 17:57	2000
Chlorobenzene	ND		2000	1800	ug/L			12/08/23 17:57	2000
Chloroethane	ND		2000	1500	ug/L			12/08/23 17:57	2000
2-Chloroethyl vinyl ether	ND		10000	4000	ug/L			12/08/23 17:57	2000
Chloroform	ND		2000	1800	ug/L			12/08/23 17:57	2000
1-Chlorohexane	ND		2000	640	ug/L			12/08/23 17:57	2000
Chloromethane	ND		2000	1800	ug/L			12/08/23 17:57	2000
cis-1,2-Dichloroethene	ND		2000	400	ug/L			12/08/23 17:57	2000
cis-1,3-Dichloropropene	ND		10000	1000	ug/L			12/08/23 17:57	2000
Dibromochloromethane	ND		2000	480	ug/L			12/08/23 17:57	2000
1,2-Dichlorobenzene	ND		2000	1000	ug/L			12/08/23 17:57	2000
1,3-Dichlorobenzene	ND		2000	1100	ug/L			12/08/23 17:57	2000
1,4-Dichlorobenzene	ND		2000	1300	ug/L			12/08/23 17:57	2000
Dichlorodifluoromethane	ND		2000	1700	ug/L			12/08/23 17:57	2000
1,1-Dichloroethane	ND		2000	1000	ug/L			12/08/23 17:57	2000
1,2-Dichloroethane	ND		2000	380	ug/L			12/08/23 17:57	2000
1,1-Dichloroethene	ND		2000	1000	ug/L			12/08/23 17:57	2000
1,2-Dichloropropane	ND		2000	1000	ug/L			12/08/23 17:57	2000
1,3-Dichloropropane	ND		2000	1000	ug/L			12/08/23 17:57	2000
2,2-Dichloropropane	ND		2000	1000	ug/L			12/08/23 17:57	2000
1,1-Dichloropropene	ND		2000	1000	ug/L			12/08/23 17:57	2000
Ethylbenzene	ND		2000	1000	ug/L			12/08/23 17:57	2000
Ethyl methacrylate	ND		2000	1200	ug/L			12/08/23 17:57	2000
Hexachlorobutadiene	ND		10000	1800	ug/L			12/08/23 17:57	2000
2-Hexanone	ND		50000	2800	ug/L			12/08/23 17:57	2000
Isopropylbenzene	ND		2000	1100	ug/L			12/08/23 17:57	2000
Methylene bromide	ND		10000	440	ug/L			12/08/23 17:57	2000
Methylene Chloride	ND		10000	6000	ug/L			12/08/23 17:57	2000
4-Methyl-2-pentanone (MIBK)	ND		50000	3600	ug/L			12/08/23 17:57	2000
Methyl tert-butyl ether	ND		2000	440	ug/L			12/08/23 17:57	2000
m-Xylene & p-Xylene	ND		10000	1300	ug/L			12/08/23 17:57	2000
Naphthalene	ND		10000	6000	ug/L			12/08/23 17:57	2000
n-Butylbenzene	ND		2000	1500	ug/L			12/08/23 17:57	2000
N-Propylbenzene	ND		2000	1400	ug/L			12/08/23 17:57	2000
o-Chlorotoluene	ND		2000	1100	ug/L			12/08/23 17:57	2000
o-Xylene	ND		10000	1200	ug/L			12/08/23 17:57	2000
p-Chlorotoluene	ND		2000	1100	ug/L			12/08/23 17:57	2000
p-Isopropyltoluene	ND		2000	1400	ug/L			12/08/23 17:57	2000
sec-Butylbenzene	ND		2000	1400	ug/L			12/08/23 17:57	2000

Client Sample ID: MW7-ROX-120423-DUP
Date Collected: 12/04/23 11:15
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-7
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		2000	2000	ug/L			12/08/23 17:57	2000
tert-Butylbenzene	ND		2000	1300	ug/L			12/08/23 17:57	2000
1,1,1,2-Tetrachloroethane	ND		2000	320	ug/L			12/08/23 17:57	2000
1,1,2,2-Tetrachloroethane	ND		2000	1000	ug/L			12/08/23 17:57	2000
Tetrachloroethene	ND		2000	1800	ug/L			12/08/23 17:57	2000
Toluene	ND		2000	1800	ug/L			12/08/23 17:57	2000
trans-1,2-Dichloroethene	ND		2000	1000	ug/L			12/08/23 17:57	2000
trans-1,3-Dichloropropene	ND		10000	400	ug/L			12/08/23 17:57	2000
1,2,3-Trichlorobenzene	ND		2000	1800	ug/L			12/08/23 17:57	2000
1,2,4-Trichlorobenzene	ND		2000	1600	ug/L			12/08/23 17:57	2000
1,1,1-Trichloroethane	ND		2000	360	ug/L			12/08/23 17:57	2000
1,1,2-Trichloroethane	ND		10000	420	ug/L			12/08/23 17:57	2000
Trichloroethene	ND		2000	300	ug/L			12/08/23 17:57	2000
Trichlorofluoromethane	ND		2000	1000	ug/L			12/08/23 17:57	2000
1,2,3-Trichloropropane	ND		10000	1700	ug/L			12/08/23 17:57	2000
1,2,4-Trimethylbenzene	ND		2000	1600	ug/L			12/08/23 17:57	2000
1,3,5-Trimethylbenzene	ND		2000	1100	ug/L			12/08/23 17:57	2000
Vinyl acetate	ND		50000	1900	ug/L			12/08/23 17:57	2000
Vinyl chloride	ND		2000	1000	ug/L			12/08/23 17:57	2000
Xylenes, Total	ND		20000	3200	ug/L			12/08/23 17:57	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*12/08/23 17:57*	*2000*
Dibromofluoromethane	*102*		*75 - 126*		*12/08/23 17:57*	*2000*
Toluene-d8 (Surr)	*90*		*64 - 132*		*12/08/23 17:57*	*2000*

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**860000**		5000	2500	ug/L			12/11/23 14:20	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*12/11/23 14:20*	*5000*
Dibromofluoromethane	*106*		*75 - 126*		*12/11/23 14:20*	*5000*
Toluene-d8 (Surr)	*87*		*64 - 132*		*12/11/23 14:20*	*5000*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.13**	**J**	0.21	0.11	ug/L		12/07/23 14:39	12/11/23 21:00	1
Acenaphthylene	**0.14**	**J**	0.21	0.047	ug/L		12/07/23 14:39	12/11/23 21:00	1
Anthracene	**0.095**	**J**	0.21	0.050	ug/L		12/07/23 14:39	12/11/23 21:00	1
Benzo[a]anthracene	ND		0.21	0.036	ug/L		12/07/23 14:39	12/11/23 21:00	1
Benzo[a]pyrene	ND		0.21	0.068	ug/L		12/07/23 14:39	12/11/23 21:00	1
Benzo[b]fluoranthene	ND		0.21	0.040	ug/L		12/07/23 14:39	12/11/23 21:00	1
Benzo[g,h,i]perylene	ND		0.21	0.029	ug/L		12/07/23 14:39	12/11/23 21:00	1
Benzo[k]fluoranthene	ND		0.21	0.066	ug/L		12/07/23 14:39	12/11/23 21:00	1
Chrysene	ND		0.21	0.035	ug/L		12/07/23 14:39	12/11/23 21:00	1
Dibenz(a,h)anthracene	ND		0.21	0.051	ug/L		12/07/23 14:39	12/11/23 21:00	1
Fluoranthene	ND		0.21	0.036	ug/L		12/07/23 14:39	12/11/23 21:00	1
Fluorene	ND		0.21	0.095	ug/L		12/07/23 14:39	12/11/23 21:00	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.036	ug/L		12/07/23 14:39	12/11/23 21:00	1

Client Sample ID: MW7-ROX-120423-DUP
Date Collected: 12/04/23 11:15
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-7
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	**0.12**	**J**	0.21	0.096	ug/L		12/07/23 14:39	12/11/23 21:00	1
Pyrene	ND		0.21	0.042	ug/L		12/07/23 14:39	12/11/23 21:00	1
1-Methylnaphthalene	**1.1**		0.21	0.086	ug/L		12/07/23 14:39	12/11/23 21:00	1
2-Methylnaphthalene	**1.5**		0.21	0.071	ug/L		12/07/23 14:39	12/11/23 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*79*		*18 - 147*	*12/07/23 14:39*	*12/11/23 21:00*	*1*
2-Fluorobiphenyl	*63*		*15 - 128*	*12/07/23 14:39*	*12/11/23 21:00*	*1*
Nitrobenzene-d5	*77*		*10 - 144*	*12/07/23 14:39*	*12/11/23 21:00*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	11	4.1	ug/L		12/07/23 14:39	12/11/23 22:10	1
Benzenethiol	ND	*- *1	11	1.8	ug/L		12/07/23 14:39	12/11/23 22:10	1
Benzoic acid	ND	*1	32	7.8	ug/L		12/07/23 14:39	12/11/23 22:10	1
Benzyl alcohol	ND		11	2.1	ug/L		12/07/23 14:39	12/11/23 22:10	1
Bis(2-chloroethoxy)methane	ND		11	0.17	ug/L		12/07/23 14:39	12/11/23 22:10	1
Bis(2-chloroethyl)ether	ND		11	2.9	ug/L		12/07/23 14:39	12/11/23 22:10	1
bis (2-chloroisopropyl) ether	ND	*-	11	0.17	ug/L		12/07/23 14:39	12/11/23 22:10	1
Bis(2-ethylhexyl) phthalate	**12**		11	5.4	ug/L		12/07/23 14:39	12/11/23 22:10	1
4-Bromophenyl phenyl ether	ND		11	0.21	ug/L		12/07/23 14:39	12/11/23 22:10	1
Butyl benzyl phthalate	ND		11	0.20	ug/L		12/07/23 14:39	12/11/23 22:10	1
4-Chloroaniline	ND		11	3.6	ug/L		12/07/23 14:39	12/11/23 22:10	1
4-Chloro-3-methylphenol	ND		11	4.1	ug/L		12/07/23 14:39	12/11/23 22:10	1
2-Chloronaphthalene	ND		11	0.15	ug/L		12/07/23 14:39	12/11/23 22:10	1
2-Chlorophenol	ND	*1	11	2.4	ug/L		12/07/23 14:39	12/11/23 22:10	1
4-Chlorophenyl phenyl ether	ND		11	2.1	ug/L		12/07/23 14:39	12/11/23 22:10	1
Dibenz[a,h]acridine	ND		11	1.1	ug/L		12/07/23 14:39	12/11/23 22:10	1
Dibenzofuran	ND		11	0.18	ug/L		12/07/23 14:39	12/11/23 22:10	1
3,3'-Dichlorobenzidine	ND		11	2.8	ug/L		12/07/23 14:39	12/11/23 22:10	1
2,4-Dichlorophenol	ND		11	3.2	ug/L		12/07/23 14:39	12/11/23 22:10	1
Diethyl phthalate	**0.55**	**J**	11	0.26	ug/L		12/07/23 14:39	12/11/23 22:10	1
2,4-Dimethylphenol	ND		11	3.7	ug/L		12/07/23 14:39	12/11/23 22:10	1
Dimethyl phthalate	ND		11	0.18	ug/L		12/07/23 14:39	12/11/23 22:10	1
Di-n-butyl phthalate	ND		11	2.9	ug/L		12/07/23 14:39	12/11/23 22:10	1
4,6-Dinitro-ortho-cresol	ND		11	1.7	ug/L		12/07/23 14:39	12/11/23 22:10	1
2,4-Dinitrophenol	ND	*1	32	3.6	ug/L		12/07/23 14:39	12/11/23 22:10	1
2,4-Dinitrotoluene	ND		11	2.0	ug/L		12/07/23 14:39	12/11/23 22:10	1
2,6-Dinitrotoluene	ND		11	2.0	ug/L		12/07/23 14:39	12/11/23 22:10	1
Di-n-octyl phthalate	ND		11	0.18	ug/L		12/07/23 14:39	12/11/23 22:10	1
1,4-Dioxane	ND	*1	11	1.1	ug/L		12/07/23 14:39	12/11/23 22:10	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	1.1	ug/L		12/07/23 14:39	12/11/23 22:10	1
Hexachlorobenzene	ND		11	0.18	ug/L		12/07/23 14:39	12/11/23 22:10	1
Hexachlorocyclopentadiene	ND	*1	21	2.8	ug/L		12/07/23 14:39	12/11/23 22:10	1
Hexachloroethane	ND	*1	11	4.5	ug/L		12/07/23 14:39	12/11/23 22:10	1
Indene	ND		11	1.1	ug/L		12/07/23 14:39	12/11/23 22:10	1
Isophorone	ND		11	0.15	ug/L		12/07/23 14:39	12/11/23 22:10	1
2-Methylphenol	ND		11	1.9	ug/L		12/07/23 14:39	12/11/23 22:10	1
3 & 4 Methylphenol	ND		21	0.42	ug/L		12/07/23 14:39	12/11/23 22:10	1

Client Sample ID: MW7-ROX-120423-DUP

Lab Sample ID: 400-247720-7

Date Collected: 12/04/23 11:15

Matrix: Water

Date Received: 12/05/23 09:22

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		11	2.4	ug/L		12/07/23 14:39	12/11/23 22:10	1
3-Nitroaniline	ND		11	1.9	ug/L		12/07/23 14:39	12/11/23 22:10	1
4-Nitroaniline	ND		11	1.6	ug/L		12/07/23 14:39	12/11/23 22:10	1
Nitrobenzene	ND		11	0.14	ug/L		12/07/23 14:39	12/11/23 22:10	1
2-Nitrophenol	ND		11	5.6	ug/L		12/07/23 14:39	12/11/23 22:10	1
4-Nitrophenol	ND		11	2.2	ug/L		12/07/23 14:39	12/11/23 22:10	1
N-Nitrosodimethylamine	ND	*1	11	3.7	ug/L		12/07/23 14:39	12/11/23 22:10	1
N-Nitrosodi-n-propylamine	ND		11	3.5	ug/L		12/07/23 14:39	12/11/23 22:10	1
N-Nitrosodiphenylamine	ND		11	0.19	ug/L		12/07/23 14:39	12/11/23 22:10	1
Pentachlorophenol	ND		21	1.5	ug/L		12/07/23 14:39	12/11/23 22:10	1
Phenol	**67**	***1**	11	2.8	ug/L		12/07/23 14:39	12/11/23 22:10	1
Pyridine	ND	*1	11	3.4	ug/L		12/07/23 14:39	12/11/23 22:10	1
Quinoline	ND		11	4.8	ug/L		12/07/23 14:39	12/11/23 22:10	1
2,4,5-Trichlorophenol	ND		11	4.0	ug/L		12/07/23 14:39	12/11/23 22:10	1
2,4,6-Trichlorophenol	ND		11	3.7	ug/L		12/07/23 14:39	12/11/23 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*46 - 124*	*12/07/23 14:39*	*12/11/23 22:10*	*1*
2-Fluorophenol	*10*	*S1-*	*13 - 113*	*12/07/23 14:39*	*12/11/23 22:10*	*1*
Nitrobenzene-d5	*64*		*36 - 126*	*12/07/23 14:39*	*12/11/23 22:10*	*1*
Phenol-d5	*39*		*17 - 127*	*12/07/23 14:39*	*12/11/23 22:10*	*1*
Terphenyl-d14	*94*		*44 - 149*	*12/07/23 14:39*	*12/11/23 22:10*	*1*
2,4,6-Tribromophenol	*107*		*26 - 150*	*12/07/23 14:39*	*12/11/23 22:10*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H	11	5.4	ug/L		12/13/23 09:48	12/14/23 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*46 - 124*	*12/13/23 09:48*	*12/14/23 22:09*	*1*
Nitrobenzene-d5	*59*		*36 - 126*	*12/13/23 09:48*	*12/14/23 22:09*	*1*
Terphenyl-d14	*67*		*44 - 149*	*12/13/23 09:48*	*12/14/23 22:09*	*1*

Method: EPA 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		12/08/23 10:59	12/11/23 14:56	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/08/23 10:59	12/11/23 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*12/08/23 10:59*	*12/11/23 14:56*	*1*

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

Job ID: 400-247720-1

Client Sample ID: P93D-ROX-120423
Date Collected: 12/04/23 13:40
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-8
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/08/23 15:56	1
Acrolein	ND		20	3.3	ug/L			12/08/23 15:56	1
Acrylonitrile	ND		10	2.8	ug/L			12/08/23 15:56	1
Benzene	ND		1.0	0.50	ug/L			12/08/23 15:56	1
Bromobenzene	ND		1.0	0.54	ug/L			12/08/23 15:56	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/08/23 15:56	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/08/23 15:56	1
Bromoform	ND		5.0	0.25	ug/L			12/08/23 15:56	1
Bromomethane	ND		1.0	0.98	ug/L			12/08/23 15:56	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/08/23 15:56	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/08/23 15:56	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/08/23 15:56	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/08/23 15:56	1
Chloroethane	ND		1.0	0.76	ug/L			12/08/23 15:56	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/08/23 15:56	1
Chloroform	ND		1.0	0.90	ug/L			12/08/23 15:56	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/08/23 15:56	1
Chloromethane	ND		1.0	0.90	ug/L			12/08/23 15:56	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/08/23 15:56	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/08/23 15:56	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/08/23 15:56	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/08/23 15:56	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/08/23 15:56	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/08/23 15:56	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/08/23 15:56	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/08/23 15:56	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/08/23 15:56	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/08/23 15:56	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 15:56	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 15:56	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 15:56	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/08/23 15:56	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/08/23 15:56	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/08/23 15:56	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/08/23 15:56	1
2-Hexanone	ND		25	1.4	ug/L			12/08/23 15:56	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/08/23 15:56	1
Methylene bromide	ND		5.0	0.22	ug/L			12/08/23 15:56	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/08/23 15:56	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/08/23 15:56	1
Methyl tert-butyl ether	**0.85**	**J**	1.0	0.22	ug/L			12/08/23 15:56	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/08/23 15:56	1
Naphthalene	ND		5.0	3.0	ug/L			12/08/23 15:56	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/08/23 15:56	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/08/23 15:56	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/08/23 15:56	1
o-Xylene	ND		5.0	0.60	ug/L			12/08/23 15:56	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/08/23 15:56	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/08/23 15:56	1

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

Job ID: 400-247720-1

Client Sample ID: P93D-ROX-120423

Date Collected: 12/04/23 13:40
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-8

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/08/23 15:56	1
Styrene	ND		1.0	1.0	ug/L			12/08/23 15:56	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/08/23 15:56	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/08/23 15:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/08/23 15:56	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/08/23 15:56	1
Toluene	ND		1.0	0.90	ug/L			12/08/23 15:56	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/08/23 15:56	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/08/23 15:56	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/08/23 15:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/08/23 15:56	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/08/23 15:56	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/08/23 15:56	1
Trichloroethene	ND		1.0	0.15	ug/L			12/08/23 15:56	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/08/23 15:56	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/08/23 15:56	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/08/23 15:56	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/08/23 15:56	1
Vinyl acetate	ND		25	0.93	ug/L			12/08/23 15:56	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/08/23 15:56	1
Xylenes, Total	ND		10	1.6	ug/L			12/08/23 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*12/08/23 15:56*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*12/08/23 15:56*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*12/08/23 15:56*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.10	ug/L		12/08/23 15:23	12/13/23 23:29	1
Acenaphthylene	**0.056**	**J**	0.21	0.045	ug/L		12/08/23 15:23	12/13/23 23:29	1
Anthracene	ND		0.21	0.048	ug/L		12/08/23 15:23	12/13/23 23:29	1
Benzo[a]anthracene	ND		0.21	0.035	ug/L		12/08/23 15:23	12/13/23 23:29	1
Benzo[a]pyrene	ND		0.21	0.066	ug/L		12/08/23 15:23	12/13/23 23:29	1
Benzo[b]fluoranthene	ND		0.21	0.038	ug/L		12/08/23 15:23	12/13/23 23:29	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		12/08/23 15:23	12/13/23 23:29	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		12/08/23 15:23	12/13/23 23:29	1
Chrysene	ND		0.21	0.034	ug/L		12/08/23 15:23	12/13/23 23:29	1
Dibenz(a,h)anthracene	ND		0.21	0.049	ug/L		12/08/23 15:23	12/13/23 23:29	1
Fluoranthene	ND		0.21	0.035	ug/L		12/08/23 15:23	12/13/23 23:29	1
Fluorene	ND		0.21	0.091	ug/L		12/08/23 15:23	12/13/23 23:29	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.035	ug/L		12/08/23 15:23	12/13/23 23:29	1
Phenanthrene	ND		0.21	0.092	ug/L		12/08/23 15:23	12/13/23 23:29	1
Pyrene	ND		0.21	0.040	ug/L		12/08/23 15:23	12/13/23 23:29	1
1-Methylnaphthalene	ND		0.21	0.082	ug/L		12/08/23 15:23	12/13/23 23:29	1
2-Methylnaphthalene	ND		0.21	0.068	ug/L		12/08/23 15:23	12/13/23 23:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*69*		*18 - 147*	*12/08/23 15:23*	*12/13/23 23:29*	*1*
2-Fluorobiphenyl	*72*		*15 - 128*	*12/08/23 15:23*	*12/13/23 23:29*	*1*

Client Sample ID: P93D-ROX-120423
Date Collected: 12/04/23 13:40
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-8
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*71*		*10 - 144*	*12/08/23 15:23*	*12/13/23 23:29*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		12/08/23 15:23	12/13/23 21:43	1
Benzenethiol	ND	*1	10	1.7	ug/L		12/08/23 15:23	12/13/23 21:43	1
Benzoic acid	ND		31	7.5	ug/L		12/08/23 15:23	12/13/23 21:43	1
Benzyl alcohol	ND		10	2.1	ug/L		12/08/23 15:23	12/13/23 21:43	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/08/23 15:23	12/13/23 21:43	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		12/08/23 15:23	12/13/23 21:43	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		12/08/23 15:23	12/13/23 21:43	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		12/08/23 15:23	12/13/23 21:43	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		12/08/23 15:23	12/13/23 21:43	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		12/08/23 15:23	12/13/23 21:43	1
4-Chloroaniline	ND		10	3.5	ug/L		12/08/23 15:23	12/13/23 21:43	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		12/08/23 15:23	12/13/23 21:43	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/08/23 15:23	12/13/23 21:43	1
2-Chlorophenol	ND		10	2.3	ug/L		12/08/23 15:23	12/13/23 21:43	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		12/08/23 15:23	12/13/23 21:43	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/08/23 15:23	12/13/23 21:43	1
Dibenzofuran	ND		10	0.17	ug/L		12/08/23 15:23	12/13/23 21:43	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		12/08/23 15:23	12/13/23 21:43	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		12/08/23 15:23	12/13/23 21:43	1
Diethyl phthalate	ND		10	0.25	ug/L		12/08/23 15:23	12/13/23 21:43	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		12/08/23 15:23	12/13/23 21:43	1
Dimethyl phthalate	**0.91**	**J B**	10	0.17	ug/L		12/08/23 15:23	12/13/23 21:43	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		12/08/23 15:23	12/13/23 21:43	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/08/23 15:23	12/13/23 21:43	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		12/08/23 15:23	12/13/23 21:43	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		12/08/23 15:23	12/13/23 21:43	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		12/08/23 15:23	12/13/23 21:43	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/08/23 15:23	12/13/23 21:43	1
1,4-Dioxane	ND		10	1.0	ug/L		12/08/23 15:23	12/13/23 21:43	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/08/23 15:23	12/13/23 21:43	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/08/23 15:23	12/13/23 21:43	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		12/08/23 15:23	12/13/23 21:43	1
Hexachloroethane	ND		10	4.3	ug/L		12/08/23 15:23	12/13/23 21:43	1
Indene	ND		10	1.0	ug/L		12/08/23 15:23	12/13/23 21:43	1
Isophorone	ND		10	0.14	ug/L		12/08/23 15:23	12/13/23 21:43	1
2-Methylphenol	ND		10	1.8	ug/L		12/08/23 15:23	12/13/23 21:43	1
3 & 4 Methylphenol	ND		21	0.40	ug/L		12/08/23 15:23	12/13/23 21:43	1
2-Nitroaniline	ND		10	2.3	ug/L		12/08/23 15:23	12/13/23 21:43	1
3-Nitroaniline	ND		10	1.8	ug/L		12/08/23 15:23	12/13/23 21:43	1
4-Nitroaniline	ND		10	1.5	ug/L		12/08/23 15:23	12/13/23 21:43	1
Nitrobenzene	ND		10	0.13	ug/L		12/08/23 15:23	12/13/23 21:43	1
2-Nitrophenol	ND		10	5.3	ug/L		12/08/23 15:23	12/13/23 21:43	1
4-Nitrophenol	ND		10	2.2	ug/L		12/08/23 15:23	12/13/23 21:43	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		12/08/23 15:23	12/13/23 21:43	1

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

Job ID: 400-247720-1

Client Sample ID: P93D-ROX-120423

Date Collected: 12/04/23 13:40
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-8

Matrix: Water

Method: SW846 8270E - 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		12/08/23 15:23	12/13/23 21:43	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/08/23 15:23	12/13/23 21:43	1
Pentachlorophenol	ND		21	1.4	ug/L		12/08/23 15:23	12/13/23 21:43	1
Phenol	ND		10	2.7	ug/L		12/08/23 15:23	12/13/23 21:43	1
Pyridine	ND		10	3.3	ug/L		12/08/23 15:23	12/13/23 21:43	1
Quinoline	ND		10	4.6	ug/L		12/08/23 15:23	12/13/23 21:43	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		12/08/23 15:23	12/13/23 21:43	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		12/08/23 15:23	12/13/23 21:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*46 - 124*	*12/08/23 15:23*	*12/13/23 21:43*	*1*
2-Fluorophenol	*44*		*13 - 113*	*12/08/23 15:23*	*12/13/23 21:43*	*1*
Nitrobenzene-d5	*66*		*36 - 126*	*12/08/23 15:23*	*12/13/23 21:43*	*1*
Phenol-d5	*56*		*17 - 127*	*12/08/23 15:23*	*12/13/23 21:43*	*1*
Terphenyl-d14	*85*		*44 - 149*	*12/08/23 15:23*	*12/13/23 21:43*	*1*
2,4,6-Tribromophenol	*87*		*26 - 150*	*12/08/23 15:23*	*12/13/23 21:43*	*1*

Method: EPA 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		12/08/23 10:59	12/11/23 15:17	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/08/23 10:59	12/11/23 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*51 - 149*	*12/08/23 10:59*	*12/11/23 15:17*	*1*

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

Job ID: 400-247720-1

Client Sample ID: TB-ROX-120423-8260-B
Date Collected: 12/04/23 12:00
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-9
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/08/23 15:07	1
Acrolein	ND		20	3.3	ug/L			12/08/23 15:07	1
Acrylonitrile	ND		10	2.8	ug/L			12/08/23 15:07	1
Benzene	ND		1.0	0.50	ug/L			12/08/23 15:07	1
Bromobenzene	ND		1.0	0.54	ug/L			12/08/23 15:07	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/08/23 15:07	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/08/23 15:07	1
Bromoform	ND		5.0	0.25	ug/L			12/08/23 15:07	1
Bromomethane	ND		1.0	0.98	ug/L			12/08/23 15:07	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/08/23 15:07	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/08/23 15:07	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/08/23 15:07	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/08/23 15:07	1
Chloroethane	ND		1.0	0.76	ug/L			12/08/23 15:07	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/08/23 15:07	1
Chloroform	ND		1.0	0.90	ug/L			12/08/23 15:07	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/08/23 15:07	1
Chloromethane	ND		1.0	0.90	ug/L			12/08/23 15:07	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/08/23 15:07	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/08/23 15:07	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/08/23 15:07	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/08/23 15:07	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/08/23 15:07	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/08/23 15:07	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/08/23 15:07	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/08/23 15:07	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/08/23 15:07	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/08/23 15:07	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 15:07	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 15:07	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 15:07	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/08/23 15:07	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/08/23 15:07	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/08/23 15:07	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/08/23 15:07	1
2-Hexanone	ND		25	1.4	ug/L			12/08/23 15:07	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/08/23 15:07	1
Methylene bromide	ND		5.0	0.22	ug/L			12/08/23 15:07	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/08/23 15:07	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/08/23 15:07	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/08/23 15:07	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/08/23 15:07	1
Naphthalene	ND		5.0	3.0	ug/L			12/08/23 15:07	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/08/23 15:07	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/08/23 15:07	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/08/23 15:07	1
o-Xylene	ND		5.0	0.60	ug/L			12/08/23 15:07	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/08/23 15:07	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/08/23 15:07	1

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

Job ID: 400-247720-1

Client Sample ID: TB-ROX-120423-8260-B
Date Collected: 12/04/23 12:00
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-9
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/08/23 15:07	1
Styrene	ND		1.0	1.0	ug/L			12/08/23 15:07	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/08/23 15:07	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/08/23 15:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/08/23 15:07	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/08/23 15:07	1
Toluene	ND		1.0	0.90	ug/L			12/08/23 15:07	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/08/23 15:07	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/08/23 15:07	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/08/23 15:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/08/23 15:07	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/08/23 15:07	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/08/23 15:07	1
Trichloroethene	ND		1.0	0.15	ug/L			12/08/23 15:07	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/08/23 15:07	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/08/23 15:07	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/08/23 15:07	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/08/23 15:07	1
Vinyl acetate	ND		25	0.93	ug/L			12/08/23 15:07	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/08/23 15:07	1
Xylenes, Total	ND		10	1.6	ug/L			12/08/23 15:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*12/08/23 15:07*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*12/08/23 15:07*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*12/08/23 15:07*	*1*

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

Job ID: 400-247720-1

Client Sample ID: TB-ROX-120423-8011-B
Date Collected: 12/04/23 12:00
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-10
Matrix: Water

Method: EPA 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		12/08/23 10:59	12/11/23 15:58	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		12/08/23 10:59	12/11/23 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*117*		*51 - 149*	*12/08/23 10:59*	*12/11/23 15:58*	*1*

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

Job ID: 400-247720-1

Client Sample ID: P57-ROX-120423
Date Collected: 12/04/23 09:30
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-11
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/08/23 16:19	1
Acrolein	ND		20	3.3	ug/L			12/08/23 16:19	1
Acrylonitrile	ND		10	2.8	ug/L			12/08/23 16:19	1
Benzene	**7.0**		1.0	0.50	ug/L			12/08/23 16:19	1
Bromobenzene	ND		1.0	0.54	ug/L			12/08/23 16:19	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/08/23 16:19	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/08/23 16:19	1
Bromoform	ND		5.0	0.25	ug/L			12/08/23 16:19	1
Bromomethane	ND		1.0	0.98	ug/L			12/08/23 16:19	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/08/23 16:19	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/08/23 16:19	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/08/23 16:19	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/08/23 16:19	1
Chloroethane	ND		1.0	0.76	ug/L			12/08/23 16:19	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/08/23 16:19	1
Chloroform	ND		1.0	0.90	ug/L			12/08/23 16:19	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/08/23 16:19	1
Chloromethane	ND		1.0	0.90	ug/L			12/08/23 16:19	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/08/23 16:19	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/08/23 16:19	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/08/23 16:19	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/08/23 16:19	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/08/23 16:19	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/08/23 16:19	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/08/23 16:19	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/08/23 16:19	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/08/23 16:19	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/08/23 16:19	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 16:19	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 16:19	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 16:19	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/08/23 16:19	1
Ethylbenzene	**0.62**	**J**	1.0	0.50	ug/L			12/08/23 16:19	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/08/23 16:19	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/08/23 16:19	1
2-Hexanone	ND		25	1.4	ug/L			12/08/23 16:19	1
Isopropylbenzene	**18**		1.0	0.53	ug/L			12/08/23 16:19	1
Methylene bromide	ND		5.0	0.22	ug/L			12/08/23 16:19	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/08/23 16:19	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/08/23 16:19	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/08/23 16:19	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/08/23 16:19	1
Naphthalene	ND		5.0	3.0	ug/L			12/08/23 16:19	1
n-Butylbenzene	**1.7**		1.0	0.76	ug/L			12/08/23 16:19	1
N-Propylbenzene	**19**		1.0	0.69	ug/L			12/08/23 16:19	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/08/23 16:19	1
o-Xylene	ND		5.0	0.60	ug/L			12/08/23 16:19	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/08/23 16:19	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/08/23 16:19	1

Client Sample ID: P57-ROX-120423
Date Collected: 12/04/23 09:30
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-11
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**4.0**		1.0	0.70	ug/L			12/08/23 16:19	1
Styrene	ND		1.0	1.0	ug/L			12/08/23 16:19	1
tert-Butylbenzene	**4.4**		1.0	0.63	ug/L			12/08/23 16:19	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/08/23 16:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/08/23 16:19	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/08/23 16:19	1
Toluene	**2.7**		1.0	0.90	ug/L			12/08/23 16:19	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/08/23 16:19	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/08/23 16:19	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/08/23 16:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/08/23 16:19	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/08/23 16:19	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/08/23 16:19	1
Trichloroethene	ND		1.0	0.15	ug/L			12/08/23 16:19	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/08/23 16:19	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/08/23 16:19	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/08/23 16:19	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/08/23 16:19	1
Vinyl acetate	ND		25	0.93	ug/L			12/08/23 16:19	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/08/23 16:19	1
Xylenes, Total	ND		10	1.6	ug/L			12/08/23 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*12/08/23 16:19*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*12/08/23 16:19*	*1*
Toluene-d8 (Surr)	*88*		*64 - 132*		*12/08/23 16:19*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.16**	**J**	0.20	0.097	ug/L		12/08/23 15:23	12/13/23 23:49	1
Acenaphthylene	ND		0.20	0.043	ug/L		12/08/23 15:23	12/13/23 23:49	1
Anthracene	ND		0.20	0.046	ug/L		12/08/23 15:23	12/13/23 23:49	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		12/08/23 15:23	12/13/23 23:49	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		12/08/23 15:23	12/13/23 23:49	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		12/08/23 15:23	12/13/23 23:49	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/08/23 15:23	12/13/23 23:49	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		12/08/23 15:23	12/13/23 23:49	1
Chrysene	ND		0.20	0.032	ug/L		12/08/23 15:23	12/13/23 23:49	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		12/08/23 15:23	12/13/23 23:49	1
Fluoranthene	ND		0.20	0.033	ug/L		12/08/23 15:23	12/13/23 23:49	1
Fluorene	**0.28**		0.20	0.088	ug/L		12/08/23 15:23	12/13/23 23:49	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		12/08/23 15:23	12/13/23 23:49	1
Phenanthrene	ND		0.20	0.089	ug/L		12/08/23 15:23	12/13/23 23:49	1
Pyrene	ND		0.20	0.038	ug/L		12/08/23 15:23	12/13/23 23:49	1
1-Methylnaphthalene	**7.9**		0.20	0.079	ug/L		12/08/23 15:23	12/13/23 23:49	1
2-Methylnaphthalene	**1.2**		0.20	0.065	ug/L		12/08/23 15:23	12/13/23 23:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*58*		*18 - 147*	*12/08/23 15:23*	*12/13/23 23:49*	*1*
2-Fluorobiphenyl	*49*		*15 - 128*	*12/08/23 15:23*	*12/13/23 23:49*	*1*

Client Sample ID: P57-ROX-120423
Date Collected: 12/04/23 09:30
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-11
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*65*		*10 - 144*	*12/08/23 15:23*	*12/13/23 23:49*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	3.7	ug/L		12/08/23 15:23	12/13/23 22:09	1
Benzenethiol	ND	*1	9.8	1.7	ug/L		12/08/23 15:23	12/13/23 22:09	1
Benzoic acid	ND		30	7.2	ug/L		12/08/23 15:23	12/13/23 22:09	1
Benzyl alcohol	ND		9.8	2.0	ug/L		12/08/23 15:23	12/13/23 22:09	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		12/08/23 15:23	12/13/23 22:09	1
Bis(2-chloroethyl)ether	ND		9.8	2.7	ug/L		12/08/23 15:23	12/13/23 22:09	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		12/08/23 15:23	12/13/23 22:09	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		12/08/23 15:23	12/13/23 22:09	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		12/08/23 15:23	12/13/23 22:09	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		12/08/23 15:23	12/13/23 22:09	1
4-Chloroaniline	ND		9.8	3.3	ug/L		12/08/23 15:23	12/13/23 22:09	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		12/08/23 15:23	12/13/23 22:09	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		12/08/23 15:23	12/13/23 22:09	1
2-Chlorophenol	ND		9.8	2.2	ug/L		12/08/23 15:23	12/13/23 22:09	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		12/08/23 15:23	12/13/23 22:09	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		12/08/23 15:23	12/13/23 22:09	1
Dibenzofuran	**0.38**	**J**	9.8	0.17	ug/L		12/08/23 15:23	12/13/23 22:09	1
3,3'-Dichlorobenzidine	ND		9.8	2.6	ug/L		12/08/23 15:23	12/13/23 22:09	1
2,4-Dichlorophenol	ND		9.8	3.0	ug/L		12/08/23 15:23	12/13/23 22:09	1
Diethyl phthalate	ND		9.8	0.24	ug/L		12/08/23 15:23	12/13/23 22:09	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		12/08/23 15:23	12/13/23 22:09	1
Dimethyl phthalate	ND		9.8	0.17	ug/L		12/08/23 15:23	12/13/23 22:09	1
Di-n-butyl phthalate	ND		9.8	2.7	ug/L		12/08/23 15:23	12/13/23 22:09	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		12/08/23 15:23	12/13/23 22:09	1
2,4-Dinitrophenol	ND		30	3.3	ug/L		12/08/23 15:23	12/13/23 22:09	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		12/08/23 15:23	12/13/23 22:09	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		12/08/23 15:23	12/13/23 22:09	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		12/08/23 15:23	12/13/23 22:09	1
1,4-Dioxane	ND		9.8	0.98	ug/L		12/08/23 15:23	12/13/23 22:09	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		12/08/23 15:23	12/13/23 22:09	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		12/08/23 15:23	12/13/23 22:09	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/08/23 15:23	12/13/23 22:09	1
Hexachloroethane	ND		9.8	4.1	ug/L		12/08/23 15:23	12/13/23 22:09	1
Indene	ND		9.8	0.98	ug/L		12/08/23 15:23	12/13/23 22:09	1
Isophorone	ND		9.8	0.14	ug/L		12/08/23 15:23	12/13/23 22:09	1
2-Methylphenol	ND		9.8	1.8	ug/L		12/08/23 15:23	12/13/23 22:09	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		12/08/23 15:23	12/13/23 22:09	1
2-Nitroaniline	ND		9.8	2.2	ug/L		12/08/23 15:23	12/13/23 22:09	1
3-Nitroaniline	ND		9.8	1.8	ug/L		12/08/23 15:23	12/13/23 22:09	1
4-Nitroaniline	ND		9.8	1.5	ug/L		12/08/23 15:23	12/13/23 22:09	1
Nitrobenzene	ND		9.8	0.13	ug/L		12/08/23 15:23	12/13/23 22:09	1
2-Nitrophenol	ND		9.8	5.1	ug/L		12/08/23 15:23	12/13/23 22:09	1
4-Nitrophenol	ND		9.8	2.1	ug/L		12/08/23 15:23	12/13/23 22:09	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		12/08/23 15:23	12/13/23 22:09	1

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

Job ID: 400-247720-1

Client Sample ID: P57-ROX-120423
Date Collected: 12/04/23 09:30
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-11
Matrix: Water

Method: SW846 8270E - 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		12/08/23 15:23	12/13/23 22:09	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		12/08/23 15:23	12/13/23 22:09	1
Pentachlorophenol	ND		20	1.4	ug/L		12/08/23 15:23	12/13/23 22:09	1
Phenol	ND		9.8	2.6	ug/L		12/08/23 15:23	12/13/23 22:09	1
Pyridine	ND		9.8	3.1	ug/L		12/08/23 15:23	12/13/23 22:09	1
Quinoline	ND		9.8	4.4	ug/L		12/08/23 15:23	12/13/23 22:09	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		12/08/23 15:23	12/13/23 22:09	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		12/08/23 15:23	12/13/23 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*46 - 124*	*12/08/23 15:23*	*12/13/23 22:09*	*1*
2-Fluorophenol	*47*		*13 - 113*	*12/08/23 15:23*	*12/13/23 22:09*	*1*
Nitrobenzene-d5	*65*		*36 - 126*	*12/08/23 15:23*	*12/13/23 22:09*	*1*
Phenol-d5	*59*		*17 - 127*	*12/08/23 15:23*	*12/13/23 22:09*	*1*
Terphenyl-d14	*77*		*44 - 149*	*12/08/23 15:23*	*12/13/23 22:09*	*1*
2,4,6-Tribromophenol	*94*		*26 - 150*	*12/08/23 15:23*	*12/13/23 22:09*	*1*

Method: EPA 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		12/08/23 12:50	12/11/23 17:21	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/08/23 12:50	12/11/23 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*51 - 149*	*12/08/23 12:50*	*12/11/23 17:21*	*1*

Client Sample ID: P74-ROX-120423
Date Collected: 12/04/23 11:15
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-12
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130	50	ug/L			12/08/23 12:00	5
Acrolein	ND		100	17	ug/L			12/08/23 12:00	5
Acrylonitrile	ND		50	14	ug/L			12/08/23 12:00	5
Benzene	**1000**		5.0	2.5	ug/L			12/08/23 12:00	5
Bromobenzene	ND		5.0	2.7	ug/L			12/08/23 12:00	5
Bromochloromethane	ND		5.0	1.1	ug/L			12/08/23 12:00	5
Bromodichloromethane	ND		5.0	2.5	ug/L			12/08/23 12:00	5
Bromoform	ND		25	1.3	ug/L			12/08/23 12:00	5
Bromomethane	ND		5.0	4.9	ug/L			12/08/23 12:00	5
2-Butanone (MEK)	ND		130	13	ug/L			12/08/23 12:00	5
Carbon disulfide	ND		5.0	2.5	ug/L			12/08/23 12:00	5
Carbon tetrachloride	ND		5.0	0.95	ug/L			12/08/23 12:00	5
Chlorobenzene	ND		5.0	4.5	ug/L			12/08/23 12:00	5
Chloroethane	ND		5.0	3.8	ug/L			12/08/23 12:00	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			12/08/23 12:00	5
Chloroform	ND		5.0	4.5	ug/L			12/08/23 12:00	5
1-Chlorohexane	ND		5.0	1.6	ug/L			12/08/23 12:00	5
Chloromethane	ND		5.0	4.5	ug/L			12/08/23 12:00	5
cis-1,2-Dichloroethene	ND		5.0	1.0	ug/L			12/08/23 12:00	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			12/08/23 12:00	5
Dibromochloromethane	ND		5.0	1.2	ug/L			12/08/23 12:00	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			12/08/23 12:00	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			12/08/23 12:00	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			12/08/23 12:00	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			12/08/23 12:00	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			12/08/23 12:00	5
1,2-Dichloroethane	ND		5.0	0.95	ug/L			12/08/23 12:00	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			12/08/23 12:00	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			12/08/23 12:00	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			12/08/23 12:00	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			12/08/23 12:00	5
1,1-Dichloropropene	ND		5.0	2.5	ug/L			12/08/23 12:00	5
Ethylbenzene	**10**		5.0	2.5	ug/L			12/08/23 12:00	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			12/08/23 12:00	5
Hexachlorobutadiene	ND		25	4.5	ug/L			12/08/23 12:00	5
2-Hexanone	ND		130	7.0	ug/L			12/08/23 12:00	5
Isopropylbenzene	ND		5.0	2.7	ug/L			12/08/23 12:00	5
Methylene bromide	ND		25	1.1	ug/L			12/08/23 12:00	5
Methylene Chloride	ND		25	15	ug/L			12/08/23 12:00	5
4-Methyl-2-pentanone (MIBK)	**10**	**J**	130	9.0	ug/L			12/08/23 12:00	5
Methyl tert-butyl ether	**9.2**		5.0	1.1	ug/L			12/08/23 12:00	5
m-Xylene & p-Xylene	**33**		25	3.2	ug/L			12/08/23 12:00	5
Naphthalene	ND		25	15	ug/L			12/08/23 12:00	5
n-Butylbenzene	ND		5.0	3.8	ug/L			12/08/23 12:00	5
N-Propylbenzene	ND		5.0	3.5	ug/L			12/08/23 12:00	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			12/08/23 12:00	5
o-Xylene	ND		25	3.0	ug/L			12/08/23 12:00	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			12/08/23 12:00	5
p-Isopropyltoluene	ND		5.0	3.6	ug/L			12/08/23 12:00	5

Client Sample ID: P74-ROX-120423
Date Collected: 12/04/23 11:15
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-12
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0	3.5	ug/L			12/08/23 12:00	5
Styrene	ND		5.0	5.0	ug/L			12/08/23 12:00	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			12/08/23 12:00	5
1,1,1,2-Tetrachloroethane	ND		5.0	0.80	ug/L			12/08/23 12:00	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			12/08/23 12:00	5
Tetrachloroethene	ND		5.0	4.5	ug/L			12/08/23 12:00	5
Toluene	**14**		5.0	4.5	ug/L			12/08/23 12:00	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			12/08/23 12:00	5
trans-1,3-Dichloropropene	ND		25	1.0	ug/L			12/08/23 12:00	5
1,2,3-Trichlorobenzene	ND		5.0	4.5	ug/L			12/08/23 12:00	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			12/08/23 12:00	5
1,1,1-Trichloroethane	ND		5.0	0.90	ug/L			12/08/23 12:00	5
1,1,2-Trichloroethane	ND		25	1.1	ug/L			12/08/23 12:00	5
Trichloroethene	ND		5.0	0.75	ug/L			12/08/23 12:00	5
Trichlorofluoromethane	ND		5.0	2.6	ug/L			12/08/23 12:00	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			12/08/23 12:00	5
1,2,4-Trimethylbenzene	**6.1**		5.0	4.1	ug/L			12/08/23 12:00	5
1,3,5-Trimethylbenzene	ND		5.0	2.8	ug/L			12/08/23 12:00	5
Vinyl acetate	ND		130	4.7	ug/L			12/08/23 12:00	5
Vinyl chloride	ND		5.0	2.5	ug/L			12/08/23 12:00	5
Xylenes, Total	**35**	**J**	50	8.0	ug/L			12/08/23 12:00	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*12/08/23 12:00*	*5*
Dibromofluoromethane	*101*		*75 - 126*		*12/08/23 12:00*	*5*
Toluene-d8 (Surr)	*92*		*64 - 132*		*12/08/23 12:00*	*5*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.097	ug/L		12/08/23 15:23	12/14/23 00:09	1
Acenaphthylene	ND		0.20	0.043	ug/L		12/08/23 15:23	12/14/23 00:09	1
Anthracene	ND		0.20	0.046	ug/L		12/08/23 15:23	12/14/23 00:09	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		12/08/23 15:23	12/14/23 00:09	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		12/08/23 15:23	12/14/23 00:09	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		12/08/23 15:23	12/14/23 00:09	1
Benzo[g,h,i]perylene	ND		0.20	0.026	ug/L		12/08/23 15:23	12/14/23 00:09	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		12/08/23 15:23	12/14/23 00:09	1
Chrysene	ND		0.20	0.032	ug/L		12/08/23 15:23	12/14/23 00:09	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		12/08/23 15:23	12/14/23 00:09	1
Fluoranthene	ND		0.20	0.033	ug/L		12/08/23 15:23	12/14/23 00:09	1
Fluorene	ND		0.20	0.087	ug/L		12/08/23 15:23	12/14/23 00:09	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		12/08/23 15:23	12/14/23 00:09	1
Phenanthrene	ND		0.20	0.088	ug/L		12/08/23 15:23	12/14/23 00:09	1
Pyrene	ND		0.20	0.038	ug/L		12/08/23 15:23	12/14/23 00:09	1
1-Methylnaphthalene	**0.32**		0.20	0.078	ug/L		12/08/23 15:23	12/14/23 00:09	1
2-Methylnaphthalene	**0.24**		0.20	0.065	ug/L		12/08/23 15:23	12/14/23 00:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*56*		*18 - 147*	*12/08/23 15:23*	*12/14/23 00:09*	*1*
2-Fluorobiphenyl	*55*		*15 - 128*	*12/08/23 15:23*	*12/14/23 00:09*	*1*

Client Sample ID: P74-ROX-120423
Date Collected: 12/04/23 11:15
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-12
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*55*		*10 - 144*	*12/08/23 15:23*	*12/14/23 00:09*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	3.7	ug/L		12/08/23 15:23	12/13/23 22:34	1
Benzenethiol	ND	*1	9.8	1.7	ug/L		12/08/23 15:23	12/13/23 22:34	1
Benzoic acid	ND		29	7.2	ug/L		12/08/23 15:23	12/13/23 22:34	1
Benzyl alcohol	ND		9.8	2.0	ug/L		12/08/23 15:23	12/13/23 22:34	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		12/08/23 15:23	12/13/23 22:34	1
Bis(2-chloroethyl)ether	ND		9.8	2.6	ug/L		12/08/23 15:23	12/13/23 22:34	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		12/08/23 15:23	12/13/23 22:34	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		12/08/23 15:23	12/13/23 22:34	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		12/08/23 15:23	12/13/23 22:34	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		12/08/23 15:23	12/13/23 22:34	1
4-Chloroaniline	ND		9.8	3.3	ug/L		12/08/23 15:23	12/13/23 22:34	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		12/08/23 15:23	12/13/23 22:34	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		12/08/23 15:23	12/13/23 22:34	1
2-Chlorophenol	ND		9.8	2.2	ug/L		12/08/23 15:23	12/13/23 22:34	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		12/08/23 15:23	12/13/23 22:34	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		12/08/23 15:23	12/13/23 22:34	1
Dibenzofuran	ND		9.8	0.17	ug/L		12/08/23 15:23	12/13/23 22:34	1
3,3'-Dichlorobenzidine	ND		9.8	2.5	ug/L		12/08/23 15:23	12/13/23 22:34	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		12/08/23 15:23	12/13/23 22:34	1
Diethyl phthalate	**0.26**	**J**	9.8	0.24	ug/L		12/08/23 15:23	12/13/23 22:34	1
2,4-Dimethylphenol	**4.7**	**J**	9.8	3.4	ug/L		12/08/23 15:23	12/13/23 22:34	1
Dimethyl phthalate	**0.68**	**J B**	9.8	0.17	ug/L		12/08/23 15:23	12/13/23 22:34	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		12/08/23 15:23	12/13/23 22:34	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		12/08/23 15:23	12/13/23 22:34	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		12/08/23 15:23	12/13/23 22:34	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		12/08/23 15:23	12/13/23 22:34	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		12/08/23 15:23	12/13/23 22:34	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		12/08/23 15:23	12/13/23 22:34	1
1,4-Dioxane	ND		9.8	0.98	ug/L		12/08/23 15:23	12/13/23 22:34	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		12/08/23 15:23	12/13/23 22:34	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		12/08/23 15:23	12/13/23 22:34	1
Hexachlorocyclopentadiene	ND		20	2.5	ug/L		12/08/23 15:23	12/13/23 22:34	1
Hexachloroethane	ND		9.8	4.1	ug/L		12/08/23 15:23	12/13/23 22:34	1
Indene	ND		9.8	0.98	ug/L		12/08/23 15:23	12/13/23 22:34	1
Isophorone	ND		9.8	0.14	ug/L		12/08/23 15:23	12/13/23 22:34	1
2-Methylphenol	ND		9.8	1.8	ug/L		12/08/23 15:23	12/13/23 22:34	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		12/08/23 15:23	12/13/23 22:34	1
2-Nitroaniline	ND		9.8	2.2	ug/L		12/08/23 15:23	12/13/23 22:34	1
3-Nitroaniline	ND		9.8	1.8	ug/L		12/08/23 15:23	12/13/23 22:34	1
4-Nitroaniline	ND		9.8	1.5	ug/L		12/08/23 15:23	12/13/23 22:34	1
Nitrobenzene	ND		9.8	0.13	ug/L		12/08/23 15:23	12/13/23 22:34	1
2-Nitrophenol	ND		9.8	5.1	ug/L		12/08/23 15:23	12/13/23 22:34	1
4-Nitrophenol	ND		9.8	2.1	ug/L		12/08/23 15:23	12/13/23 22:34	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		12/08/23 15:23	12/13/23 22:34	1

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

Job ID: 400-247720-1

Client Sample ID: P74-ROX-120423
Date Collected: 12/04/23 11:15
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-12
Matrix: Water

Method: SW846 8270E - 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		12/08/23 15:23	12/13/23 22:34	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		12/08/23 15:23	12/13/23 22:34	1
Pentachlorophenol	ND		20	1.4	ug/L		12/08/23 15:23	12/13/23 22:34	1
Phenol	**3.9**	**J**	9.8	2.5	ug/L		12/08/23 15:23	12/13/23 22:34	1
Pyridine	ND		9.8	3.1	ug/L		12/08/23 15:23	12/13/23 22:34	1
Quinoline	ND		9.8	4.4	ug/L		12/08/23 15:23	12/13/23 22:34	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		12/08/23 15:23	12/13/23 22:34	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		12/08/23 15:23	12/13/23 22:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*46 - 124*	*12/08/23 15:23*	*12/13/23 22:34*	*1*
2-Fluorophenol	*43*		*13 - 113*	*12/08/23 15:23*	*12/13/23 22:34*	*1*
Nitrobenzene-d5	*57*		*36 - 126*	*12/08/23 15:23*	*12/13/23 22:34*	*1*
Phenol-d5	*51*		*17 - 127*	*12/08/23 15:23*	*12/13/23 22:34*	*1*
Terphenyl-d14	*72*		*44 - 149*	*12/08/23 15:23*	*12/13/23 22:34*	*1*
2,4,6-Tribromophenol	*81*		*26 - 150*	*12/08/23 15:23*	*12/13/23 22:34*	*1*

Method: EPA 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		12/08/23 12:50	12/11/23 17:42	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/08/23 12:50	12/11/23 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*51 - 149*	*12/08/23 12:50*	*12/11/23 17:42*	*1*

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

Job ID: 400-247720-1

Client Sample ID: T12-ROX-120423
Date Collected: 12/04/23 12:20
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-13
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		250	100	ug/L			12/08/23 16:43	10
Acrolein	ND		200	33	ug/L			12/08/23 16:43	10
Acrylonitrile	ND		100	28	ug/L			12/08/23 16:43	10
Benzene	**1300**		10	5.0	ug/L			12/08/23 16:43	10
Bromobenzene	ND		10	5.4	ug/L			12/08/23 16:43	10
Bromochloromethane	ND		10	2.1	ug/L			12/08/23 16:43	10
Bromodichloromethane	ND		10	5.0	ug/L			12/08/23 16:43	10
Bromoform	ND		50	2.5	ug/L			12/08/23 16:43	10
Bromomethane	ND		10	9.8	ug/L			12/08/23 16:43	10
2-Butanone (MEK)	ND		250	26	ug/L			12/08/23 16:43	10
Carbon disulfide	ND		10	5.0	ug/L			12/08/23 16:43	10
Carbon tetrachloride	ND		10	1.9	ug/L			12/08/23 16:43	10
Chlorobenzene	ND		10	9.0	ug/L			12/08/23 16:43	10
Chloroethane	ND		10	7.6	ug/L			12/08/23 16:43	10
2-Chloroethyl vinyl ether	ND		50	20	ug/L			12/08/23 16:43	10
Chloroform	ND		10	9.0	ug/L			12/08/23 16:43	10
1-Chlorohexane	ND		10	3.2	ug/L			12/08/23 16:43	10
Chloromethane	ND		10	9.0	ug/L			12/08/23 16:43	10
cis-1,2-Dichloroethene	ND		10	2.0	ug/L			12/08/23 16:43	10
cis-1,3-Dichloropropene	ND		50	5.0	ug/L			12/08/23 16:43	10
Dibromochloromethane	ND		10	2.4	ug/L			12/08/23 16:43	10
1,2-Dichlorobenzene	ND		10	5.0	ug/L			12/08/23 16:43	10
1,3-Dichlorobenzene	ND		10	5.4	ug/L			12/08/23 16:43	10
1,4-Dichlorobenzene	ND		10	6.4	ug/L			12/08/23 16:43	10
Dichlorodifluoromethane	ND		10	8.5	ug/L			12/08/23 16:43	10
1,1-Dichloroethane	ND		10	5.0	ug/L			12/08/23 16:43	10
1,2-Dichloroethane	ND		10	1.9	ug/L			12/08/23 16:43	10
1,1-Dichloroethene	ND		10	5.0	ug/L			12/08/23 16:43	10
1,2-Dichloropropane	ND		10	5.0	ug/L			12/08/23 16:43	10
1,3-Dichloropropane	ND		10	5.0	ug/L			12/08/23 16:43	10
2,2-Dichloropropane	ND		10	5.0	ug/L			12/08/23 16:43	10
1,1-Dichloropropene	ND		10	5.0	ug/L			12/08/23 16:43	10
Ethylbenzene	**5.7**	**J**	10	5.0	ug/L			12/08/23 16:43	10
Ethyl methacrylate	ND		10	6.0	ug/L			12/08/23 16:43	10
Hexachlorobutadiene	ND		50	9.0	ug/L			12/08/23 16:43	10
2-Hexanone	ND		250	14	ug/L			12/08/23 16:43	10
Isopropylbenzene	**11**		10	5.3	ug/L			12/08/23 16:43	10
Methylene bromide	ND		50	2.2	ug/L			12/08/23 16:43	10
Methylene Chloride	ND		50	30	ug/L			12/08/23 16:43	10
4-Methyl-2-pentanone (MIBK)	ND		250	18	ug/L			12/08/23 16:43	10
Methyl tert-butyl ether	ND		10	2.2	ug/L			12/08/23 16:43	10
m-Xylene & p-Xylene	**32**	**J**	50	6.3	ug/L			12/08/23 16:43	10
Naphthalene	ND		50	30	ug/L			12/08/23 16:43	10
n-Butylbenzene	ND		10	7.6	ug/L			12/08/23 16:43	10
N-Propylbenzene	**10**		10	6.9	ug/L			12/08/23 16:43	10
o-Chlorotoluene	ND		10	5.7	ug/L			12/08/23 16:43	10
o-Xylene	ND		50	6.0	ug/L			12/08/23 16:43	10
p-Chlorotoluene	ND		10	5.6	ug/L			12/08/23 16:43	10
p-Isopropyltoluene	ND		10	7.1	ug/L			12/08/23 16:43	10

Client Sample ID: T12-ROX-120423
Date Collected: 12/04/23 12:20
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-13
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		10	7.0	ug/L			12/08/23 16:43	10
Styrene	ND		10	10	ug/L			12/08/23 16:43	10
tert-Butylbenzene	ND		10	6.3	ug/L			12/08/23 16:43	10
1,1,1,2-Tetrachloroethane	ND		10	1.6	ug/L			12/08/23 16:43	10
1,1,2,2-Tetrachloroethane	ND		10	5.0	ug/L			12/08/23 16:43	10
Tetrachloroethene	ND		10	9.0	ug/L			12/08/23 16:43	10
Toluene	**23**		10	9.0	ug/L			12/08/23 16:43	10
trans-1,2-Dichloroethene	ND		10	5.0	ug/L			12/08/23 16:43	10
trans-1,3-Dichloropropene	ND		50	2.0	ug/L			12/08/23 16:43	10
1,2,3-Trichlorobenzene	ND		10	9.0	ug/L			12/08/23 16:43	10
1,2,4-Trichlorobenzene	ND		10	8.2	ug/L			12/08/23 16:43	10
1,1,1-Trichloroethane	ND		10	1.8	ug/L			12/08/23 16:43	10
1,1,2-Trichloroethane	ND		50	2.1	ug/L			12/08/23 16:43	10
Trichloroethene	ND		10	1.5	ug/L			12/08/23 16:43	10
Trichlorofluoromethane	ND		10	5.2	ug/L			12/08/23 16:43	10
1,2,3-Trichloropropane	ND		50	8.4	ug/L			12/08/23 16:43	10
1,2,4-Trimethylbenzene	ND		10	8.2	ug/L			12/08/23 16:43	10
1,3,5-Trimethylbenzene	ND		10	5.6	ug/L			12/08/23 16:43	10
Vinyl acetate	ND		250	9.3	ug/L			12/08/23 16:43	10
Vinyl chloride	ND		10	5.0	ug/L			12/08/23 16:43	10
Xylenes, Total	**35**	**J**	100	16	ug/L			12/08/23 16:43	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*12/08/23 16:43*	*10*
Dibromofluoromethane	*100*		*75 - 126*		*12/08/23 16:43*	*10*
Toluene-d8 (Surr)	*92*		*64 - 132*		*12/08/23 16:43*	*10*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.25**		0.20	0.097	ug/L		12/08/23 15:23	12/14/23 00:29	1
Acenaphthylene	ND		0.20	0.043	ug/L		12/08/23 15:23	12/14/23 00:29	1
Anthracene	**0.069**	**J**	0.20	0.046	ug/L		12/08/23 15:23	12/14/23 00:29	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		12/08/23 15:23	12/14/23 00:29	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		12/08/23 15:23	12/14/23 00:29	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		12/08/23 15:23	12/14/23 00:29	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/08/23 15:23	12/14/23 00:29	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		12/08/23 15:23	12/14/23 00:29	1
Chrysene	ND		0.20	0.032	ug/L		12/08/23 15:23	12/14/23 00:29	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		12/08/23 15:23	12/14/23 00:29	1
Fluoranthene	**0.043**	**J**	0.20	0.033	ug/L		12/08/23 15:23	12/14/23 00:29	1
Fluorene	**0.26**		0.20	0.088	ug/L		12/08/23 15:23	12/14/23 00:29	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		12/08/23 15:23	12/14/23 00:29	1
Phenanthrene	**0.43**		0.20	0.089	ug/L		12/08/23 15:23	12/14/23 00:29	1
Pyrene	ND		0.20	0.038	ug/L		12/08/23 15:23	12/14/23 00:29	1
1-Methylnaphthalene	**14**		0.20	0.079	ug/L		12/08/23 15:23	12/14/23 00:29	1
2-Methylnaphthalene	**19**		0.20	0.065	ug/L		12/08/23 15:23	12/14/23 00:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*58*		*18 - 147*	*12/08/23 15:23*	*12/14/23 00:29*	*1*
2-Fluorobiphenyl	*58*		*15 - 128*	*12/08/23 15:23*	*12/14/23 00:29*	*1*

Client Sample ID: T12-ROX-120423
Date Collected: 12/04/23 12:20
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-13
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*65*		*10 - 144*	*12/08/23 15:23*	*12/14/23 00:29*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	3.7	ug/L		12/08/23 15:23	12/13/23 22:59	1
Benzenethiol	ND	*1	9.8	1.7	ug/L		12/08/23 15:23	12/13/23 22:59	1
Benzoic acid	ND		30	7.2	ug/L		12/08/23 15:23	12/13/23 22:59	1
Benzyl alcohol	ND		9.8	2.0	ug/L		12/08/23 15:23	12/13/23 22:59	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		12/08/23 15:23	12/13/23 22:59	1
Bis(2-chloroethyl)ether	ND		9.8	2.7	ug/L		12/08/23 15:23	12/13/23 22:59	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		12/08/23 15:23	12/13/23 22:59	1
Bis(2-ethylhexyl) phthalate	**6.4**	**J**	9.8	4.9	ug/L		12/08/23 15:23	12/13/23 22:59	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		12/08/23 15:23	12/13/23 22:59	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		12/08/23 15:23	12/13/23 22:59	1
4-Chloroaniline	ND		9.8	3.3	ug/L		12/08/23 15:23	12/13/23 22:59	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		12/08/23 15:23	12/13/23 22:59	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		12/08/23 15:23	12/13/23 22:59	1
2-Chlorophenol	ND		9.8	2.2	ug/L		12/08/23 15:23	12/13/23 22:59	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		12/08/23 15:23	12/13/23 22:59	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		12/08/23 15:23	12/13/23 22:59	1
Dibenzofuran	**0.21**	**J**	9.8	0.17	ug/L		12/08/23 15:23	12/13/23 22:59	1
3,3'-Dichlorobenzidine	ND		9.8	2.6	ug/L		12/08/23 15:23	12/13/23 22:59	1
2,4-Dichlorophenol	ND		9.8	3.0	ug/L		12/08/23 15:23	12/13/23 22:59	1
Diethyl phthalate	ND		9.8	0.24	ug/L		12/08/23 15:23	12/13/23 22:59	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		12/08/23 15:23	12/13/23 22:59	1
Dimethyl phthalate	**1.3**	**J B**	9.8	0.17	ug/L		12/08/23 15:23	12/13/23 22:59	1
Di-n-butyl phthalate	ND		9.8	2.7	ug/L		12/08/23 15:23	12/13/23 22:59	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		12/08/23 15:23	12/13/23 22:59	1
2,4-Dinitrophenol	ND		30	3.3	ug/L		12/08/23 15:23	12/13/23 22:59	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		12/08/23 15:23	12/13/23 22:59	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		12/08/23 15:23	12/13/23 22:59	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		12/08/23 15:23	12/13/23 22:59	1
1,4-Dioxane	ND		9.8	0.98	ug/L		12/08/23 15:23	12/13/23 22:59	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		12/08/23 15:23	12/13/23 22:59	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		12/08/23 15:23	12/13/23 22:59	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/08/23 15:23	12/13/23 22:59	1
Hexachloroethane	ND		9.8	4.1	ug/L		12/08/23 15:23	12/13/23 22:59	1
Indene	ND		9.8	0.98	ug/L		12/08/23 15:23	12/13/23 22:59	1
Isophorone	ND		9.8	0.14	ug/L		12/08/23 15:23	12/13/23 22:59	1
2-Methylphenol	ND		9.8	1.8	ug/L		12/08/23 15:23	12/13/23 22:59	1
3 & 4 Methylphenol	**0.45**	**J**	20	0.38	ug/L		12/08/23 15:23	12/13/23 22:59	1
2-Nitroaniline	ND		9.8	2.2	ug/L		12/08/23 15:23	12/13/23 22:59	1
3-Nitroaniline	ND		9.8	1.8	ug/L		12/08/23 15:23	12/13/23 22:59	1
4-Nitroaniline	ND		9.8	1.5	ug/L		12/08/23 15:23	12/13/23 22:59	1
Nitrobenzene	ND		9.8	0.13	ug/L		12/08/23 15:23	12/13/23 22:59	1
2-Nitrophenol	ND		9.8	5.1	ug/L		12/08/23 15:23	12/13/23 22:59	1
4-Nitrophenol	ND		9.8	2.1	ug/L		12/08/23 15:23	12/13/23 22:59	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		12/08/23 15:23	12/13/23 22:59	1

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

Job ID: 400-247720-1

Client Sample ID: T12-ROX-120423

Date Collected: 12/04/23 12:20
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-13

Matrix: Water

Method: SW846 8270E - 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		12/08/23 15:23	12/13/23 22:59	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		12/08/23 15:23	12/13/23 22:59	1
Pentachlorophenol	ND		20	1.4	ug/L		12/08/23 15:23	12/13/23 22:59	1
Phenol	**35**		9.8	2.6	ug/L		12/08/23 15:23	12/13/23 22:59	1
Pyridine	ND		9.8	3.1	ug/L		12/08/23 15:23	12/13/23 22:59	1
Quinoline	ND		9.8	4.4	ug/L		12/08/23 15:23	12/13/23 22:59	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		12/08/23 15:23	12/13/23 22:59	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		12/08/23 15:23	12/13/23 22:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*46 - 124*	*12/08/23 15:23*	*12/13/23 22:59*	*1*
2-Fluorophenol	*39*		*13 - 113*	*12/08/23 15:23*	*12/13/23 22:59*	*1*
Nitrobenzene-d5	*60*		*36 - 126*	*12/08/23 15:23*	*12/13/23 22:59*	*1*
Phenol-d5	*53*		*17 - 127*	*12/08/23 15:23*	*12/13/23 22:59*	*1*
Terphenyl-d14	*70*		*44 - 149*	*12/08/23 15:23*	*12/13/23 22:59*	*1*
2,4,6-Tribromophenol	*81*		*26 - 150*	*12/08/23 15:23*	*12/13/23 22:59*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H	9.9	4.9	ug/L		12/20/23 10:21	12/21/23 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*46 - 124*	*12/20/23 10:21*	*12/21/23 17:43*	*1*
Nitrobenzene-d5	*57*		*36 - 126*	*12/20/23 10:21*	*12/21/23 17:43*	*1*
Terphenyl-d14	*62*		*44 - 149*	*12/20/23 10:21*	*12/21/23 17:43*	*1*

Method: EPA 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		12/08/23 12:50	12/11/23 18:03	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/08/23 12:50	12/11/23 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*71*		*51 - 149*	*12/08/23 12:50*	*12/11/23 18:03*	*1*

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

Job ID: 400-247720-1

Client Sample ID: T12-ROX-120423-DUP
Date Collected: 12/04/23 12:20
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-14
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		250	100	ug/L			12/08/23 17:08	10
Acrolein	ND		200	33	ug/L			12/08/23 17:08	10
Acrylonitrile	ND		100	28	ug/L			12/08/23 17:08	10
Benzene	**1300**		10	5.0	ug/L			12/08/23 17:08	10
Bromobenzene	ND		10	5.4	ug/L			12/08/23 17:08	10
Bromochloromethane	ND		10	2.1	ug/L			12/08/23 17:08	10
Bromodichloromethane	ND		10	5.0	ug/L			12/08/23 17:08	10
Bromoform	ND		50	2.5	ug/L			12/08/23 17:08	10
Bromomethane	ND		10	9.8	ug/L			12/08/23 17:08	10
2-Butanone (MEK)	ND		250	26	ug/L			12/08/23 17:08	10
Carbon disulfide	ND		10	5.0	ug/L			12/08/23 17:08	10
Carbon tetrachloride	ND		10	1.9	ug/L			12/08/23 17:08	10
Chlorobenzene	ND		10	9.0	ug/L			12/08/23 17:08	10
Chloroethane	ND		10	7.6	ug/L			12/08/23 17:08	10
2-Chloroethyl vinyl ether	ND		50	20	ug/L			12/08/23 17:08	10
Chloroform	ND		10	9.0	ug/L			12/08/23 17:08	10
1-Chlorohexane	ND		10	3.2	ug/L			12/08/23 17:08	10
Chloromethane	ND		10	9.0	ug/L			12/08/23 17:08	10
cis-1,2-Dichloroethene	ND		10	2.0	ug/L			12/08/23 17:08	10
cis-1,3-Dichloropropene	ND		50	5.0	ug/L			12/08/23 17:08	10
Dibromochloromethane	ND		10	2.4	ug/L			12/08/23 17:08	10
1,2-Dichlorobenzene	ND		10	5.0	ug/L			12/08/23 17:08	10
1,3-Dichlorobenzene	ND		10	5.4	ug/L			12/08/23 17:08	10
1,4-Dichlorobenzene	ND		10	6.4	ug/L			12/08/23 17:08	10
Dichlorodifluoromethane	ND		10	8.5	ug/L			12/08/23 17:08	10
1,1-Dichloroethane	ND		10	5.0	ug/L			12/08/23 17:08	10
1,2-Dichloroethane	ND		10	1.9	ug/L			12/08/23 17:08	10
1,1-Dichloroethene	ND		10	5.0	ug/L			12/08/23 17:08	10
1,2-Dichloropropane	ND		10	5.0	ug/L			12/08/23 17:08	10
1,3-Dichloropropane	ND		10	5.0	ug/L			12/08/23 17:08	10
2,2-Dichloropropane	ND		10	5.0	ug/L			12/08/23 17:08	10
1,1-Dichloropropene	ND		10	5.0	ug/L			12/08/23 17:08	10
Ethylbenzene	ND		10	5.0	ug/L			12/08/23 17:08	10
Ethyl methacrylate	ND		10	6.0	ug/L			12/08/23 17:08	10
Hexachlorobutadiene	ND		50	9.0	ug/L			12/08/23 17:08	10
2-Hexanone	ND		250	14	ug/L			12/08/23 17:08	10
Isopropylbenzene	**9.2**	**J**	10	5.3	ug/L			12/08/23 17:08	10
Methylene bromide	ND		50	2.2	ug/L			12/08/23 17:08	10
Methylene Chloride	ND		50	30	ug/L			12/08/23 17:08	10
4-Methyl-2-pentanone (MIBK)	ND		250	18	ug/L			12/08/23 17:08	10
Methyl tert-butyl ether	ND		10	2.2	ug/L			12/08/23 17:08	10
m-Xylene & p-Xylene	**28**	**J**	50	6.3	ug/L			12/08/23 17:08	10
Naphthalene	ND		50	30	ug/L			12/08/23 17:08	10
n-Butylbenzene	ND		10	7.6	ug/L			12/08/23 17:08	10
N-Propylbenzene	**7.6**	**J**	10	6.9	ug/L			12/08/23 17:08	10
o-Chlorotoluene	ND		10	5.7	ug/L			12/08/23 17:08	10
o-Xylene	ND		50	6.0	ug/L			12/08/23 17:08	10
p-Chlorotoluene	ND		10	5.6	ug/L			12/08/23 17:08	10
p-Isopropyltoluene	ND		10	7.1	ug/L			12/08/23 17:08	10

Client Sample ID: T12-ROX-120423-DUP

Lab Sample ID: 400-247720-14

Date Collected: 12/04/23 12:20

Matrix: Water

Date Received: 12/05/23 09:22

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		10	7.0	ug/L			12/08/23 17:08	10
Styrene	ND		10	10	ug/L			12/08/23 17:08	10
tert-Butylbenzene	ND		10	6.3	ug/L			12/08/23 17:08	10
1,1,1,2-Tetrachloroethane	ND		10	1.6	ug/L			12/08/23 17:08	10
1,1,2,2-Tetrachloroethane	ND		10	5.0	ug/L			12/08/23 17:08	10
Tetrachloroethene	ND		10	9.0	ug/L			12/08/23 17:08	10
Toluene	**21**		10	9.0	ug/L			12/08/23 17:08	10
trans-1,2-Dichloroethene	ND		10	5.0	ug/L			12/08/23 17:08	10
trans-1,3-Dichloropropene	ND		50	2.0	ug/L			12/08/23 17:08	10
1,2,3-Trichlorobenzene	ND		10	9.0	ug/L			12/08/23 17:08	10
1,2,4-Trichlorobenzene	ND		10	8.2	ug/L			12/08/23 17:08	10
1,1,1-Trichloroethane	ND		10	1.8	ug/L			12/08/23 17:08	10
1,1,2-Trichloroethane	ND		50	2.1	ug/L			12/08/23 17:08	10
Trichloroethene	ND		10	1.5	ug/L			12/08/23 17:08	10
Trichlorofluoromethane	ND		10	5.2	ug/L			12/08/23 17:08	10
1,2,3-Trichloropropane	ND		50	8.4	ug/L			12/08/23 17:08	10
1,2,4-Trimethylbenzene	ND		10	8.2	ug/L			12/08/23 17:08	10
1,3,5-Trimethylbenzene	ND		10	5.6	ug/L			12/08/23 17:08	10
Vinyl acetate	ND		250	9.3	ug/L			12/08/23 17:08	10
Vinyl chloride	ND		10	5.0	ug/L			12/08/23 17:08	10
Xylenes, Total	**30**	**J**	100	16	ug/L			12/08/23 17:08	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*12/08/23 17:08*	*10*
Dibromofluoromethane	*101*		*75 - 126*		*12/08/23 17:08*	*10*
Toluene-d8 (Surr)	*89*		*64 - 132*		*12/08/23 17:08*	*10*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.28**		0.20	0.098	ug/L		12/08/23 15:23	12/14/23 00:49	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/08/23 15:23	12/14/23 00:49	1
Anthracene	**0.068**	**J**	0.20	0.047	ug/L		12/08/23 15:23	12/14/23 00:49	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/08/23 15:23	12/14/23 00:49	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		12/08/23 15:23	12/14/23 00:49	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/08/23 15:23	12/14/23 00:49	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/08/23 15:23	12/14/23 00:49	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		12/08/23 15:23	12/14/23 00:49	1
Chrysene	ND		0.20	0.033	ug/L		12/08/23 15:23	12/14/23 00:49	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/08/23 15:23	12/14/23 00:49	1
Fluoranthene	**0.035**	**J**	0.20	0.034	ug/L		12/08/23 15:23	12/14/23 00:49	1
Fluorene	**0.21**		0.20	0.088	ug/L		12/08/23 15:23	12/14/23 00:49	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/08/23 15:23	12/14/23 00:49	1
Phenanthrene	**0.46**		0.20	0.089	ug/L		12/08/23 15:23	12/14/23 00:49	1
Pyrene	ND		0.20	0.039	ug/L		12/08/23 15:23	12/14/23 00:49	1
1-Methylnaphthalene	**14**		0.20	0.079	ug/L		12/08/23 15:23	12/14/23 00:49	1
2-Methylnaphthalene	**19**		0.20	0.065	ug/L		12/08/23 15:23	12/14/23 00:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*49*		*18 - 147*	*12/08/23 15:23*	*12/14/23 00:49*	*1*
2-Fluorobiphenyl	*63*		*15 - 128*	*12/08/23 15:23*	*12/14/23 00:49*	*1*

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

Job ID: 400-247720-1

Client Sample ID: T12-ROX-120423-DUP

Date Collected: 12/04/23 12:20
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-14

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*65*		*10 - 144*	*12/08/23 15:23*	*12/14/23 00:49*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.9	3.8	ug/L		12/08/23 15:23	12/14/23 22:34	1
Benzenethiol	ND	*1	9.9	1.7	ug/L		12/08/23 15:23	12/14/23 22:34	1
Benzoic acid	ND		30	7.2	ug/L		12/08/23 15:23	12/14/23 22:34	1
Benzyl alcohol	ND		9.9	2.0	ug/L		12/08/23 15:23	12/14/23 22:34	1
Bis(2-chloroethoxy)methane	ND		9.9	0.16	ug/L		12/08/23 15:23	12/14/23 22:34	1
Bis(2-chloroethyl)ether	ND		9.9	2.7	ug/L		12/08/23 15:23	12/14/23 22:34	1
bis (2-chloroisopropyl) ether	ND		9.9	0.16	ug/L		12/08/23 15:23	12/14/23 22:34	1
Bis(2-ethylhexyl) phthalate	ND		9.9	4.9	ug/L		12/08/23 15:23	12/14/23 22:34	1
4-Bromophenyl phenyl ether	ND		9.9	0.20	ug/L		12/08/23 15:23	12/14/23 22:34	1
Butyl benzyl phthalate	ND		9.9	0.19	ug/L		12/08/23 15:23	12/14/23 22:34	1
4-Chloroaniline	ND		9.9	3.4	ug/L		12/08/23 15:23	12/14/23 22:34	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		12/08/23 15:23	12/14/23 22:34	1
2-Chloronaphthalene	ND		9.9	0.14	ug/L		12/08/23 15:23	12/14/23 22:34	1
2-Chlorophenol	ND		9.9	2.2	ug/L		12/08/23 15:23	12/14/23 22:34	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		12/08/23 15:23	12/14/23 22:34	1
Dibenz[a,h]acridine	ND		9.9	0.99	ug/L		12/08/23 15:23	12/14/23 22:34	1
Dibenzofuran	**0.27**	**J**	9.9	0.17	ug/L		12/08/23 15:23	12/14/23 22:34	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		12/08/23 15:23	12/14/23 22:34	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		12/08/23 15:23	12/14/23 22:34	1
Diethyl phthalate	ND		9.9	0.24	ug/L		12/08/23 15:23	12/14/23 22:34	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		12/08/23 15:23	12/14/23 22:34	1
Dimethyl phthalate	ND		9.9	0.17	ug/L		12/08/23 15:23	12/14/23 22:34	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		12/08/23 15:23	12/14/23 22:34	1
4,6-Dinitro-ortho-cresol	ND		9.9	1.6	ug/L		12/08/23 15:23	12/14/23 22:34	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		12/08/23 15:23	12/14/23 22:34	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		12/08/23 15:23	12/14/23 22:34	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		12/08/23 15:23	12/14/23 22:34	1
Di-n-octyl phthalate	ND		9.9	0.17	ug/L		12/08/23 15:23	12/14/23 22:34	1
1,4-Dioxane	ND		9.9	0.99	ug/L		12/08/23 15:23	12/14/23 22:34	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		12/08/23 15:23	12/14/23 22:34	1
Hexachlorobenzene	ND		9.9	0.17	ug/L		12/08/23 15:23	12/14/23 22:34	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/08/23 15:23	12/14/23 22:34	1
Hexachloroethane	ND		9.9	4.2	ug/L		12/08/23 15:23	12/14/23 22:34	1
Indene	ND		9.9	0.99	ug/L		12/08/23 15:23	12/14/23 22:34	1
Isophorone	ND		9.9	0.14	ug/L		12/08/23 15:23	12/14/23 22:34	1
2-Methylphenol	ND		9.9	1.8	ug/L		12/08/23 15:23	12/14/23 22:34	1
3 & 4 Methylphenol	**0.47**	**J**	20	0.39	ug/L		12/08/23 15:23	12/14/23 22:34	1
2-Nitroaniline	ND		9.9	2.2	ug/L		12/08/23 15:23	12/14/23 22:34	1
3-Nitroaniline	ND		9.9	1.8	ug/L		12/08/23 15:23	12/14/23 22:34	1
4-Nitroaniline	ND		9.9	1.5	ug/L		12/08/23 15:23	12/14/23 22:34	1
Nitrobenzene	ND		9.9	0.13	ug/L		12/08/23 15:23	12/14/23 22:34	1
2-Nitrophenol	ND		9.9	5.1	ug/L		12/08/23 15:23	12/14/23 22:34	1
4-Nitrophenol	ND		9.9	2.1	ug/L		12/08/23 15:23	12/14/23 22:34	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		12/08/23 15:23	12/14/23 22:34	1

Client Sample ID: T12-ROX-120423-DUP

Date Collected: 12/04/23 12:20
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-14

Matrix: Water

Method: SW846 8270E - 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		12/08/23 15:23	12/14/23 22:34	1
N-Nitrosodiphenylamine	ND		9.9	0.18	ug/L		12/08/23 15:23	12/14/23 22:34	1
Pentachlorophenol	ND		20	1.4	ug/L		12/08/23 15:23	12/14/23 22:34	1
Phenol	**39**		9.9	2.6	ug/L		12/08/23 15:23	12/14/23 22:34	1
Pyridine	ND		9.9	3.2	ug/L		12/08/23 15:23	12/14/23 22:34	1
Quinoline	ND		9.9	4.5	ug/L		12/08/23 15:23	12/14/23 22:34	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		12/08/23 15:23	12/14/23 22:34	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		12/08/23 15:23	12/14/23 22:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*46 - 124*	*12/08/23 15:23*	*12/14/23 22:34*	*1*
2-Fluorophenol	*46*		*13 - 113*	*12/08/23 15:23*	*12/14/23 22:34*	*1*
Nitrobenzene-d5	*63*		*36 - 126*	*12/08/23 15:23*	*12/14/23 22:34*	*1*
Phenol-d5	*59*		*17 - 127*	*12/08/23 15:23*	*12/14/23 22:34*	*1*
Terphenyl-d14	*63*		*44 - 149*	*12/08/23 15:23*	*12/14/23 22:34*	*1*
2,4,6-Tribromophenol	*99*		*26 - 150*	*12/08/23 15:23*	*12/14/23 22:34*	*1*

Method: EPA 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		12/08/23 12:50	12/11/23 18:24	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/08/23 12:50	12/11/23 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*51 - 149*	*12/08/23 12:50*	*12/11/23 18:24*	*1*

Client Sample ID: P59-ROX-120423
Date Collected: 12/04/23 13:25
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-15
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130	50	ug/L			12/08/23 12:22	5
Acrolein	ND		100	17	ug/L			12/08/23 12:22	5
Acrylonitrile	ND		50	14	ug/L			12/08/23 12:22	5
Benzene	**1200**		5.0	2.5	ug/L			12/08/23 12:22	5
Bromobenzene	ND		5.0	2.7	ug/L			12/08/23 12:22	5
Bromochloromethane	ND		5.0	1.1	ug/L			12/08/23 12:22	5
Bromodichloromethane	ND		5.0	2.5	ug/L			12/08/23 12:22	5
Bromoform	ND		25	1.3	ug/L			12/08/23 12:22	5
Bromomethane	ND		5.0	4.9	ug/L			12/08/23 12:22	5
2-Butanone (MEK)	ND		130	13	ug/L			12/08/23 12:22	5
Carbon disulfide	ND		5.0	2.5	ug/L			12/08/23 12:22	5
Carbon tetrachloride	ND		5.0	0.95	ug/L			12/08/23 12:22	5
Chlorobenzene	ND		5.0	4.5	ug/L			12/08/23 12:22	5
Chloroethane	ND		5.0	3.8	ug/L			12/08/23 12:22	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			12/08/23 12:22	5
Chloroform	ND		5.0	4.5	ug/L			12/08/23 12:22	5
1-Chlorohexane	ND		5.0	1.6	ug/L			12/08/23 12:22	5
Chloromethane	ND		5.0	4.5	ug/L			12/08/23 12:22	5
cis-1,2-Dichloroethene	ND		5.0	1.0	ug/L			12/08/23 12:22	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			12/08/23 12:22	5
Dibromochloromethane	ND		5.0	1.2	ug/L			12/08/23 12:22	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			12/08/23 12:22	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			12/08/23 12:22	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			12/08/23 12:22	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			12/08/23 12:22	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			12/08/23 12:22	5
1,2-Dichloroethane	ND		5.0	0.95	ug/L			12/08/23 12:22	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			12/08/23 12:22	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			12/08/23 12:22	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			12/08/23 12:22	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			12/08/23 12:22	5
1,1-Dichloropropene	ND		5.0	2.5	ug/L			12/08/23 12:22	5
Ethylbenzene	**63**		5.0	2.5	ug/L			12/08/23 12:22	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			12/08/23 12:22	5
Hexachlorobutadiene	ND		25	4.5	ug/L			12/08/23 12:22	5
2-Hexanone	ND		130	7.0	ug/L			12/08/23 12:22	5
Isopropylbenzene	**31**		5.0	2.7	ug/L			12/08/23 12:22	5
Methylene bromide	ND		25	1.1	ug/L			12/08/23 12:22	5
Methylene Chloride	ND		25	15	ug/L			12/08/23 12:22	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			12/08/23 12:22	5
Methyl tert-butyl ether	ND		5.0	1.1	ug/L			12/08/23 12:22	5
m-Xylene & p-Xylene	**72**		25	3.2	ug/L			12/08/23 12:22	5
Naphthalene	**16**	**J**	25	15	ug/L			12/08/23 12:22	5
n-Butylbenzene	ND		5.0	3.8	ug/L			12/08/23 12:22	5
N-Propylbenzene	**48**		5.0	3.5	ug/L			12/08/23 12:22	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			12/08/23 12:22	5
o-Xylene	ND		25	3.0	ug/L			12/08/23 12:22	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			12/08/23 12:22	5
p-Isopropyltoluene	ND		5.0	3.6	ug/L			12/08/23 12:22	5

Client Sample ID: P59-ROX-120423

Date Collected: 12/04/23 13:25
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-15
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0	3.5	ug/L			12/08/23 12:22	5
Styrene	ND		5.0	5.0	ug/L			12/08/23 12:22	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			12/08/23 12:22	5
1,1,1,2-Tetrachloroethane	ND		5.0	0.80	ug/L			12/08/23 12:22	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			12/08/23 12:22	5
Tetrachloroethene	ND		5.0	4.5	ug/L			12/08/23 12:22	5
Toluene	**49**		5.0	4.5	ug/L			12/08/23 12:22	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			12/08/23 12:22	5
trans-1,3-Dichloropropene	ND		25	1.0	ug/L			12/08/23 12:22	5
1,2,3-Trichlorobenzene	ND		5.0	4.5	ug/L			12/08/23 12:22	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			12/08/23 12:22	5
1,1,1-Trichloroethane	ND		5.0	0.90	ug/L			12/08/23 12:22	5
1,1,2-Trichloroethane	ND		25	1.1	ug/L			12/08/23 12:22	5
Trichloroethene	ND		5.0	0.75	ug/L			12/08/23 12:22	5
Trichlorofluoromethane	ND		5.0	2.6	ug/L			12/08/23 12:22	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			12/08/23 12:22	5
1,2,4-Trimethylbenzene	**10**		5.0	4.1	ug/L			12/08/23 12:22	5
1,3,5-Trimethylbenzene	**19**		5.0	2.8	ug/L			12/08/23 12:22	5
Vinyl acetate	ND		130	4.7	ug/L			12/08/23 12:22	5
Vinyl chloride	ND		5.0	2.5	ug/L			12/08/23 12:22	5
Xylenes, Total	**75**		50	8.0	ug/L			12/08/23 12:22	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 130*		*12/08/23 12:22*	*5*
Dibromofluoromethane	*101*		*75 - 126*		*12/08/23 12:22*	*5*
Toluene-d8 (Surr)	*92*		*64 - 132*		*12/08/23 12:22*	*5*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.38**		0.19	0.095	ug/L		12/08/23 15:23	12/14/23 01:10	1
Acenaphthylene	ND		0.19	0.042	ug/L		12/08/23 15:23	12/14/23 01:10	1
Anthracene	**0.23**		0.19	0.045	ug/L		12/08/23 15:23	12/14/23 01:10	1
Benzo[a]anthracene	**0.052**	**J**	0.19	0.033	ug/L		12/08/23 15:23	12/14/23 01:10	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		12/08/23 15:23	12/14/23 01:10	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		12/08/23 15:23	12/14/23 01:10	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		12/08/23 15:23	12/14/23 01:10	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		12/08/23 15:23	12/14/23 01:10	1
Chrysene	**0.055**	**J**	0.19	0.032	ug/L		12/08/23 15:23	12/14/23 01:10	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		12/08/23 15:23	12/14/23 01:10	1
Fluoranthene	**0.18**	**J**	0.19	0.033	ug/L		12/08/23 15:23	12/14/23 01:10	1
Fluorene	**0.31**		0.19	0.086	ug/L		12/08/23 15:23	12/14/23 01:10	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		12/08/23 15:23	12/14/23 01:10	1
Phenanthrene	**0.49**		0.19	0.087	ug/L		12/08/23 15:23	12/14/23 01:10	1
Pyrene	**0.24**		0.19	0.038	ug/L		12/08/23 15:23	12/14/23 01:10	1
1-Methylnaphthalene	**6.6**		0.19	0.077	ug/L		12/08/23 15:23	12/14/23 01:10	1
2-Methylnaphthalene	**7.9**		0.19	0.064	ug/L		12/08/23 15:23	12/14/23 01:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*40*		*18 - 147*	*12/08/23 15:23*	*12/14/23 01:10*	*1*
2-Fluorobiphenyl	*68*		*15 - 128*	*12/08/23 15:23*	*12/14/23 01:10*	*1*

Client Sample ID: P59-ROX-120423
Date Collected: 12/04/23 13:25
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-15
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*55*		*10 - 144*	*12/08/23 15:23*	*12/14/23 01:10*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		12/08/23 15:23	12/14/23 23:00	1
Benzenethiol	ND	*1	9.6	1.6	ug/L		12/08/23 15:23	12/14/23 23:00	1
Benzoic acid	ND		29	7.0	ug/L		12/08/23 15:23	12/14/23 23:00	1
Benzyl alcohol	ND		9.6	1.9	ug/L		12/08/23 15:23	12/14/23 23:00	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		12/08/23 15:23	12/14/23 23:00	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		12/08/23 15:23	12/14/23 23:00	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		12/08/23 15:23	12/14/23 23:00	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		12/08/23 15:23	12/14/23 23:00	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		12/08/23 15:23	12/14/23 23:00	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		12/08/23 15:23	12/14/23 23:00	1
4-Chloroaniline	ND		9.6	3.3	ug/L		12/08/23 15:23	12/14/23 23:00	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		12/08/23 15:23	12/14/23 23:00	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		12/08/23 15:23	12/14/23 23:00	1
2-Chlorophenol	ND		9.6	2.1	ug/L		12/08/23 15:23	12/14/23 23:00	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		12/08/23 15:23	12/14/23 23:00	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		12/08/23 15:23	12/14/23 23:00	1
Dibenzofuran	ND		9.6	0.16	ug/L		12/08/23 15:23	12/14/23 23:00	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		12/08/23 15:23	12/14/23 23:00	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		12/08/23 15:23	12/14/23 23:00	1
Diethyl phthalate	**0.49**	**J**	9.6	0.23	ug/L		12/08/23 15:23	12/14/23 23:00	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		12/08/23 15:23	12/14/23 23:00	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		12/08/23 15:23	12/14/23 23:00	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		12/08/23 15:23	12/14/23 23:00	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		12/08/23 15:23	12/14/23 23:00	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		12/08/23 15:23	12/14/23 23:00	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		12/08/23 15:23	12/14/23 23:00	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		12/08/23 15:23	12/14/23 23:00	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		12/08/23 15:23	12/14/23 23:00	1
1,4-Dioxane	ND		9.6	0.96	ug/L		12/08/23 15:23	12/14/23 23:00	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		12/08/23 15:23	12/14/23 23:00	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		12/08/23 15:23	12/14/23 23:00	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		12/08/23 15:23	12/14/23 23:00	1
Hexachloroethane	ND		9.6	4.0	ug/L		12/08/23 15:23	12/14/23 23:00	1
Indene	ND		9.6	0.96	ug/L		12/08/23 15:23	12/14/23 23:00	1
Isophorone	ND		9.6	0.13	ug/L		12/08/23 15:23	12/14/23 23:00	1
2-Methylphenol	ND		9.6	1.7	ug/L		12/08/23 15:23	12/14/23 23:00	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		12/08/23 15:23	12/14/23 23:00	1
2-Nitroaniline	ND		9.6	2.1	ug/L		12/08/23 15:23	12/14/23 23:00	1
3-Nitroaniline	ND		9.6	1.7	ug/L		12/08/23 15:23	12/14/23 23:00	1
4-Nitroaniline	ND		9.6	1.4	ug/L		12/08/23 15:23	12/14/23 23:00	1
Nitrobenzene	ND		9.6	0.13	ug/L		12/08/23 15:23	12/14/23 23:00	1
2-Nitrophenol	ND		9.6	5.0	ug/L		12/08/23 15:23	12/14/23 23:00	1
4-Nitrophenol	ND		9.6	2.0	ug/L		12/08/23 15:23	12/14/23 23:00	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		12/08/23 15:23	12/14/23 23:00	1

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

Job ID: 400-247720-1

Client Sample ID: P59-ROX-120423
Date Collected: 12/04/23 13:25
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-15
Matrix: Water

Method: SW846 8270E - 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		12/08/23 15:23	12/14/23 23:00	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		12/08/23 15:23	12/14/23 23:00	1
Pentachlorophenol	ND		19	1.3	ug/L		12/08/23 15:23	12/14/23 23:00	1
Phenol	**24**		9.6	2.5	ug/L		12/08/23 15:23	12/14/23 23:00	1
Pyridine	ND		9.6	3.1	ug/L		12/08/23 15:23	12/14/23 23:00	1
Quinoline	ND		9.6	4.3	ug/L		12/08/23 15:23	12/14/23 23:00	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		12/08/23 15:23	12/14/23 23:00	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		12/08/23 15:23	12/14/23 23:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*46 - 124*	*12/08/23 15:23*	*12/14/23 23:00*	*1*
2-Fluorophenol	*42*		*13 - 113*	*12/08/23 15:23*	*12/14/23 23:00*	*1*
Nitrobenzene-d5	*55*		*36 - 126*	*12/08/23 15:23*	*12/14/23 23:00*	*1*
Phenol-d5	*51*		*17 - 127*	*12/08/23 15:23*	*12/14/23 23:00*	*1*
Terphenyl-d14	*48*		*44 - 149*	*12/08/23 15:23*	*12/14/23 23:00*	*1*
2,4,6-Tribromophenol	*82*		*26 - 150*	*12/08/23 15:23*	*12/14/23 23:00*	*1*

Method: EPA 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		12/08/23 12:50	12/11/23 18:44	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/08/23 12:50	12/11/23 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*12/08/23 12:50*	*12/11/23 18:44*	*1*

Qualifiers

GC/MS 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/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
B	Compound was found in the blank and sample.
E	Result exceeded calibration range.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
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.

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 MONTHLY GW

Job ID: 400-247720-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-130)	(75-126)	(64-132)
400-247720-1	TB-ROX-120423-8260-A	105	100	90
400-247720-3	MW4-ROX-120423-EB	105	100	92
400-247720-4	MW4-ROX-120423	104	100	94
400-247720-4 MS	MW4-ROX-120423	104	99	93
400-247720-4 MSD	MW4-ROX-120423	100	101	92
400-247720-5	MW25-ROX-120423	106	103	92
400-247720-6	MW7-ROX-120423	103	102	91
400-247720-6 - DL	MW7-ROX-120423	103	107	85
400-247720-7	MW7-ROX-120423-DUP	104	102	90
400-247720-7 - DL	MW7-ROX-120423-DUP	104	106	87
400-247720-8	P93D-ROX-120423	101	101	90
400-247720-9	TB-ROX-120423-8260-B	102	100	92
400-247720-11	P57-ROX-120423	102	101	88
400-247720-12	P74-ROX-120423	102	101	92
400-247720-13	T12-ROX-120423	105	100	92
400-247720-14	T12-ROX-120423-DUP	102	101	89
400-247720-15	P59-ROX-120423	107	101	92
LCS 400-653443/1002	Lab Control Sample	102	99	91
LCS 400-653663/1002	Lab Control Sample	100	101	89
MB 400-653443/5	Method Blank	103	99	93
MB 400-653663/4	Method Blank	101	104	90

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - 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)
400-247720-3	MW4-ROX-120423-EB	70	46	61	53	82	69
400-247720-4	MW4-ROX-120423	75	48	61	55	76	78
400-247720-5	MW25-ROX-120423	77	0.9 S1-	58	9 S1-	87	64
400-247720-5 - RERA	MW25-ROX-120423	80	20	66	46	83	93
400-247720-6	MW7-ROX-120423	86	33	67	56	76	112
400-247720-7	MW7-ROX-120423-DUP	85	10 S1-	64	39	94	107
400-247720-7 - RERA	MW7-ROX-120423-DUP	70		59		67	
400-247720-8	P93D-ROX-120423	82	44	66	56	85	87
400-247720-11	P57-ROX-120423	78	47	65	59	77	94
400-247720-12	P74-ROX-120423	66	43	57	51	72	81
400-247720-13	T12-ROX-120423	69	39	60	53	70	81
400-247720-13 - RERA	T12-ROX-120423	62		57		62	
400-247720-14	T12-ROX-120423-DUP	76	46	63	59	63	99
400-247720-15	P59-ROX-120423	68	42	55	51	48	82
LCS 400-653399/19-A	Lab Control Sample	88	22	70	45	112	91
LCS 400-653399/2-A	Lab Control Sample	87	47	75	64	105	117
LCS 400-653593/2-A	Lab Control Sample	73	54	72	65	82	84

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	FBP (46-124)	2FP (13-113)	NBZ (36-126)	PHL (17-127)	TPHL (44-149)	TBP (26-150)
LCS 400-653593/4-A	Lab Control Sample	78	48	63	60	87	76
LCS 400-653912/2-A	Lab Control Sample	83	35	76	63	92	97
LCS 400-653912/6-A	Lab Control Sample	74	31	61	55	83	77
LCS 400-655129/2-A	Lab Control Sample	76		81		80	
LCSD 400-653399/20-A	Lab Control Sample Dup	84	43	65	61	103	93
LCSD 400-653399/3-A	Lab Control Sample Dup	67	20	56	44	88	91
LCSD 400-653593/3-A	Lab Control Sample Dup	67	45	68	61	76	79
LCSD 400-653593/5-A	Lab Control Sample Dup	79	59	67	66	92	79
LCSD 400-653912/3-A	Lab Control Sample Dup	71	14	62	32	99	71
LCSD 400-653912/7-A	Lab Control Sample Dup	79	36	62	57	87	82
LCSD 400-655129/3-A	Lab Control Sample Dup	64		70		68	
MB 400-653399/1-A	Method Blank	72	13	53	37	100	71
MB 400-653593/1-A	Method Blank	80	45	65	60	85	77
MB 400-653912/1-A	Method Blank	85	11 S1-	68	50	88	84
MB 400-655129/1-A	Method Blank	78		66		86	

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	TPHL (18-147)	FBP (15-128)	NBZ (10-144)
400-247720-3	MW4-ROX-120423-EB	68	67	62
400-247720-4	MW4-ROX-120423	61	67	63
400-247720-5	MW25-ROX-120423	81	64	72
400-247720-5 - RERA	MW25-ROX-120423	67	72	72
400-247720-6	MW7-ROX-120423	63	62	71
400-247720-7	MW7-ROX-120423-DUP	79	63	77
400-247720-8	P93D-ROX-120423	69	72	71
400-247720-11	P57-ROX-120423	58	49	65
400-247720-12	P74-ROX-120423	56	55	55
400-247720-13	T12-ROX-120423	58	58	65
400-247720-14	T12-ROX-120423-DUP	49	63	65
400-247720-15	P59-ROX-120423	40	68	55
LCS 400-653399/2-A	Lab Control Sample	76	76	84
LCS 400-653593/2-A	Lab Control Sample	65	70	70
LCSD 400-653399/3-A	Lab Control Sample Dup	58	57	72
LCSD 400-653593/3-A	Lab Control Sample Dup	62	67	72
MB 400-653399/1-A	Method Blank	92	59	75
MB 400-653593/1-A	Method Blank	74	75	72

Surrogate Legend

TPHL = Terphenyl-d14

Surrogate Summary

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

Job ID: 400-247720-1

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
		BFB1						
Lab Sample ID	Client Sample ID	(51-149)						
400-247720-2	TB-ROX-120423-8011-A	107						
400-247720-3	MW4-ROX-120423-EB	115						
400-247720-4	MW4-ROX-120423	114						
400-247720-5	MW25-ROX-120423	103						
400-247720-6	MW7-ROX-120423	101						
400-247720-7	MW7-ROX-120423-DUP	101						
400-247720-8	P93D-ROX-120423	114						
400-247720-10	TB-ROX-120423-8011-B	117						
400-247720-11	P57-ROX-120423	88						
400-247720-12	P74-ROX-120423	107						
400-247720-13	T12-ROX-120423	71						
400-247720-14	T12-ROX-120423-DUP	100						
400-247720-15	P59-ROX-120423	94						
LCS 400-653514/2-A	Lab Control Sample	88						
LCS 400-653553/2-A	Lab Control Sample	89						
LCSD 400-653514/3-A	Lab Control Sample Dup	98						
LCSD 400-653553/3-A	Lab Control Sample Dup	110						
MB 400-653514/1-A	Method Blank	110						
MB 400-653553/1-A	Method Blank	94						

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-247720-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

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

Job ID: 400-247720-1

Client Sample ID: TB-ROX-120423-8260-A
Lab Sample ID: 400-247720-1
Date Collected: 12/04/23 12:00
Matrix: Water
Date Received: 12/05/23 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653443	12/08/23 14:43	WPD	EET PEN

Client Sample ID: TB-ROX-120423-8011-A
Lab Sample ID: 400-247720-2
Date Collected: 12/04/23 12:00
Matrix: Water
Date Received: 12/05/23 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.6 mL	35 mL	653514	12/08/23 10:59	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 13:12	PG	EET PEN

Client Sample ID: MW4-ROX-120423-EB
Lab Sample ID: 400-247720-3
Date Collected: 12/04/23 08:40
Matrix: Water
Date Received: 12/05/23 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653443	12/08/23 10:49	WPD	EET PEN
Total/NA	Prep	3520C			249.8 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654186	12/13/23 20:53	S1B	EET PEN
Total/NA	Prep	3520C			249.8 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	654224	12/13/23 22:48	KJA	EET PEN
Total/NA	Prep	8011			34.6 mL	35 mL	653514	12/08/23 10:59	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 13:33	PG	EET PEN

Client Sample ID: MW4-ROX-120423
Lab Sample ID: 400-247720-4
Date Collected: 12/04/23 09:40
Matrix: Water
Date Received: 12/05/23 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653443	12/08/23 11:13	WPD	EET PEN
Total/NA	Prep	3520C			245.8 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654186	12/13/23 21:18	S1B	EET PEN
Total/NA	Prep	3520C			245.8 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	654224	12/13/23 23:08	KJA	EET PEN
Total/NA	Prep	8011			35 mL	35 mL	653514	12/08/23 10:59	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 13:54	PG	EET PEN

Client Sample ID: MW25-ROX-120423
Lab Sample ID: 400-247720-5
Date Collected: 12/04/23 10:25
Matrix: Water
Date Received: 12/05/23 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653443	12/08/23 11:35	WPD	EET PEN
Total/NA	Prep	3520C	RERA		248.2 mL	1 mL	653912	12/13/23 09:48	BKL	EET PEN
Total/NA	Analysis	8270E	RERA	1	0.4 mL	0.4 mL	654340	12/14/23 21:43	S1B	EET PEN

Client Sample ID: MW25-ROX-120423

Lab Sample ID: 400-247720-5

Date Collected: 12/04/23 10:25

Matrix: Water

Date Received: 12/05/23 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			244.4 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 21:20	S1B	EET PEN
Total/NA	Prep	3520C			244.4 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653755	12/11/23 20:20	S1B	EET PEN
Total/NA	Prep	3520C	RERA		248.2 mL	1 mL	653912	12/13/23 09:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	654319	12/14/23 17:08	S1B	EET PEN
Total/NA	Prep	8011			35.7 mL	35 mL	653514	12/08/23 10:59	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 14:15	PG	EET PEN

Client Sample ID: MW7-ROX-120423

Lab Sample ID: 400-247720-6

Date Collected: 12/04/23 11:15

Matrix: Water

Date Received: 12/05/23 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2000	5 mL	5 mL	653443	12/08/23 17:32	WPD	EET PEN
Total/NA	Analysis	8260D	DL	5000	5 mL	5 mL	653663	12/11/23 13:55	WPD	EET PEN
Total/NA	Prep	3520C			244.8 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 21:45	S1B	EET PEN
Total/NA	Prep	3520C			244.8 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653755	12/11/23 20:40	S1B	EET PEN
Total/NA	Prep	8011			34.8 mL	35 mL	653514	12/08/23 10:59	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 14:35	PG	EET PEN

Client Sample ID: MW7-ROX-120423-DUP

Lab Sample ID: 400-247720-7

Date Collected: 12/04/23 11:15

Matrix: Water

Date Received: 12/05/23 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2000	5 mL	5 mL	653443	12/08/23 17:57	WPD	EET PEN
Total/NA	Analysis	8260D	DL	5000	5 mL	5 mL	653663	12/11/23 14:20	WPD	EET PEN
Total/NA	Prep	3520C	RERA		231.6 mL	1 mL	653912	12/13/23 09:48	BKL	EET PEN
Total/NA	Analysis	8270E	RERA	1	0.4 mL	0.4 mL	654340	12/14/23 22:09	S1B	EET PEN
Total/NA	Prep	3520C			233.6 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 22:10	S1B	EET PEN
Total/NA	Prep	3520C			233.6 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653755	12/11/23 21:00	S1B	EET PEN
Total/NA	Prep	8011			34.9 mL	35 mL	653514	12/08/23 10:59	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 14:56	PG	EET PEN

Client Sample ID: P93D-ROX-120423

Lab Sample ID: 400-247720-8

Date Collected: 12/04/23 13:40

Matrix: Water

Date Received: 12/05/23 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653443	12/08/23 15:56	WPD	EET PEN

Client Sample ID: P93D-ROX-120423

Lab Sample ID: 400-247720-8
Matrix: Water
Date Collected: 12/04/23 13:40
Date Received: 12/05/23 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			243.4 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654186	12/13/23 21:43	S1B	EET PEN
Total/NA	Prep	3520C			243.4 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	654224	12/13/23 23:29	KJA	EET PEN
Total/NA	Prep	8011			35.3 mL	35 mL	653514	12/08/23 10:59	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 15:17	PG	EET PEN

Client Sample ID: TB-ROX-120423-8260-B

Lab Sample ID: 400-247720-9
Matrix: Water
Date Collected: 12/04/23 12:00
Date Received: 12/05/23 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653443	12/08/23 15:07	WPD	EET PEN

Client Sample ID: TB-ROX-120423-8011-B

Lab Sample ID: 400-247720-10
Matrix: Water
Date Collected: 12/04/23 12:00
Date Received: 12/05/23 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			32.9 mL	35 mL	653514	12/08/23 10:59	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 15:58	PG	EET PEN

Client Sample ID: P57-ROX-120423

Lab Sample ID: 400-247720-11
Matrix: Water
Date Collected: 12/04/23 09:30
Date Received: 12/05/23 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653443	12/08/23 16:19	WPD	EET PEN
Total/NA	Prep	3520C			254.2 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654186	12/13/23 22:09	S1B	EET PEN
Total/NA	Prep	3520C			254.2 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	654224	12/13/23 23:49	KJA	EET PEN
Total/NA	Prep	8011			35.1 mL	35 mL	653553	12/08/23 12:50	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 17:21	PG	EET PEN

Client Sample ID: P74-ROX-120423

Lab Sample ID: 400-247720-12
Matrix: Water
Date Collected: 12/04/23 11:15
Date Received: 12/05/23 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		5	5 mL	5 mL	653443	12/08/23 12:00	WPD	EET PEN
Total/NA	Prep	3520C			255.2 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654186	12/13/23 22:34	S1B	EET PEN
Total/NA	Prep	3520C			255.2 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	654224	12/14/23 00:09	KJA	EET PEN

Lab Chronicle

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

Job ID: 400-247720-1

Client Sample ID: P74-ROX-120423
Date Collected: 12/04/23 11:15
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-12
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			34.8 mL	35 mL	653553	12/08/23 12:50	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 17:42	PG	EET PEN

Client Sample ID: T12-ROX-120423
Date Collected: 12/04/23 12:20
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-13
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	8260D		10	5 mL	5 mL	653443	12/08/23 16:43	WPD	EET PEN
Total/NA	Prep	3520C			254.2 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654186	12/13/23 22:59	S1B	EET PEN
Total/NA	Prep	3520C	RERA		252.8 mL	1 mL	655129	12/20/23 10:21	BKL	EET PEN
Total/NA	Analysis	8270E	RERA	1	0.4 mL	0.4 mL	655351	12/21/23 17:43	S1B	EET PEN
Total/NA	Prep	3520C			254.2 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	654224	12/14/23 00:29	KJA	EET PEN
Total/NA	Prep	8011			34.5 mL	35 mL	653553	12/08/23 12:50	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 18:03	PG	EET PEN

Client Sample ID: T12-ROX-120423-DUP
Date Collected: 12/04/23 12:20
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-14
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	8260D		10	5 mL	5 mL	653443	12/08/23 17:08	WPD	EET PEN
Total/NA	Prep	3520C			252.6 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654340	12/14/23 22:34	S1B	EET PEN
Total/NA	Prep	3520C			252.6 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	654224	12/14/23 00:49	KJA	EET PEN
Total/NA	Prep	8011			35.1 mL	35 mL	653553	12/08/23 12:50	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 18:24	PG	EET PEN

Client Sample ID: P59-ROX-120423
Date Collected: 12/04/23 13:25
Date Received: 12/05/23 09:22

Lab Sample ID: 400-247720-15
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	8260D		5	5 mL	5 mL	653443	12/08/23 12:22	WPD	EET PEN
Total/NA	Prep	3520C			259.8 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654340	12/14/23 23:00	S1B	EET PEN
Total/NA	Prep	3520C			259.8 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	654224	12/14/23 01:10	KJA	EET PEN
Total/NA	Prep	8011			34.3 mL	35 mL	653553	12/08/23 12:50	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 18:44	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-653399/1-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	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 16:45	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	653755	12/11/23 15:57	S1B	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-653443/5
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	8260D		1	5 mL	5 mL	653443	12/08/23 08:49	WPD	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-653514/1-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	653514	12/08/23 10:59	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 12:10	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-653553/1-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	653553	12/08/23 12:50	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 16:19	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-653593/1-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	653593	12/08/23 15:22	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654186	12/13/23 18:46	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	653593	12/08/23 15:22	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	654224	12/13/23 21:47	KJA	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-653663/4
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	8260D		1	5 mL	5 mL	653663	12/11/23 09:32	WPD	EET PEN

Lab Chronicle

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

Job ID: 400-247720-1

Client Sample ID: Method Blank — Lab Sample ID: MB 400-653912/1-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	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654340	12/14/23 16:15	S1B	EET PEN

Client Sample ID: Method Blank — Lab Sample ID: MB 400-655129/1-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	655129	12/20/23 10:21	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	655351	12/21/23 16:24	S1B	EET PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 400-653399/19-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	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 18:01	S1B	EET PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 400-653399/2-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	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 17:10	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	653755	12/11/23 16:17	S1B	EET PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 400-653443/1002

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	8260D		1	5 mL	5 mL	653443	12/08/23 08:06	WPD	EET PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 400-653514/2-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	653514	12/08/23 10:59	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 12:31	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653553/2-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	653553	12/08/23 12:50	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 16:40	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653593/2-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	653593	12/08/23 15:22	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654186	12/13/23 19:11	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	653593	12/08/23 15:22	STC	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	654224	12/13/23 22:08	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653593/4-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	653593	12/08/23 15:22	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654186	12/13/23 20:02	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653663/1002
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	8260D		1	5 mL	5 mL	653663	12/11/23 08:48	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653912/2-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	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654340	12/14/23 16:44	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653912/6-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	653912	12/12/23 10:44	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654340	12/14/23 18:32	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-247720-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-655129/2-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	655129	12/20/23 10:21	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	655351	12/21/23 16:50	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653399/20-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	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 18:25	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653399/3-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	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	653805	12/11/23 17:36	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	653399	12/07/23 14:39	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	653755	12/11/23 16:37	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653514/3-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	653514	12/08/23 10:59	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 12:52	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653553/3-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	653553	12/08/23 12:50	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 17:01	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653593/3-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	653593	12/08/23 15:22	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654186	12/13/23 19:36	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	653593	12/08/23 15:22	STC	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	654224	12/13/23 22:28	KJA	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653593/5-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	653593	12/08/23 15:22	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654186	12/13/23 20:28	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653912/3-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	653912	12/12/23 10:43	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654464	12/15/23 14:50	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653912/7-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	653912	12/12/23 10:44	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654340	12/14/23 18:58	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-655129/3-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	655129	12/20/23 10:21	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	655351	12/21/23 17:16	S1B	EET PEN

Client Sample ID: MW4-ROX-120423
Lab Sample ID: 400-247720-4 MS
Date Collected: 12/04/23 09:40
Matrix: Water
Date Received: 12/05/23 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653443	12/08/23 13:33	WPD	EET PEN

Client Sample ID: MW4-ROX-120423
Lab Sample ID: 400-247720-4 MSD
Date Collected: 12/04/23 09:40
Matrix: Water
Date Received: 12/05/23 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653443	12/08/23 13:57	WPD	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 653443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247720-1	TB-ROX-120423-8260-A	Total/NA	Water	8260D	
400-247720-3	MW4-ROX-120423-EB	Total/NA	Water	8260D	
400-247720-4	MW4-ROX-120423	Total/NA	Water	8260D	
400-247720-5	MW25-ROX-120423	Total/NA	Water	8260D	
400-247720-6	MW7-ROX-120423	Total/NA	Water	8260D	
400-247720-7	MW7-ROX-120423-DUP	Total/NA	Water	8260D	
400-247720-8	P93D-ROX-120423	Total/NA	Water	8260D	
400-247720-9	TB-ROX-120423-8260-B	Total/NA	Water	8260D	
400-247720-11	P57-ROX-120423	Total/NA	Water	8260D	
400-247720-12	P74-ROX-120423	Total/NA	Water	8260D	
400-247720-13	T12-ROX-120423	Total/NA	Water	8260D	
400-247720-14	T12-ROX-120423-DUP	Total/NA	Water	8260D	
400-247720-15	P59-ROX-120423	Total/NA	Water	8260D	
MB 400-653443/5	Method Blank	Total/NA	Water	8260D	
LCS 400-653443/1002	Lab Control Sample	Total/NA	Water	8260D	
400-247720-4 MS	MW4-ROX-120423	Total/NA	Water	8260D	
400-247720-4 MSD	MW4-ROX-120423	Total/NA	Water	8260D	

Analysis Batch: 653663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247720-6 - DL	MW7-ROX-120423	Total/NA	Water	8260D	
400-247720-7 - DL	MW7-ROX-120423-DUP	Total/NA	Water	8260D	
MB 400-653663/4	Method Blank	Total/NA	Water	8260D	
LCS 400-653663/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 653399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247720-5	MW25-ROX-120423	Total/NA	Water	3520C	
400-247720-6	MW7-ROX-120423	Total/NA	Water	3520C	
400-247720-7	MW7-ROX-120423-DUP	Total/NA	Water	3520C	
MB 400-653399/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-653399/19-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-653399/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-653399/20-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-653399/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Prep Batch: 653593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247720-3	MW4-ROX-120423-EB	Total/NA	Water	3520C	
400-247720-4	MW4-ROX-120423	Total/NA	Water	3520C	
400-247720-8	P93D-ROX-120423	Total/NA	Water	3520C	
400-247720-11	P57-ROX-120423	Total/NA	Water	3520C	
400-247720-12	P74-ROX-120423	Total/NA	Water	3520C	
400-247720-13	T12-ROX-120423	Total/NA	Water	3520C	
400-247720-14	T12-ROX-120423-DUP	Total/NA	Water	3520C	
400-247720-15	P59-ROX-120423	Total/NA	Water	3520C	
MB 400-653593/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-653593/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-653593/4-A	Lab Control Sample	Total/NA	Water	3520C	

GC/MS Semi VOA (Continued)

Prep Batch: 653593 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 400-653593/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-653593/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 653755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247720-5	MW25-ROX-120423	Total/NA	Water	8270E SIM	653399
400-247720-6	MW7-ROX-120423	Total/NA	Water	8270E SIM	653399
400-247720-7	MW7-ROX-120423-DUP	Total/NA	Water	8270E SIM	653399
MB 400-653399/1-A	Method Blank	Total/NA	Water	8270E SIM	653399
LCS 400-653399/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	653399
LCSD 400-653399/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	653399

Analysis Batch: 653805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247720-5	MW25-ROX-120423	Total/NA	Water	8270E	653399
400-247720-6	MW7-ROX-120423	Total/NA	Water	8270E	653399
400-247720-7	MW7-ROX-120423-DUP	Total/NA	Water	8270E	653399
MB 400-653399/1-A	Method Blank	Total/NA	Water	8270E	653399
LCS 400-653399/19-A	Lab Control Sample	Total/NA	Water	8270E	653399
LCS 400-653399/2-A	Lab Control Sample	Total/NA	Water	8270E	653399
LCSD 400-653399/20-A	Lab Control Sample Dup	Total/NA	Water	8270E	653399
LCSD 400-653399/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	653399

Prep Batch: 653912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247720-5 - RERA	MW25-ROX-120423	Total/NA	Water	3520C	
400-247720-7 - RERA	MW7-ROX-120423-DUP	Total/NA	Water	3520C	
MB 400-653912/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-653912/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-653912/6-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-653912/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-653912/7-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 654186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247720-3	MW4-ROX-120423-EB	Total/NA	Water	8270E	653593
400-247720-4	MW4-ROX-120423	Total/NA	Water	8270E	653593
400-247720-8	P93D-ROX-120423	Total/NA	Water	8270E	653593
400-247720-11	P57-ROX-120423	Total/NA	Water	8270E	653593
400-247720-12	P74-ROX-120423	Total/NA	Water	8270E	653593
400-247720-13	T12-ROX-120423	Total/NA	Water	8270E	653593
MB 400-653593/1-A	Method Blank	Total/NA	Water	8270E	653593
LCS 400-653593/2-A	Lab Control Sample	Total/NA	Water	8270E	653593
LCS 400-653593/4-A	Lab Control Sample	Total/NA	Water	8270E	653593
LCSD 400-653593/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	653593
LCSD 400-653593/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	653593

Analysis Batch: 654224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247720-3	MW4-ROX-120423-EB	Total/NA	Water	8270E SIM	653593
400-247720-4	MW4-ROX-120423	Total/NA	Water	8270E SIM	653593

GC/MS Semi VOA (Continued)

Analysis Batch: 654224 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247720-8	P93D-ROX-120423	Total/NA	Water	8270E SIM	653593
400-247720-11	P57-ROX-120423	Total/NA	Water	8270E SIM	653593
400-247720-12	P74-ROX-120423	Total/NA	Water	8270E SIM	653593
400-247720-13	T12-ROX-120423	Total/NA	Water	8270E SIM	653593
400-247720-14	T12-ROX-120423-DUP	Total/NA	Water	8270E SIM	653593
400-247720-15	P59-ROX-120423	Total/NA	Water	8270E SIM	653593
MB 400-653593/1-A	Method Blank	Total/NA	Water	8270E SIM	653593
LCS 400-653593/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	653593
LCSD 400-653593/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	653593

Analysis Batch: 654319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247720-5 - RERA	MW25-ROX-120423	Total/NA	Water	8270E SIM	653912

Analysis Batch: 654340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247720-5 - RERA	MW25-ROX-120423	Total/NA	Water	8270E	653912
400-247720-7 - RERA	MW7-ROX-120423-DUP	Total/NA	Water	8270E	653912
400-247720-14	T12-ROX-120423-DUP	Total/NA	Water	8270E	653593
400-247720-15	P59-ROX-120423	Total/NA	Water	8270E	653593
MB 400-653912/1-A	Method Blank	Total/NA	Water	8270E	653912
LCS 400-653912/2-A	Lab Control Sample	Total/NA	Water	8270E	653912
LCS 400-653912/6-A	Lab Control Sample	Total/NA	Water	8270E	653912
LCSD 400-653912/7-A	Lab Control Sample Dup	Total/NA	Water	8270E	653912

Analysis Batch: 654464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 400-653912/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	653912

Prep Batch: 655129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247720-13 - RERA	T12-ROX-120423	Total/NA	Water	3520C	
MB 400-655129/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-655129/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-655129/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 655351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247720-13 - RERA	T12-ROX-120423	Total/NA	Water	8270E	655129
MB 400-655129/1-A	Method Blank	Total/NA	Water	8270E	655129
LCS 400-655129/2-A	Lab Control Sample	Total/NA	Water	8270E	655129
LCSD 400-655129/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	655129

GC Semi VOA

Prep Batch: 653514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247720-2	TB-ROX-120423-8011-A	Total/NA	Water	8011	
400-247720-3	MW4-ROX-120423-EB	Total/NA	Water	8011	
400-247720-4	MW4-ROX-120423	Total/NA	Water	8011	
400-247720-5	MW25-ROX-120423	Total/NA	Water	8011	

GC Semi VOA (Continued)

Prep Batch: 653514 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247720-6	MW7-ROX-120423	Total/NA	Water	8011	
400-247720-7	MW7-ROX-120423-DUP	Total/NA	Water	8011	
400-247720-8	P93D-ROX-120423	Total/NA	Water	8011	
400-247720-10	TB-ROX-120423-8011-B	Total/NA	Water	8011	
MB 400-653514/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-653514/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-653514/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Prep Batch: 653553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247720-11	P57-ROX-120423	Total/NA	Water	8011	
400-247720-12	P74-ROX-120423	Total/NA	Water	8011	
400-247720-13	T12-ROX-120423	Total/NA	Water	8011	
400-247720-14	T12-ROX-120423-DUP	Total/NA	Water	8011	
400-247720-15	P59-ROX-120423	Total/NA	Water	8011	
MB 400-653553/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-653553/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-653553/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 653676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247720-2	TB-ROX-120423-8011-A	Total/NA	Water	8011	653514
400-247720-3	MW4-ROX-120423-EB	Total/NA	Water	8011	653514
400-247720-4	MW4-ROX-120423	Total/NA	Water	8011	653514
400-247720-5	MW25-ROX-120423	Total/NA	Water	8011	653514
400-247720-6	MW7-ROX-120423	Total/NA	Water	8011	653514
400-247720-7	MW7-ROX-120423-DUP	Total/NA	Water	8011	653514
400-247720-8	P93D-ROX-120423	Total/NA	Water	8011	653514
400-247720-10	TB-ROX-120423-8011-B	Total/NA	Water	8011	653514
400-247720-11	P57-ROX-120423	Total/NA	Water	8011	653553
400-247720-12	P74-ROX-120423	Total/NA	Water	8011	653553
400-247720-13	T12-ROX-120423	Total/NA	Water	8011	653553
400-247720-14	T12-ROX-120423-DUP	Total/NA	Water	8011	653553
400-247720-15	P59-ROX-120423	Total/NA	Water	8011	653553
MB 400-653514/1-A	Method Blank	Total/NA	Water	8011	653514
MB 400-653553/1-A	Method Blank	Total/NA	Water	8011	653553
LCS 400-653514/2-A	Lab Control Sample	Total/NA	Water	8011	653514
LCS 400-653553/2-A	Lab Control Sample	Total/NA	Water	8011	653553
LCSD 400-653514/3-A	Lab Control Sample Dup	Total/NA	Water	8011	653514
LCSD 400-653553/3-A	Lab Control Sample Dup	Total/NA	Water	8011	653553

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-653443/5
Matrix: Water
Analysis Batch: 653443

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			12/08/23 08:49	1
Acrolein	ND		20	3.3	ug/L			12/08/23 08:49	1
Acrylonitrile	ND		10	2.8	ug/L			12/08/23 08:49	1
Benzene	ND		1.0	0.50	ug/L			12/08/23 08:49	1
Bromobenzene	ND		1.0	0.54	ug/L			12/08/23 08:49	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/08/23 08:49	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/08/23 08:49	1
Bromoform	ND		5.0	0.25	ug/L			12/08/23 08:49	1
Bromomethane	ND		1.0	0.98	ug/L			12/08/23 08:49	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/08/23 08:49	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/08/23 08:49	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/08/23 08:49	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/08/23 08:49	1
Chloroethane	ND		1.0	0.76	ug/L			12/08/23 08:49	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/08/23 08:49	1
Chloroform	ND		1.0	0.90	ug/L			12/08/23 08:49	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/08/23 08:49	1
Chloromethane	ND		1.0	0.90	ug/L			12/08/23 08:49	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/08/23 08:49	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/08/23 08:49	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/08/23 08:49	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/08/23 08:49	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/08/23 08:49	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/08/23 08:49	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/08/23 08:49	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/08/23 08:49	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/08/23 08:49	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/08/23 08:49	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 08:49	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 08:49	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 08:49	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/08/23 08:49	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/08/23 08:49	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/08/23 08:49	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/08/23 08:49	1
2-Hexanone	ND		25	1.4	ug/L			12/08/23 08:49	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/08/23 08:49	1
Methylene bromide	ND		5.0	0.22	ug/L			12/08/23 08:49	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/08/23 08:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/08/23 08:49	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/08/23 08:49	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/08/23 08:49	1
Naphthalene	ND		5.0	3.0	ug/L			12/08/23 08:49	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/08/23 08:49	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/08/23 08:49	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/08/23 08:49	1
o-Xylene	ND		5.0	0.60	ug/L			12/08/23 08:49	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/08/23 08:49	1

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

Lab Sample ID: MB 400-653443/5
Matrix: Water
Analysis Batch: 653443

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			12/08/23 08:49	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/08/23 08:49	1
Styrene	ND		1.0	1.0	ug/L			12/08/23 08:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/08/23 08:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/08/23 08:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/08/23 08:49	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/08/23 08:49	1
Toluene	ND		1.0	0.90	ug/L			12/08/23 08:49	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/08/23 08:49	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/08/23 08:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/08/23 08:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/08/23 08:49	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/08/23 08:49	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/08/23 08:49	1
Trichloroethene	ND		1.0	0.15	ug/L			12/08/23 08:49	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/08/23 08:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/08/23 08:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/08/23 08:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/08/23 08:49	1
Vinyl acetate	ND		25	0.93	ug/L			12/08/23 08:49	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/08/23 08:49	1
Xylenes, Total	ND		10	1.6	ug/L			12/08/23 08:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*12/08/23 08:49*	*1*
Dibromofluoromethane	*99*		*75 - 126*		*12/08/23 08:49*	*1*
Toluene-d8 (Surr)	*93*		*64 - 132*		*12/08/23 08:49*	*1*

Lab Sample ID: LCS 400-653443/1002
Matrix: Water
Analysis Batch: 653443

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	256		ug/L		128	43 - 160
Acrolein	250	228		ug/L		91	38 - 160
Acrylonitrile	500	562		ug/L		112	64 - 142
Benzene	50.0	51.3		ug/L		103	70 - 130
Bromobenzene	50.0	44.5		ug/L		89	70 - 132
Bromochloromethane	50.0	49.0		ug/L		98	70 - 130
Bromodichloromethane	50.0	53.3		ug/L		107	67 - 133
Bromoform	50.0	52.2		ug/L		104	57 - 140
Bromomethane	25.0	23.7		ug/L		95	10 - 160
2-Butanone (MEK)	200	271		ug/L		136	61 - 145
Carbon disulfide	50.0	45.5		ug/L		91	61 - 137
Carbon tetrachloride	50.0	53.1		ug/L		106	61 - 137
Chlorobenzene	50.0	44.8		ug/L		90	70 - 130
Chloroethane	25.0	21.6		ug/L		86	55 - 141
2-Chloroethyl vinyl ether	25.0	23.6		ug/L		95	10 - 160

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

Lab Sample ID: LCS 400-653443/1002
Matrix: Water
Analysis Batch: 653443

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	49.7		ug/L		99	69 - 130
1-Chlorohexane	50.0	47.8		ug/L		96	69 - 130
Chloromethane	25.0	25.9		ug/L		104	58 - 137
cis-1,2-Dichloroethene	50.0	52.0		ug/L		104	68 - 130
cis-1,3-Dichloropropene	50.0	54.5		ug/L		109	69 - 132
Dibromochloromethane	50.0	48.4		ug/L		97	67 - 135
1,2-Dichlorobenzene	50.0	43.7		ug/L		87	67 - 130
1,3-Dichlorobenzene	50.0	44.8		ug/L		90	70 - 130
1,4-Dichlorobenzene	50.0	44.8		ug/L		90	70 - 130
Dichlorodifluoromethane	25.0	17.7		ug/L		71	41 - 146
1,1-Dichloroethane	50.0	50.5		ug/L		101	70 - 130
1,2-Dichloroethane	50.0	48.4		ug/L		97	69 - 130
1,1-Dichloroethene	50.0	48.0		ug/L		96	63 - 134
1,2-Dichloropropane	50.0	53.6		ug/L		107	70 - 130
1,3-Dichloropropane	50.0	46.3		ug/L		93	70 - 130
2,2-Dichloropropane	50.0	50.4		ug/L		101	52 - 135
1,1-Dichloropropene	50.0	51.0		ug/L		102	70 - 130
Ethylbenzene	50.0	46.0		ug/L		92	70 - 130
Ethyl methacrylate	50.0	46.5		ug/L		93	68 - 130
Hexachlorobutadiene	50.0	56.9		ug/L		114	53 - 140
2-Hexanone	200	219		ug/L		109	65 - 137
Isopropylbenzene	50.0	45.8		ug/L		92	70 - 130
Methylene bromide	50.0	50.1		ug/L		100	70 - 130
Methylene Chloride	50.0	51.5		ug/L		103	66 - 135
4-Methyl-2-pentanone (MIBK)	200	210		ug/L		105	69 - 138
Methyl tert-butyl ether	50.0	51.0		ug/L		102	66 - 130
m-Xylene & p-Xylene	50.0	46.2		ug/L		92	70 - 130
Naphthalene	50.0	42.9		ug/L		86	47 - 149
n-Butylbenzene	50.0	44.5		ug/L		89	67 - 130
N-Propylbenzene	50.0	44.7		ug/L		89	70 - 130
o-Chlorotoluene	50.0	46.1		ug/L		92	70 - 130
o-Xylene	50.0	46.1		ug/L		92	70 - 130
p-Chlorotoluene	50.0	44.7		ug/L		89	70 - 130
p-Isopropyltoluene	50.0	44.9		ug/L		90	65 - 130
sec-Butylbenzene	50.0	44.9		ug/L		90	66 - 130
Styrene	50.0	43.4		ug/L		87	70 - 130
tert-Butylbenzene	50.0	50.0		ug/L		100	64 - 139
1,1,1,2-Tetrachloroethane	50.0	48.4		ug/L		97	67 - 131
1,1,2,2-Tetrachloroethane	50.0	44.1		ug/L		88	70 - 131
Tetrachloroethene	50.0	45.5		ug/L		91	65 - 130
Toluene	50.0	45.7		ug/L		91	70 - 130
trans-1,2-Dichloroethene	50.0	49.5		ug/L		99	70 - 130
trans-1,3-Dichloropropene	50.0	46.3		ug/L		93	63 - 130
1,2,3-Trichlorobenzene	50.0	47.2		ug/L		94	60 - 138
1,2,4-Trichlorobenzene	50.0	46.6		ug/L		93	60 - 140
1,1,1-Trichloroethane	50.0	50.9		ug/L		102	68 - 130
1,1,2-Trichloroethane	50.0	46.4		ug/L		93	70 - 130
Trichloroethene	50.0	51.3		ug/L		103	70 - 130
Trichlorofluoromethane	25.0	24.0		ug/L		96	65 - 138

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

Lab Sample ID: LCS 400-653443/1002
Matrix: Water
Analysis Batch: 653443

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	44.0		ug/L		88	70 - 130
1,2,4-Trimethylbenzene	50.0	44.3		ug/L		89	70 - 130
1,3,5-Trimethylbenzene	50.0	44.7		ug/L		89	69 - 130
Vinyl acetate	50.0	52.1		ug/L		104	26 - 160
Vinyl chloride	25.0	24.6		ug/L		99	59 - 136
Xylenes, Total	100	92.3		ug/L		92	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*72 - 130*
Dibromofluoromethane	*99*		*75 - 126*
Toluene-d8 (Surr)	*91*		*64 - 132*

Lab Sample ID: 400-247720-4 MS
Matrix: Water
Analysis Batch: 653443

Client Sample ID: MW4-ROX-120423
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND		200	106		ug/L		53	43 - 150
Acrolein	ND		250	168		ug/L		67	38 - 150
Acrylonitrile	ND		500	522		ug/L		104	62 - 149
Benzene	ND		50.0	45.6		ug/L		91	56 - 142
Bromobenzene	ND		50.0	32.6		ug/L		65	59 - 136
Bromochloromethane	ND		50.0	44.7		ug/L		89	64 - 140
Bromodichloromethane	ND		50.0	46.0		ug/L		92	59 - 143
Bromoform	ND		50.0	43.6		ug/L		87	50 - 140
Bromomethane	ND		25.0	17.0		ug/L		68	10 - 150
2-Butanone (MEK)	ND		200	135		ug/L		67	55 - 150
Carbon disulfide	ND		50.0	40.8		ug/L		82	48 - 150
Carbon tetrachloride	ND		50.0	46.5		ug/L		93	55 - 145
Chlorobenzene	ND		50.0	34.3		ug/L		69	64 - 130
Chloroethane	ND		25.0	18.4		ug/L		74	50 - 150
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	44.2		ug/L		88	60 - 141
1-Chlorohexane	ND		50.0	34.0		ug/L		68	56 - 136
Chloromethane	ND		25.0	20.8		ug/L		83	49 - 148
cis-1,2-Dichloroethene	ND		50.0	45.9		ug/L		92	59 - 143
cis-1,3-Dichloropropene	ND		50.0	46.7		ug/L		93	57 - 140
Dibromochloromethane	ND		50.0	40.0		ug/L		80	56 - 143
1,2-Dichlorobenzene	ND		50.0	30.1		ug/L		60	52 - 137
1,3-Dichlorobenzene	ND		50.0	29.8		ug/L		60	54 - 135
1,4-Dichlorobenzene	ND		50.0	29.2		ug/L		58	53 - 135
Dichlorodifluoromethane	ND		25.0	15.1		ug/L		60	16 - 150
1,1-Dichloroethane	ND		50.0	47.7		ug/L		95	61 - 144
1,2-Dichloroethane	ND		50.0	43.8		ug/L		88	60 - 141
1,1-Dichloroethene	ND		50.0	43.9		ug/L		88	54 - 147
1,2-Dichloropropane	ND		50.0	48.4		ug/L		97	66 - 137
1,3-Dichloropropane	ND		50.0	39.5		ug/L		79	66 - 133
2,2-Dichloropropane	ND		50.0	45.3		ug/L		91	42 - 144

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

Lab Sample ID: 400-247720-4 MS
Matrix: Water
Analysis Batch: 653443

Client Sample ID: MW4-ROX-120423
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	45.1		ug/L		90	65 - 136
Ethylbenzene	ND		50.0	34.3		ug/L		69	58 - 131
Ethyl methacrylate	ND		50.0	40.5		ug/L		81	64 - 130
Hexachlorobutadiene	ND		50.0	28.1		ug/L		56	31 - 149
2-Hexanone	ND	F1	200	121	F1	ug/L		60	65 - 140
Isopropylbenzene	ND		50.0	31.8		ug/L		64	56 - 133
Methylene bromide	ND		50.0	43.8		ug/L		88	63 - 138
Methylene Chloride	ND		50.0	44.8		ug/L		90	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	179		ug/L		89	63 - 146
Methyl tert-butyl ether	ND		50.0	46.1		ug/L		92	59 - 137
m-Xylene & p-Xylene	ND		50.0	34.0		ug/L		68	57 - 130
Naphthalene	ND		50.0	34.9		ug/L		70	25 - 150
n-Butylbenzene	ND		50.0	24.0		ug/L		48	41 - 142
N-Propylbenzene	ND		50.0	28.9		ug/L		58	51 - 138
o-Chlorotoluene	ND		50.0	30.5		ug/L		61	53 - 134
o-Xylene	ND		50.0	33.5		ug/L		67	61 - 130
p-Chlorotoluene	ND		50.0	29.3		ug/L		59	54 - 133
p-Isopropyltoluene	ND		50.0	27.2		ug/L		54	48 - 139
sec-Butylbenzene	ND		50.0	27.7		ug/L		55	50 - 138
Styrene	ND		50.0	31.2		ug/L		62	58 - 131
tert-Butylbenzene	ND		50.0	33.1		ug/L		66	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	38.4		ug/L		77	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	36.9		ug/L		74	66 - 135
Tetrachloroethene	ND		50.0	34.4		ug/L		69	52 - 133
Toluene	ND		50.0	37.0		ug/L		74	65 - 130
trans-1,2-Dichloroethene	ND		50.0	43.3		ug/L		87	61 - 143
trans-1,3-Dichloropropene	ND		50.0	38.7		ug/L		77	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	32.1		ug/L		64	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	30.9		ug/L		62	39 - 148
1,1,1-Trichloroethane	ND		50.0	46.1		ug/L		92	57 - 142
1,1,2-Trichloroethane	ND		50.0	40.8		ug/L		82	66 - 131
Trichloroethene	ND		50.0	44.1		ug/L		88	64 - 136
Trichlorofluoromethane	ND		25.0	20.0		ug/L		80	54 - 150
1,2,3-Trichloropropane	ND		50.0	37.2		ug/L		74	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	28.8		ug/L		58	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	29.7		ug/L		59	52 - 135
Vinyl acetate	ND		50.0	45.0		ug/L		90	26 - 150
Vinyl chloride	ND		25.0	20.6		ug/L		83	46 - 150
Xylenes, Total	ND		100	67.4		ug/L		67	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*72 - 130*
Dibromofluoromethane	*99*		*75 - 126*
Toluene-d8 (Surr)	*93*		*64 - 132*

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

Lab Sample ID: 400-247720-4 MSD
Matrix: Water
Analysis Batch: 653443

Client Sample ID: MW4-ROX-120423
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	103		ug/L		51	43 - 150	3	30
Acrolein	ND		250	167		ug/L		67	38 - 150	1	31
Acrylonitrile	ND		500	513		ug/L		103	62 - 149	2	30
Benzene	ND		50.0	43.8		ug/L		88	56 - 142	4	30
Bromobenzene	ND		50.0	30.8		ug/L		62	59 - 136	6	30
Bromochloromethane	ND		50.0	42.2		ug/L		84	64 - 140	6	30
Bromodichloromethane	ND		50.0	45.5		ug/L		91	59 - 143	1	30
Bromoform	ND		50.0	39.6		ug/L		79	50 - 140	9	30
Bromomethane	ND		25.0	15.2		ug/L		61	10 - 150	11	50
2-Butanone (MEK)	ND		200	135		ug/L		67	55 - 150	0	30
Carbon disulfide	ND		50.0	39.7		ug/L		79	48 - 150	3	30
Carbon tetrachloride	ND		50.0	44.9		ug/L		90	55 - 145	3	30
Chlorobenzene	ND		50.0	33.3		ug/L		67	64 - 130	3	30
Chloroethane	ND		25.0	16.5		ug/L		66	50 - 150	11	30
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	42.9		ug/L		86	60 - 141	3	30
1-Chlorohexane	ND		50.0	32.8		ug/L		66	56 - 136	4	30
Chloromethane	ND		25.0	18.6		ug/L		74	49 - 148	11	31
cis-1,2-Dichloroethene	ND		50.0	44.5		ug/L		89	59 - 143	3	30
cis-1,3-Dichloropropene	ND		50.0	44.8		ug/L		90	57 - 140	4	30
Dibromochloromethane	ND		50.0	38.3		ug/L		77	56 - 143	4	30
1,2-Dichlorobenzene	ND		50.0	28.9		ug/L		58	52 - 137	4	30
1,3-Dichlorobenzene	ND		50.0	28.2		ug/L		56	54 - 135	6	30
1,4-Dichlorobenzene	ND		50.0	28.2		ug/L		56	53 - 135	4	30
Dichlorodifluoromethane	ND		25.0	12.7		ug/L		51	16 - 150	17	31
1,1-Dichloroethane	ND		50.0	42.9		ug/L		86	61 - 144	11	30
1,2-Dichloroethane	ND		50.0	40.6		ug/L		81	60 - 141	8	30
1,1-Dichloroethene	ND		50.0	41.5		ug/L		83	54 - 147	6	30
1,2-Dichloropropane	ND		50.0	46.3		ug/L		93	66 - 137	4	30
1,3-Dichloropropane	ND		50.0	36.7		ug/L		73	66 - 133	7	30
2,2-Dichloropropane	ND		50.0	43.7		ug/L		87	42 - 144	4	31
1,1-Dichloropropene	ND		50.0	43.1		ug/L		86	65 - 136	4	30
Ethylbenzene	ND		50.0	33.7		ug/L		67	58 - 131	2	30
Ethyl methacrylate	ND		50.0	37.3		ug/L		75	64 - 130	8	30
Hexachlorobutadiene	ND		50.0	27.9		ug/L		56	31 - 149	1	36
2-Hexanone	ND	F1	200	116	F1	ug/L		58	65 - 140	4	30
Isopropylbenzene	ND		50.0	31.2		ug/L		62	56 - 133	2	30
Methylene bromide	ND		50.0	42.5		ug/L		85	63 - 138	3	30
Methylene Chloride	ND		50.0	42.1		ug/L		84	60 - 146	6	32
4-Methyl-2-pentanone (MIBK)	ND		200	174		ug/L		87	63 - 146	3	30
Methyl tert-butyl ether	ND		50.0	44.1		ug/L		88	59 - 137	4	30
m-Xylene & p-Xylene	ND		50.0	32.7		ug/L		65	57 - 130	4	30
Naphthalene	ND		50.0	33.1		ug/L		66	25 - 150	5	30
n-Butylbenzene	ND		50.0	23.8		ug/L		48	41 - 142	1	31
N-Propylbenzene	ND		50.0	28.2		ug/L		56	51 - 138	2	30
o-Chlorotoluene	ND		50.0	29.0		ug/L		58	53 - 134	5	30
o-Xylene	ND		50.0	32.6		ug/L		65	61 - 130	3	30
p-Chlorotoluene	ND		50.0	27.9		ug/L		56	54 - 133	5	30

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

Lab Sample ID: 400-247720-4 MSD
Matrix: Water
Analysis Batch: 653443

Client Sample ID: MW4-ROX-120423
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	26.4		ug/L		53	48 - 139	3	30
sec-Butylbenzene	ND		50.0	27.5		ug/L		55	50 - 138	1	30
Styrene	ND		50.0	30.6		ug/L		61	58 - 131	2	30
tert-Butylbenzene	ND		50.0	32.2		ug/L		64	54 - 146	3	30
1,1,1,2-Tetrachloroethane	ND		50.0	36.5		ug/L		73	59 - 137	5	30
1,1,2,2-Tetrachloroethane	ND		50.0	35.4		ug/L		71	66 - 135	4	30
Tetrachloroethene	ND		50.0	33.2		ug/L		66	52 - 133	4	30
Toluene	ND		50.0	35.6		ug/L		71	65 - 130	4	30
trans-1,2-Dichloroethene	ND		50.0	41.8		ug/L		84	61 - 143	3	30
trans-1,3-Dichloropropene	ND		50.0	36.1		ug/L		72	53 - 133	7	30
1,2,3-Trichlorobenzene	ND		50.0	30.1		ug/L		60	43 - 145	6	30
1,2,4-Trichlorobenzene	ND		50.0	27.8		ug/L		56	39 - 148	11	30
1,1,1-Trichloroethane	ND		50.0	43.5		ug/L		87	57 - 142	6	30
1,1,2-Trichloroethane	ND		50.0	38.7		ug/L		77	66 - 131	5	30
Trichloroethene	ND		50.0	41.6		ug/L		83	64 - 136	6	30
Trichlorofluoromethane	ND		25.0	17.5		ug/L		70	54 - 150	14	30
1,2,3-Trichloropropane	ND		50.0	35.3		ug/L		71	65 - 133	5	30
1,2,4-Trimethylbenzene	ND		50.0	27.3		ug/L		55	50 - 139	5	30
1,3,5-Trimethylbenzene	ND		50.0	28.1		ug/L		56	52 - 135	5	30
Vinyl acetate	ND		50.0	41.0		ug/L		82	26 - 150	9	33
Vinyl chloride	ND		25.0	17.8		ug/L		71	46 - 150	15	30
Xylenes, Total	ND		100	65.3		ug/L		65	59 - 130	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*72 - 130*
Dibromofluoromethane	*101*		*75 - 126*
Toluene-d8 (Surr)	*92*		*64 - 132*

Lab Sample ID: MB 400-653663/4
Matrix: Water
Analysis Batch: 653663

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.50	ug/L			12/11/23 09:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*12/11/23 09:32*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*12/11/23 09:32*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*12/11/23 09:32*	*1*

Lab Sample ID: LCS 400-653663/1002
Matrix: Water
Analysis Batch: 653663

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			50.0	51.8		ug/L		104	70 - 130		

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

Lab Sample ID: LCS 400-653663/1002
Matrix: Water
Analysis Batch: 653663

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	*100*		*72 - 130*
Dibromofluoromethane	*101*		*75 - 126*
Toluene-d8 (Surr)	*89*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-653399/1-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653399

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		12/07/23 14:39	12/11/23 16:45	1
Benzenethiol	ND		10	1.7	ug/L		12/07/23 14:39	12/11/23 16:45	1
Benzoic acid	ND		30	7.3	ug/L		12/07/23 14:39	12/11/23 16:45	1
Benzyl alcohol	ND		10	2.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/07/23 14:39	12/11/23 16:45	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		12/07/23 14:39	12/11/23 16:45	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		12/07/23 14:39	12/11/23 16:45	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/07/23 14:39	12/11/23 16:45	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/07/23 14:39	12/11/23 16:45	1
4-Chloroaniline	ND		10	3.4	ug/L		12/07/23 14:39	12/11/23 16:45	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		12/07/23 14:39	12/11/23 16:45	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/07/23 14:39	12/11/23 16:45	1
2-Chlorophenol	ND		10	2.2	ug/L		12/07/23 14:39	12/11/23 16:45	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
Dibenzofuran	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 16:45	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
Diethyl phthalate	ND		10	0.24	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		12/07/23 14:39	12/11/23 16:45	1
Dimethyl phthalate	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 16:45	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		12/07/23 14:39	12/11/23 16:45	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/07/23 14:39	12/11/23 16:45	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 16:45	1
1,4-Dioxane	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/07/23 14:39	12/11/23 16:45	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/07/23 14:39	12/11/23 16:45	1
Hexachloroethane	ND		10	4.2	ug/L		12/07/23 14:39	12/11/23 16:45	1
Indene	ND		10	1.0	ug/L		12/07/23 14:39	12/11/23 16:45	1
Isophorone	ND		10	0.14	ug/L		12/07/23 14:39	12/11/23 16:45	1
2-Methylphenol	ND		10	1.8	ug/L		12/07/23 14:39	12/11/23 16:45	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		12/07/23 14:39	12/11/23 16:45	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-653399/1-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653399

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.2	ug/L		12/07/23 14:39	12/11/23 16:45	1
3-Nitroaniline	ND		10	1.8	ug/L		12/07/23 14:39	12/11/23 16:45	1
4-Nitroaniline	ND		10	1.5	ug/L		12/07/23 14:39	12/11/23 16:45	1
Nitrobenzene	ND		10	0.13	ug/L		12/07/23 14:39	12/11/23 16:45	1
2-Nitrophenol	ND		10	5.2	ug/L		12/07/23 14:39	12/11/23 16:45	1
4-Nitrophenol	ND		10	2.1	ug/L		12/07/23 14:39	12/11/23 16:45	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		12/07/23 14:39	12/11/23 16:45	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		12/07/23 14:39	12/11/23 16:45	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/07/23 14:39	12/11/23 16:45	1
Pentachlorophenol	ND		20	1.4	ug/L		12/07/23 14:39	12/11/23 16:45	1
Phenol	ND		10	2.6	ug/L		12/07/23 14:39	12/11/23 16:45	1
Pyridine	ND		10	3.2	ug/L		12/07/23 14:39	12/11/23 16:45	1
Quinoline	ND		10	4.5	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		12/07/23 14:39	12/11/23 16:45	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		12/07/23 14:39	12/11/23 16:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*46 - 124*	*12/07/23 14:39*	*12/11/23 16:45*	*1*
2-Fluorophenol	*13*		*13 - 113*	*12/07/23 14:39*	*12/11/23 16:45*	*1*
Nitrobenzene-d5	*53*		*36 - 126*	*12/07/23 14:39*	*12/11/23 16:45*	*1*
Phenol-d5	*37*		*17 - 127*	*12/07/23 14:39*	*12/11/23 16:45*	*1*
Terphenyl-d14	*100*		*44 - 149*	*12/07/23 14:39*	*12/11/23 16:45*	*1*
2,4,6-Tribromophenol	*71*		*26 - 150*	*12/07/23 14:39*	*12/11/23 16:45*	*1*

Lab Sample ID: LCS 400-653399/19-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	3.26	J *-	ug/L		3	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*88*		*46 - 124*
2-Fluorophenol	*22*		*13 - 113*
Nitrobenzene-d5	*70*		*36 - 126*
Phenol-d5	*45*		*17 - 127*
Terphenyl-d14	*112*		*44 - 149*
2,4,6-Tribromophenol	*91*		*26 - 150*

Lab Sample ID: LCS 400-653399/2-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	75.9		ug/L		63	21 - 120
Benzoic acid	120	101		ug/L		84	10 - 144
Benzyl alcohol	120	86.6		ug/L		72	28 - 120
Bis(2-chloroethoxy)methane	120	80.4		ug/L		67	47 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-653399/2-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-chloroethyl)ether	120	78.9		ug/L		66	44 - 120
bis (2-chloroisopropyl) ether	120	45.4		ug/L		38	33 - 121
Bis(2-ethylhexyl) phthalate	120	113		ug/L		94	52 - 147
4-Bromophenyl phenyl ether	120	114		ug/L		95	54 - 122
Butyl benzyl phthalate	120	112		ug/L		93	54 - 133
4-Chloroaniline	120	81.9		ug/L		68	26 - 120
4-Chloro-3-methylphenol	120	104		ug/L		87	48 - 131
2-Chloronaphthalene	120	108		ug/L		90	52 - 121
2-Chlorophenol	120	80.7		ug/L		67	40 - 120
4-Chlorophenyl phenyl ether	120	118		ug/L		98	56 - 125
Dibenz[a,h]acridine	120	121		ug/L		101	31 - 150
Dibenzofuran	120	107		ug/L		89	56 - 122
3,3'-Dichlorobenzidine	160	113		ug/L		71	36 - 132
2,4-Dichlorophenol	120	101		ug/L		85	49 - 120
Diethyl phthalate	120	112		ug/L		93	50 - 137
2,4-Dimethylphenol	120	90.3		ug/L		75	48 - 120
Dimethyl phthalate	120	108		ug/L		90	57 - 124
Di-n-butyl phthalate	120	115		ug/L		96	58 - 126
4,6-Dinitro-ortho-cresol	240	196		ug/L		81	23 - 148
2,4-Dinitrophenol	240	200		ug/L		83	10 - 150
2,4-Dinitrotoluene	120	121		ug/L		101	54 - 142
2,6-Dinitrotoluene	120	112		ug/L		94	55 - 130
Di-n-octyl phthalate	120	117		ug/L		98	57 - 138
1,4-Dioxane	120	62.6		ug/L		52	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	77.0		ug/L		64	45 - 124
Hexachlorobenzene	120	122		ug/L		102	52 - 129
Hexachlorocyclopentadiene	120	101		ug/L		84	10 - 134
Hexachloroethane	120	87.1		ug/L		73	20 - 120
Indene	120	99.1		ug/L		83	49 - 120
Isophorone	120	78.1		ug/L		65	48 - 120
2-Methylphenol	120	88.1		ug/L		73	46 - 124
3 & 4 Methylphenol	120	84.6		ug/L		70	45 - 120
2-Nitroaniline	120	83.0		ug/L		69	51 - 145
3-Nitroaniline	120	69.2		ug/L		58	37 - 127
4-Nitroaniline	120	95.3		ug/L		79	36 - 137
Nitrobenzene	120	79.5		ug/L		66	45 - 120
2-Nitrophenol	120	98.8		ug/L		82	40 - 124
4-Nitrophenol	240	259		ug/L		108	23 - 146
N-Nitrosodimethylamine	120	59.9		ug/L		50	29 - 137
N-Nitrosodi-n-propylamine	120	77.0		ug/L		64	45 - 120
N-Nitrosodiphenylamine	119	98.0		ug/L		82	54 - 120
Pentachlorophenol	240	233		ug/L		97	31 - 130
Phenol	120	74.8		ug/L		62	11 - 120
Pyridine	240	109		ug/L		45	16 - 120
Quinoline	120	108		ug/L		90	49 - 130
2,4,5-Trichlorophenol	120	117		ug/L		98	51 - 136
2,4,6-Trichlorophenol	120	115		ug/L		96	50 - 127

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-653399/2-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653399

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	87		46 - 124
2-Fluorophenol	47		13 - 113
Nitrobenzene-d5	75		36 - 126
Phenol-d5	64		17 - 127
Terphenyl-d14	105		44 - 149
2,4,6-Tribromophenol	117		26 - 150

Lab Sample ID: LCSD 400-653399/20-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653399

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	6.16	J *- *1	ug/L		5	10 - 120	61	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	84		46 - 124
2-Fluorophenol	43		13 - 113
Nitrobenzene-d5	65		36 - 126
Phenol-d5	61		17 - 127
Terphenyl-d14	103		44 - 149
2,4,6-Tribromophenol	93		26 - 150

Lab Sample ID: LCSD 400-653399/3-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653399

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	54.8	*1	ug/L		46	21 - 120	32	30
Benzoic acid			120	65.1	*1	ug/L		54	10 - 144	43	30
Benzyl alcohol			120	65.4		ug/L		54	28 - 120	28	30
Bis(2-chloroethoxy)methane			120	61.5		ug/L		51	47 - 120	27	30
Bis(2-chloroethyl)ether			120	61.7		ug/L		51	44 - 120	25	30
bis (2-chloroisopropyl) ether			120	34.3	*-	ug/L		29	33 - 121	28	30
Bis(2-ethylhexyl) phthalate			120	87.8		ug/L		73	52 - 147	25	30
4-Bromophenyl phenyl ether			120	88.5		ug/L		74	54 - 122	25	30
Butyl benzyl phthalate			120	86.9		ug/L		72	54 - 133	25	30
4-Chloroaniline			120	66.8		ug/L		56	26 - 120	20	30
4-Chloro-3-methylphenol			120	81.0		ug/L		68	48 - 131	25	30
2-Chloronaphthalene			120	80.6		ug/L		67	52 - 121	29	30
2-Chlorophenol			120	50.4	*1	ug/L		42	40 - 120	46	30
4-Chlorophenyl phenyl ether			120	90.9		ug/L		76	56 - 125	26	30
Dibenz[a,h]acridine			120	92.5		ug/L		77	31 - 150	27	30
Dibenzofuran			120	83.5		ug/L		70	56 - 122	25	30
3,3'-Dichlorobenzidine			160	96.9		ug/L		61	36 - 132	16	30
2,4-Dichlorophenol			120	75.2		ug/L		63	49 - 120	30	30
Diethyl phthalate			120	87.1		ug/L		73	50 - 137	25	30
2,4-Dimethylphenol			120	70.3		ug/L		59	48 - 120	25	30
Dimethyl phthalate			120	85.9		ug/L		72	57 - 124	23	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-653399/3-A
Matrix: Water
Analysis Batch: 653805

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653399

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Di-n-butyl phthalate			120	90.3		ug/L		75	58 - 126	24	30
4,6-Dinitro-ortho-cresol			240	145		ug/L		60	23 - 148	30	30
2,4-Dinitrophenol			240	129	*1	ug/L		54	10 - 150	43	30
2,4-Dinitrotoluene			120	92.7		ug/L		77	54 - 142	27	30
2,6-Dinitrotoluene			120	86.2		ug/L		72	55 - 130	26	30
Di-n-octyl phthalate			120	87.5		ug/L		73	57 - 138	29	30
1,4-Dioxane			120	44.5	*1	ug/L		37	31 - 120	34	30
1,2-Diphenylhydrazine (as Azobenzene)			120	60.7		ug/L		51	45 - 124	24	30
Hexachlorobenzene			120	95.8		ug/L		80	52 - 129	24	30
Hexachlorocyclopentadiene			120	67.6	*1	ug/L		56	10 - 134	39	30
Hexachloroethane			120	63.8	*1	ug/L		53	20 - 120	31	30
Indene			120	74.3		ug/L		62	49 - 120	29	30
Isophorone			120	60.2		ug/L		50	48 - 120	26	30
2-Methylphenol			120	65.9		ug/L		55	46 - 124	29	30
3 & 4 Methylphenol			120	63.5		ug/L		53	45 - 120	28	30
2-Nitroaniline			120	63.6		ug/L		53	51 - 145	27	30
3-Nitroaniline			120	55.8		ug/L		46	37 - 127	21	30
4-Nitroaniline			120	75.3		ug/L		63	36 - 137	23	30
Nitrobenzene			120	60.4		ug/L		50	45 - 120	27	30
2-Nitrophenol			120	75.7		ug/L		63	40 - 124	26	30
4-Nitrophenol			240	193		ug/L		80	23 - 146	29	30
N-Nitrosodimethylamine			120	44.0	*1	ug/L		37	29 - 137	31	30
N-Nitrosodi-n-propylamine			120	59.6		ug/L		50	45 - 120	25	30
N-Nitrosodiphenylamine			119	77.4		ug/L		65	54 - 120	23	30
Pentachlorophenol			240	178		ug/L		74	31 - 130	27	30
Phenol			120	50.5	*1	ug/L		42	11 - 120	39	30
Pyridine			240	77.8	*1	ug/L		32	16 - 120	33	30
Quinoline			120	79.7		ug/L		67	49 - 130	30	30
2,4,5-Trichlorophenol			120	91.1		ug/L		76	51 - 136	25	30
2,4,6-Trichlorophenol			120	88.2		ug/L		73	50 - 127	26	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*46 - 124*
2-Fluorophenol	*20*		*13 - 113*
Nitrobenzene-d5	*56*		*36 - 126*
Phenol-d5	*44*		*17 - 127*
Terphenyl-d14	*88*		*44 - 149*
2,4,6-Tribromophenol	*91*		*26 - 150*

Lab Sample ID: MB 400-653593/1-A
Matrix: Water
Analysis Batch: 654186

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653593

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		12/08/23 15:22	12/13/23 18:46	1
Benzenethiol	ND		10	1.7	ug/L		12/08/23 15:22	12/13/23 18:46	1
Benzoic acid	ND		30	7.3	ug/L		12/08/23 15:22	12/13/23 18:46	1
Benzyl alcohol	ND		10	2.0	ug/L		12/08/23 15:22	12/13/23 18:46	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-653593/1-A
Matrix: Water
Analysis Batch: 654186

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653593

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/08/23 15:22	12/13/23 18:46	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		12/08/23 15:22	12/13/23 18:46	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		12/08/23 15:22	12/13/23 18:46	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		12/08/23 15:22	12/13/23 18:46	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/08/23 15:22	12/13/23 18:46	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/08/23 15:22	12/13/23 18:46	1
4-Chloroaniline	ND		10	3.4	ug/L		12/08/23 15:22	12/13/23 18:46	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		12/08/23 15:22	12/13/23 18:46	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/08/23 15:22	12/13/23 18:46	1
2-Chlorophenol	ND		10	2.2	ug/L		12/08/23 15:22	12/13/23 18:46	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/08/23 15:22	12/13/23 18:46	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/08/23 15:22	12/13/23 18:46	1
Dibenzofuran	ND		10	0.17	ug/L		12/08/23 15:22	12/13/23 18:46	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		12/08/23 15:22	12/13/23 18:46	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		12/08/23 15:22	12/13/23 18:46	1
Diethyl phthalate	ND		10	0.24	ug/L		12/08/23 15:22	12/13/23 18:46	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		12/08/23 15:22	12/13/23 18:46	1
Dimethyl phthalate	1.06	J	10	0.17	ug/L		12/08/23 15:22	12/13/23 18:46	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		12/08/23 15:22	12/13/23 18:46	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/08/23 15:22	12/13/23 18:46	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		12/08/23 15:22	12/13/23 18:46	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/08/23 15:22	12/13/23 18:46	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/08/23 15:22	12/13/23 18:46	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/08/23 15:22	12/13/23 18:46	1
1,4-Dioxane	ND		10	1.0	ug/L		12/08/23 15:22	12/13/23 18:46	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/08/23 15:22	12/13/23 18:46	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/08/23 15:22	12/13/23 18:46	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/08/23 15:22	12/13/23 18:46	1
Hexachloroethane	ND		10	4.2	ug/L		12/08/23 15:22	12/13/23 18:46	1
Indene	ND		10	1.0	ug/L		12/08/23 15:22	12/13/23 18:46	1
Isophorone	ND		10	0.14	ug/L		12/08/23 15:22	12/13/23 18:46	1
2-Methylphenol	ND		10	1.8	ug/L		12/08/23 15:22	12/13/23 18:46	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		12/08/23 15:22	12/13/23 18:46	1
2-Nitroaniline	ND		10	2.2	ug/L		12/08/23 15:22	12/13/23 18:46	1
3-Nitroaniline	ND		10	1.8	ug/L		12/08/23 15:22	12/13/23 18:46	1
4-Nitroaniline	ND		10	1.5	ug/L		12/08/23 15:22	12/13/23 18:46	1
Nitrobenzene	ND		10	0.13	ug/L		12/08/23 15:22	12/13/23 18:46	1
2-Nitrophenol	ND		10	5.2	ug/L		12/08/23 15:22	12/13/23 18:46	1
4-Nitrophenol	ND		10	2.1	ug/L		12/08/23 15:22	12/13/23 18:46	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		12/08/23 15:22	12/13/23 18:46	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		12/08/23 15:22	12/13/23 18:46	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/08/23 15:22	12/13/23 18:46	1
Pentachlorophenol	ND		20	1.4	ug/L		12/08/23 15:22	12/13/23 18:46	1
Phenol	ND		10	2.6	ug/L		12/08/23 15:22	12/13/23 18:46	1
Pyridine	ND		10	3.2	ug/L		12/08/23 15:22	12/13/23 18:46	1
Quinoline	ND		10	4.5	ug/L		12/08/23 15:22	12/13/23 18:46	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		12/08/23 15:22	12/13/23 18:46	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		12/08/23 15:22	12/13/23 18:46	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	80		46 - 124	12/08/23 15:22	12/13/23 18:46	1
2-Fluorophenol	45		13 - 113	12/08/23 15:22	12/13/23 18:46	1
Nitrobenzene-d5	65		36 - 126	12/08/23 15:22	12/13/23 18:46	1
Phenol-d5	60		17 - 127	12/08/23 15:22	12/13/23 18:46	1
Terphenyl-d14	85		44 - 149	12/08/23 15:22	12/13/23 18:46	1
2,4,6-Tribromophenol	77		26 - 150	12/08/23 15:22	12/13/23 18:46	1

Lab Sample ID: LCS 400-653593/2-A
Matrix: Water
Analysis Batch: 654186

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653593

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	80.5		ug/L		67	21 - 120
Benzoic acid	120	87.6		ug/L		73	10 - 144
Benzyl alcohol	120	85.9		ug/L		72	28 - 120
Bis(2-chloroethoxy)methane	120	77.5		ug/L		65	47 - 120
Bis(2-chloroethyl)ether	120	70.1		ug/L		58	44 - 120
bis (2-chloroisopropyl) ether	120	71.4		ug/L		60	33 - 121
Bis(2-ethylhexyl) phthalate	120	90.0		ug/L		75	52 - 147
4-Bromophenyl phenyl ether	120	89.1		ug/L		74	54 - 122
Butyl benzyl phthalate	120	95.6		ug/L		80	54 - 133
4-Chloroaniline	120	69.5		ug/L		58	26 - 120
4-Chloro-3-methylphenol	120	89.8		ug/L		75	48 - 131
2-Chloronaphthalene	120	88.8		ug/L		74	52 - 121
2-Chlorophenol	120	79.8		ug/L		66	40 - 120
4-Chlorophenyl phenyl ether	120	90.8		ug/L		76	56 - 125
Dibenz[a,h]acridine	120	106		ug/L		88	31 - 150
Dibenzofuran	120	94.2		ug/L		78	56 - 122
3,3'-Dichlorobenzidine	160	124		ug/L		77	36 - 132
2,4-Dichlorophenol	120	88.1		ug/L		73	49 - 120
Diethyl phthalate	120	94.3		ug/L		79	50 - 137
2,4-Dimethylphenol	120	84.5		ug/L		70	48 - 120
Dimethyl phthalate	120	90.8		ug/L		76	57 - 124
Di-n-butyl phthalate	120	98.0		ug/L		82	58 - 126
4,6-Dinitro-ortho-cresol	240	177		ug/L		74	23 - 148
2,4-Dinitrophenol	240	173		ug/L		72	10 - 150
2,4-Dinitrotoluene	120	102		ug/L		85	54 - 142
2,6-Dinitrotoluene	120	93.7		ug/L		78	55 - 130
Di-n-octyl phthalate	120	88.8		ug/L		74	57 - 138
1,4-Dioxane	120	63.1		ug/L		53	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	83.8		ug/L		70	45 - 124
Hexachlorobenzene	120	98.6		ug/L		82	52 - 129
Hexachlorocyclopentadiene	120	75.7		ug/L		63	10 - 134
Hexachloroethane	120	81.4		ug/L		68	20 - 120
Indene	120	92.8		ug/L		77	49 - 120
Isophorone	120	80.7		ug/L		67	48 - 120
2-Methylphenol	120	85.1		ug/L		71	46 - 124
3 & 4 Methylphenol	120	84.5		ug/L		70	45 - 120
2-Nitroaniline	120	78.9		ug/L		66	51 - 145
3-Nitroaniline	120	73.5		ug/L		61	37 - 127
4-Nitroaniline	120	88.7		ug/L		74	36 - 137

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-653593/2-A
Matrix: Water
Analysis Batch: 654186

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653593

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrobenzene			120	77.4		ug/L		64	45 - 120		
2-Nitrophenol			120	93.0		ug/L		78	40 - 124		
4-Nitrophenol			240	186		ug/L		78	23 - 146		
N-Nitrosodimethylamine			120	83.3		ug/L		69	29 - 137		
N-Nitrosodi-n-propylamine			120	81.2		ug/L		68	45 - 120		
N-Nitrosodiphenylamine			119	86.7		ug/L		73	54 - 120		
Pentachlorophenol			240	182		ug/L		76	31 - 130		
Phenol			120	77.8		ug/L		65	11 - 120		
Pyridine			240	118		ug/L		49	16 - 120		
Quinoline			120	112		ug/L		94	49 - 130		
2,4,5-Trichlorophenol			120	92.4		ug/L		77	51 - 136		
2,4,6-Trichlorophenol			120	90.4		ug/L		75	50 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*46 - 124*
2-Fluorophenol	*54*		*13 - 113*
Nitrobenzene-d5	*72*		*36 - 126*
Phenol-d5	*65*		*17 - 127*
Terphenyl-d14	*82*		*44 - 149*
2,4,6-Tribromophenol	*84*		*26 - 150*

Lab Sample ID: LCS 400-653593/4-A
Matrix: Water
Analysis Batch: 654186

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653593

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	61.0		ug/L		51	10 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*46 - 124*
2-Fluorophenol	*48*		*13 - 113*
Nitrobenzene-d5	*63*		*36 - 126*
Phenol-d5	*60*		*17 - 127*
Terphenyl-d14	*87*		*44 - 149*
2,4,6-Tribromophenol	*76*		*26 - 150*

Lab Sample ID: LCSD 400-653593/3-A
Matrix: Water
Analysis Batch: 654186

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653593

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	72.0		ug/L		60	21 - 120	11	30
Benzoic acid			120	86.8		ug/L		72	10 - 144	1	30
Benzyl alcohol			120	82.0		ug/L		68	28 - 120	5	30
Bis(2-chloroethoxy)methane			120	75.9		ug/L		63	47 - 120	2	30
Bis(2-chloroethyl)ether			120	71.2		ug/L		59	44 - 120	1	30
bis (2-chloroisopropyl) ether			120	68.7		ug/L		57	33 - 121	4	30
Bis(2-ethylhexyl) phthalate			120	83.8		ug/L		70	52 - 147	7	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-653593/3-A
Matrix: Water
Analysis Batch: 654186

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653593

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4-Bromophenyl phenyl ether	120	84.6		ug/L		70	54 - 122	5	30
Butyl benzyl phthalate	120	88.2		ug/L		73	54 - 133	8	30
4-Chloroaniline	120	65.1		ug/L		54	26 - 120	7	30
4-Chloro-3-methylphenol	120	83.5		ug/L		70	48 - 131	7	30
2-Chloronaphthalene	120	81.5		ug/L		68	52 - 121	9	30
2-Chlorophenol	120	71.9		ug/L		60	40 - 120	10	30
4-Chlorophenyl phenyl ether	120	84.8		ug/L		71	56 - 125	7	30
Dibenz[a,h]acridine	120	103		ug/L		86	31 - 150	2	30
Dibenzofuran	120	85.7		ug/L		71	56 - 122	9	30
3,3'-Dichlorobenzidine	160	112		ug/L		70	36 - 132	10	30
2,4-Dichlorophenol	120	83.7		ug/L		70	49 - 120	5	30
Diethyl phthalate	120	87.7		ug/L		73	50 - 137	7	30
2,4-Dimethylphenol	120	81.6		ug/L		68	48 - 120	4	30
Dimethyl phthalate	120	80.8		ug/L		67	57 - 124	12	30
Di-n-butyl phthalate	120	92.7		ug/L		77	58 - 126	5	30
4,6-Dinitro-ortho-cresol	240	176		ug/L		73	23 - 148	0	30
2,4-Dinitrophenol	240	158		ug/L		66	10 - 150	9	30
2,4-Dinitrotoluene	120	93.8		ug/L		78	54 - 142	9	30
2,6-Dinitrotoluene	120	85.2		ug/L		71	55 - 130	10	30
Di-n-octyl phthalate	120	83.7		ug/L		70	57 - 138	6	30
1,4-Dioxane	120	58.9		ug/L		49	31 - 120	7	30
1,2-Diphenylhydrazine (as Azobenzene)	120	77.6		ug/L		65	45 - 124	8	30
Hexachlorobenzene	120	92.8		ug/L		77	52 - 129	6	30
Hexachlorocyclopentadiene	120	73.8		ug/L		61	10 - 134	3	30
Hexachloroethane	120	73.7		ug/L		61	20 - 120	10	30
Indene	120	91.8		ug/L		76	49 - 120	1	30
Isophorone	120	78.2		ug/L		65	48 - 120	3	30
2-Methylphenol	120	82.0		ug/L		68	46 - 124	4	30
3 & 4 Methylphenol	120	79.2		ug/L		66	45 - 120	6	30
2-Nitroaniline	120	71.8		ug/L		60	51 - 145	10	30
3-Nitroaniline	120	66.6		ug/L		55	37 - 127	10	30
4-Nitroaniline	120	81.6		ug/L		68	36 - 137	8	30
Nitrobenzene	120	75.1		ug/L		63	45 - 120	3	30
2-Nitrophenol	120	86.2		ug/L		72	40 - 124	8	30
4-Nitrophenol	240	173		ug/L		72	23 - 146	7	30
N-Nitrosodimethylamine	120	84.1		ug/L		70	29 - 137	1	30
N-Nitrosodi-n-propylamine	120	81.0		ug/L		68	45 - 120	0	30
N-Nitrosodiphenylamine	119	82.4		ug/L		69	54 - 120	5	30
Pentachlorophenol	240	172		ug/L		72	31 - 130	5	30
Phenol	120	71.8		ug/L		60	11 - 120	8	30
Pyridine	240	116		ug/L		48	16 - 120	2	30
Quinoline	120	108		ug/L		90	49 - 130	4	30
2,4,5-Trichlorophenol	120	86.4		ug/L		72	51 - 136	7	30
2,4,6-Trichlorophenol	120	83.5		ug/L		70	50 - 127	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*46 - 124*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-653593/3-A
Matrix: Water
Analysis Batch: 654186

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653593

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol	*45*		*13 - 113*
Nitrobenzene-d5	*68*		*36 - 126*
Phenol-d5	*61*		*17 - 127*
Terphenyl-d14	*76*		*44 - 149*
2,4,6-Tribromophenol	*79*		*26 - 150*

Lab Sample ID: LCSD 400-653593/5-A
Matrix: Water
Analysis Batch: 654186

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653593

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	40.9	*1	ug/L		34	10 - 120	39	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*79*		*46 - 124*
2-Fluorophenol	*59*		*13 - 113*
Nitrobenzene-d5	*67*		*36 - 126*
Phenol-d5	*66*		*17 - 127*
Terphenyl-d14	*92*		*44 - 149*
2,4,6-Tribromophenol	*79*		*26 - 150*

Lab Sample ID: MB 400-653912/1-A
Matrix: Water
Analysis Batch: 654340

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		12/12/23 10:43	12/14/23 16:15	1
Benzenethiol	ND		10	1.7	ug/L		12/12/23 10:43	12/14/23 16:15	1
Benzoic acid	ND		30	7.3	ug/L		12/12/23 10:43	12/14/23 16:15	1
Benzyl alcohol	ND		10	2.0	ug/L		12/12/23 10:43	12/14/23 16:15	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/12/23 10:43	12/14/23 16:15	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		12/12/23 10:43	12/14/23 16:15	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		12/12/23 10:43	12/14/23 16:15	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		12/12/23 10:43	12/14/23 16:15	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/12/23 10:43	12/14/23 16:15	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/12/23 10:43	12/14/23 16:15	1
4-Chloroaniline	ND		10	3.4	ug/L		12/12/23 10:43	12/14/23 16:15	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		12/12/23 10:43	12/14/23 16:15	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/12/23 10:43	12/14/23 16:15	1
2-Chlorophenol	ND		10	2.2	ug/L		12/12/23 10:43	12/14/23 16:15	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/12/23 10:43	12/14/23 16:15	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/12/23 10:43	12/14/23 16:15	1
Dibenzofuran	ND		10	0.17	ug/L		12/12/23 10:43	12/14/23 16:15	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		12/12/23 10:43	12/14/23 16:15	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		12/12/23 10:43	12/14/23 16:15	1
Diethyl phthalate	ND		10	0.24	ug/L		12/12/23 10:43	12/14/23 16:15	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		12/12/23 10:43	12/14/23 16:15	1
Dimethyl phthalate	ND		10	0.17	ug/L		12/12/23 10:43	12/14/23 16:15	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-653912/1-A
Matrix: Water
Analysis Batch: 654340

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	ND		10	2.7	ug/L		12/12/23 10:43	12/14/23 16:15	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/12/23 10:43	12/14/23 16:15	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		12/12/23 10:43	12/14/23 16:15	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/12/23 10:43	12/14/23 16:15	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/12/23 10:43	12/14/23 16:15	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/12/23 10:43	12/14/23 16:15	1
1,4-Dioxane	ND		10	1.0	ug/L		12/12/23 10:43	12/14/23 16:15	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/12/23 10:43	12/14/23 16:15	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/12/23 10:43	12/14/23 16:15	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/12/23 10:43	12/14/23 16:15	1
Hexachloroethane	ND		10	4.2	ug/L		12/12/23 10:43	12/14/23 16:15	1
Indene	ND		10	1.0	ug/L		12/12/23 10:43	12/14/23 16:15	1
Isophorone	ND		10	0.14	ug/L		12/12/23 10:43	12/14/23 16:15	1
2-Methylphenol	ND		10	1.8	ug/L		12/12/23 10:43	12/14/23 16:15	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		12/12/23 10:43	12/14/23 16:15	1
2-Nitroaniline	ND		10	2.2	ug/L		12/12/23 10:43	12/14/23 16:15	1
3-Nitroaniline	ND		10	1.8	ug/L		12/12/23 10:43	12/14/23 16:15	1
4-Nitroaniline	ND		10	1.5	ug/L		12/12/23 10:43	12/14/23 16:15	1
Nitrobenzene	ND		10	0.13	ug/L		12/12/23 10:43	12/14/23 16:15	1
2-Nitrophenol	ND		10	5.2	ug/L		12/12/23 10:43	12/14/23 16:15	1
4-Nitrophenol	ND		10	2.1	ug/L		12/12/23 10:43	12/14/23 16:15	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		12/12/23 10:43	12/14/23 16:15	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		12/12/23 10:43	12/14/23 16:15	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/12/23 10:43	12/14/23 16:15	1
Pentachlorophenol	ND		20	1.4	ug/L		12/12/23 10:43	12/14/23 16:15	1
Phenol	ND		10	2.6	ug/L		12/12/23 10:43	12/14/23 16:15	1
Pyridine	ND		10	3.2	ug/L		12/12/23 10:43	12/14/23 16:15	1
Quinoline	ND		10	4.5	ug/L		12/12/23 10:43	12/14/23 16:15	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		12/12/23 10:43	12/14/23 16:15	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		12/12/23 10:43	12/14/23 16:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*46 - 124*	*12/12/23 10:43*	*12/14/23 16:15*	*1*
2-Fluorophenol	*11*	*S1-*	*13 - 113*	*12/12/23 10:43*	*12/14/23 16:15*	*1*
Nitrobenzene-d5	*68*		*36 - 126*	*12/12/23 10:43*	*12/14/23 16:15*	*1*
Phenol-d5	*50*		*17 - 127*	*12/12/23 10:43*	*12/14/23 16:15*	*1*
Terphenyl-d14	*88*		*44 - 149*	*12/12/23 10:43*	*12/14/23 16:15*	*1*
2,4,6-Tribromophenol	*84*		*26 - 150*	*12/12/23 10:43*	*12/14/23 16:15*	*1*

Lab Sample ID: LCS 400-653912/2-A
Matrix: Water
Analysis Batch: 654340

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653912

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	58.6		ug/L		49	21 - 120
Benzoic acid	120	88.0		ug/L		73	10 - 144
Benzyl alcohol	120	97.5		ug/L		81	28 - 120
Bis(2-chloroethoxy)methane	120	82.6		ug/L		69	47 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-653912/2-A
Matrix: Water
Analysis Batch: 654340

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653912

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-chloroethyl)ether	120	108		ug/L		90	44 - 120
bis (2-chloroisopropyl) ether	120	77.7		ug/L		65	33 - 121
Bis(2-ethylhexyl) phthalate	120	103		ug/L		86	52 - 147
4-Bromophenyl phenyl ether	120	102		ug/L		85	54 - 122
Butyl benzyl phthalate	120	106		ug/L		88	54 - 133
4-Chloroaniline	120	79.1		ug/L		66	26 - 120
4-Chloro-3-methylphenol	120	97.0		ug/L		81	48 - 131
2-Chloronaphthalene	120	98.6		ug/L		82	52 - 121
2-Chlorophenol	120	74.8		ug/L		62	40 - 120
4-Chlorophenyl phenyl ether	120	109		ug/L		91	56 - 125
Dibenz[a,h]acridine	120	125		ug/L		104	31 - 150
Dibenzofuran	120	104		ug/L		86	56 - 122
3,3'-Dichlorobenzidine	160	144		ug/L		90	36 - 132
2,4-Dichlorophenol	120	91.6		ug/L		76	49 - 120
Diethyl phthalate	120	109		ug/L		91	50 - 137
2,4-Dimethylphenol	120	92.1		ug/L		77	48 - 120
Dimethyl phthalate	120	103		ug/L		86	57 - 124
Di-n-butyl phthalate	120	111		ug/L		92	58 - 126
4,6-Dinitro-ortho-cresol	240	204		ug/L		85	23 - 148
2,4-Dinitrophenol	240	191		ug/L		79	10 - 150
2,4-Dinitrotoluene	120	114		ug/L		95	54 - 142
2,6-Dinitrotoluene	120	102		ug/L		85	55 - 130
Di-n-octyl phthalate	120	105		ug/L		87	57 - 138
1,4-Dioxane	120	67.8		ug/L		56	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	93.9		ug/L		78	45 - 124
Hexachlorobenzene	120	114		ug/L		95	52 - 129
Hexachlorocyclopentadiene	120	74.8		ug/L		62	10 - 134
Hexachloroethane	120	78.0		ug/L		65	20 - 120
Indene	120	98.1		ug/L		82	49 - 120
Isophorone	120	86.7		ug/L		72	48 - 120
2-Methylphenol	120	89.3		ug/L		74	46 - 124
3 & 4 Methylphenol	120	90.6		ug/L		76	45 - 120
2-Nitroaniline	120	87.8		ug/L		73	51 - 145
3-Nitroaniline	120	88.0		ug/L		73	37 - 127
4-Nitroaniline	120	107		ug/L		89	36 - 137
Nitrobenzene	120	81.5		ug/L		68	45 - 120
2-Nitrophenol	120	95.8		ug/L		80	40 - 124
4-Nitrophenol	240	229		ug/L		96	23 - 146
N-Nitrosodimethylamine	120	92.8		ug/L		77	29 - 137
N-Nitrosodi-n-propylamine	120	91.3		ug/L		76	45 - 120
N-Nitrosodiphenylamine	119	101		ug/L		85	54 - 120
Pentachlorophenol	240	205		ug/L		86	31 - 130
Phenol	120	77.0		ug/L		64	11 - 120
Pyridine	240	131		ug/L		55	16 - 120
Quinoline	120	121		ug/L		101	49 - 130
2,4,5-Trichlorophenol	120	104		ug/L		87	51 - 136
2,4,6-Trichlorophenol	120	106		ug/L		88	50 - 127

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-653912/2-A
Matrix: Water
Analysis Batch: 654340

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653912

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	83		46 - 124
2-Fluorophenol	35		13 - 113
Nitrobenzene-d5	76		36 - 126
Phenol-d5	63		17 - 127
Terphenyl-d14	92		44 - 149
2,4,6-Tribromophenol	97		26 - 150

Lab Sample ID: LCS 400-653912/6-A
Matrix: Water
Analysis Batch: 654340

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653912

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	5.63	J *-	ug/L		5	10 - 120		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	74		46 - 124
2-Fluorophenol	31		13 - 113
Nitrobenzene-d5	61		36 - 126
Phenol-d5	55		17 - 127
Terphenyl-d14	83		44 - 149
2,4,6-Tribromophenol	77		26 - 150

Lab Sample ID: LCSD 400-653912/3-A
Matrix: Water
Analysis Batch: 654464

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653912

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	63.2		ug/L		53	21 - 120	7	30
Benzoic acid			120	34.4	*1	ug/L		29	10 - 144	88	30
Benzyl alcohol			120	93.6		ug/L		78	28 - 120	4	30
Bis(2-chloroethoxy)methane			120	68.4		ug/L		57	47 - 120	19	30
Bis(2-chloroethyl)ether			120	83.4		ug/L		69	44 - 120	26	30
bis (2-chloroisopropyl) ether			120	63.7		ug/L		53	33 - 121	20	30
Bis(2-ethylhexyl) phthalate			120	130		ug/L		109	52 - 147	24	30
4-Bromophenyl phenyl ether			120	111		ug/L		93	54 - 122	9	30
Butyl benzyl phthalate			120	116		ug/L		97	54 - 133	9	30
4-Chloroaniline			120	70.1		ug/L		58	26 - 120	12	30
4-Chloro-3-methylphenol			120	69.5	*1	ug/L		58	48 - 131	33	30
2-Chloronaphthalene			120	91.4		ug/L		76	52 - 121	8	30
2-Chlorophenol			120	35.8	*- *1	ug/L		30	40 - 120	71	30
4-Chlorophenyl phenyl ether			120	103		ug/L		86	56 - 125	6	30
Dibenz[a,h]acridine			120	132		ug/L		110	31 - 150	6	30
Dibenzofuran			120	94.3		ug/L		79	56 - 122	9	30
3,3'-Dichlorobenzidine			160	170		ug/L		106	36 - 132	16	30
2,4-Dichlorophenol			120	49.5	*- *1	ug/L		41	49 - 120	60	30
Diethyl phthalate			120	117		ug/L		97	50 - 137	7	30
2,4-Dimethylphenol			120	70.9		ug/L		59	48 - 120	26	30
Dimethyl phthalate			120	103		ug/L		86	57 - 124	0	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-653912/3-A
Matrix: Water
Analysis Batch: 654464

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653912

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Di-n-butyl phthalate			120	126		ug/L		105	58 - 126	13	30
4,6-Dinitro-ortho-cresol			240	209		ug/L		87	23 - 148	2	30
2,4-Dinitrophenol			240	131	*1	ug/L		55	10 - 150	37	30
2,4-Dinitrotoluene			120	99.8		ug/L		83	54 - 142	13	30
2,6-Dinitrotoluene			120	103		ug/L		86	55 - 130	1	30
Di-n-octyl phthalate			120	125		ug/L		104	57 - 138	18	30
1,4-Dioxane			120	58.0		ug/L		48	31 - 120	16	30
1,2-Diphenylhydrazine (as Azobenzene)			120	87.5		ug/L		73	45 - 124	7	30
Hexachlorobenzene			120	129		ug/L		107	52 - 129	12	30
Hexachlorocyclopentadiene			120	7.53	J *- *1	ug/L		6	10 - 134	163	30
Hexachloroethane			120	80.1		ug/L		67	20 - 120	3	30
Indene			120	98.7		ug/L		82	49 - 120	1	30
Isophorone			120	76.6		ug/L		64	48 - 120	12	30
2-Methylphenol			120	61.5	*1	ug/L		51	46 - 124	37	30
3 & 4 Methylphenol			120	59.4	*1	ug/L		49	45 - 120	42	30
2-Nitroaniline			120	96.4		ug/L		80	51 - 145	9	30
3-Nitroaniline			120	82.8		ug/L		69	37 - 127	6	30
4-Nitroaniline			120	112		ug/L		93	36 - 137	5	30
Nitrobenzene			120	75.0		ug/L		63	45 - 120	8	30
2-Nitrophenol			120	45.8	*- *1	ug/L		38	40 - 124	71	30
4-Nitrophenol			240	187		ug/L		78	23 - 146	20	30
N-Nitrosodimethylamine			120	90.1		ug/L		75	29 - 137	3	30
N-Nitrosodi-n-propylamine			120	86.0		ug/L		72	45 - 120	6	30
N-Nitrosodiphenylamine			119	97.1		ug/L		82	54 - 120	4	30
Pentachlorophenol			240	139	*1	ug/L		58	31 - 130	39	30
Phenol			120	45.5	*1	ug/L		38	11 - 120	51	30
Pyridine			240	97.7		ug/L		41	16 - 120	29	30
Quinoline			120	83.3	*1	ug/L		70	49 - 130	37	30
2,4,5-Trichlorophenol			120	72.4	*1	ug/L		60	51 - 136	36	30
2,4,6-Trichlorophenol			120	69.5	*1	ug/L		58	50 - 127	41	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*71*		*46 - 124*
2-Fluorophenol	*14*		*13 - 113*
Nitrobenzene-d5	*62*		*36 - 126*
Phenol-d5	*32*		*17 - 127*
Terphenyl-d14	*99*		*44 - 149*
2,4,6-Tribromophenol	*71*		*26 - 150*

Lab Sample ID: LCSD 400-653912/7-A
Matrix: Water
Analysis Batch: 654340

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653912

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	15.9	*1	ug/L		13	10 - 120	95	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-653912/7-A
Matrix: Water
Analysis Batch: 654340

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653912

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*79*		*46 - 124*
2-Fluorophenol	*36*		*13 - 113*
Nitrobenzene-d5	*62*		*36 - 126*
Phenol-d5	*57*		*17 - 127*
Terphenyl-d14	*87*		*44 - 149*
2,4,6-Tribromophenol	*82*		*26 - 150*

Lab Sample ID: MB 400-655129/1-A
Matrix: Water
Analysis Batch: 655351

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655129

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		12/20/23 10:21	12/21/23 16:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*46 - 124*	*12/20/23 10:21*	*12/21/23 16:24*	*1*
Nitrobenzene-d5	*66*		*36 - 126*	*12/20/23 10:21*	*12/21/23 16:24*	*1*
Terphenyl-d14	*86*		*44 - 149*	*12/20/23 10:21*	*12/21/23 16:24*	*1*

Lab Sample ID: LCS 400-655129/2-A
Matrix: Water
Analysis Batch: 655351

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655129

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Bis(2-ethylhexyl) phthalate			120	100		ug/L		83	52 - 147		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*46 - 124*
Nitrobenzene-d5	*81*		*36 - 126*
Terphenyl-d14	*80*		*44 - 149*

Lab Sample ID: LCSD 400-655129/3-A
Matrix: Water
Analysis Batch: 655351

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 655129

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate			120	92.3		ug/L		77	52 - 147	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*64*		*46 - 124*
Nitrobenzene-d5	*70*		*36 - 126*
Terphenyl-d14	*68*		*44 - 149*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-653399/1-A
Matrix: Water
Analysis Batch: 653755

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653399

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		12/07/23 14:39	12/11/23 15:57	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/07/23 14:39	12/11/23 15:57	1
Anthracene	ND		0.20	0.047	ug/L		12/07/23 14:39	12/11/23 15:57	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/07/23 14:39	12/11/23 15:57	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		12/07/23 14:39	12/11/23 15:57	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/07/23 14:39	12/11/23 15:57	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/07/23 14:39	12/11/23 15:57	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/07/23 14:39	12/11/23 15:57	1
Chrysene	ND		0.20	0.033	ug/L		12/07/23 14:39	12/11/23 15:57	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/07/23 14:39	12/11/23 15:57	1
Fluoranthene	ND		0.20	0.034	ug/L		12/07/23 14:39	12/11/23 15:57	1
Fluorene	ND		0.20	0.089	ug/L		12/07/23 14:39	12/11/23 15:57	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/07/23 14:39	12/11/23 15:57	1
Phenanthrene	ND		0.20	0.090	ug/L		12/07/23 14:39	12/11/23 15:57	1
Pyrene	ND		0.20	0.039	ug/L		12/07/23 14:39	12/11/23 15:57	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		12/07/23 14:39	12/11/23 15:57	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		12/07/23 14:39	12/11/23 15:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*92*		*18 - 147*	*12/07/23 14:39*	*12/11/23 15:57*	*1*
2-Fluorobiphenyl	*59*		*15 - 128*	*12/07/23 14:39*	*12/11/23 15:57*	*1*
Nitrobenzene-d5	*75*		*10 - 144*	*12/07/23 14:39*	*12/11/23 15:57*	*1*

Lab Sample ID: LCS 400-653399/2-A
Matrix: Water
Analysis Batch: 653755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	102		ug/L		85	40 - 140
Acenaphthylene	120	111		ug/L		93	40 - 140
Anthracene	120	97.4		ug/L		81	40 - 140
Benzo[a]anthracene	120	114		ug/L		95	40 - 140
Benzo[a]pyrene	120	92.2		ug/L		77	40 - 140
Benzo[b]fluoranthene	120	91.2		ug/L		76	40 - 140
Benzo[g,h,i]perylene	120	115		ug/L		96	40 - 140
Benzo[k]fluoranthene	120	108		ug/L		90	40 - 140
Chrysene	120	102		ug/L		85	40 - 140
Dibenz(a,h)anthracene	120	98.1		ug/L		82	40 - 140
Fluoranthene	120	89.5		ug/L		75	40 - 140
Fluorene	120	102		ug/L		85	40 - 140
Indeno[1,2,3-cd]pyrene	120	107		ug/L		89	40 - 140
Phenanthrene	120	93.3		ug/L		78	40 - 140
Pyrene	120	138		ug/L		115	40 - 140
1-Methylnaphthalene	120	79.1		ug/L		66	40 - 140
2-Methylnaphthalene	120	80.0		ug/L		67	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*76*		*18 - 147*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 400-653399/2-A
Matrix: Water
Analysis Batch: 653755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653399

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	76		15 - 128
Nitrobenzene-d5	84		10 - 144

Lab Sample ID: LCSD 400-653399/3-A
Matrix: Water
Analysis Batch: 653755

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653399

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	78.4		ug/L		65	40 - 140	27	40
Acenaphthylene			120	85.2		ug/L		71	40 - 140	26	40
Anthracene			120	76.4		ug/L		64	40 - 140	24	40
Benzo[a]anthracene			120	87.3		ug/L		73	40 - 140	26	40
Benzo[a]pyrene			120	69.0		ug/L		58	40 - 140	29	40
Benzo[b]fluoranthene			120	67.8		ug/L		57	40 - 140	29	40
Benzo[g,h,i]perylene			120	86.2		ug/L		72	40 - 140	29	40
Benzo[k]fluoranthene			120	79.2		ug/L		66	40 - 140	31	40
Chrysene			120	79.1		ug/L		66	40 - 140	25	40
Dibenz(a,h)anthracene			120	77.9		ug/L		65	40 - 140	23	40
Fluoranthene			120	70.2		ug/L		59	40 - 140	24	40
Fluorene			120	80.1		ug/L		67	40 - 140	24	40
Indeno[1,2,3-cd]pyrene			120	80.5		ug/L		67	40 - 140	28	40
Phenanthrene			120	73.7		ug/L		61	40 - 140	23	40
Pyrene			120	108		ug/L		90	40 - 140	25	40
1-Methylnaphthalene			120	80.3		ug/L		67	40 - 140	2	40
2-Methylnaphthalene			120	81.6		ug/L		68	40 - 140	2	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	58		18 - 147
2-Fluorobiphenyl	57		15 - 128
Nitrobenzene-d5	72		10 - 144

Lab Sample ID: MB 400-653593/1-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653593

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		12/08/23 15:22	12/13/23 21:47	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/08/23 15:22	12/13/23 21:47	1
Anthracene	ND		0.20	0.047	ug/L		12/08/23 15:22	12/13/23 21:47	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/08/23 15:22	12/13/23 21:47	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		12/08/23 15:22	12/13/23 21:47	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/08/23 15:22	12/13/23 21:47	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/08/23 15:22	12/13/23 21:47	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/08/23 15:22	12/13/23 21:47	1
Chrysene	ND		0.20	0.033	ug/L		12/08/23 15:22	12/13/23 21:47	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/08/23 15:22	12/13/23 21:47	1
Fluoranthene	ND		0.20	0.034	ug/L		12/08/23 15:22	12/13/23 21:47	1
Fluorene	ND		0.20	0.089	ug/L		12/08/23 15:22	12/13/23 21:47	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 400-653593/1-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653593

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/08/23 15:22	12/13/23 21:47	1
Phenanthrene	ND		0.20	0.090	ug/L		12/08/23 15:22	12/13/23 21:47	1
Pyrene	ND		0.20	0.039	ug/L		12/08/23 15:22	12/13/23 21:47	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		12/08/23 15:22	12/13/23 21:47	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		12/08/23 15:22	12/13/23 21:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*74*		*18 - 147*	*12/08/23 15:22*	*12/13/23 21:47*	*1*
2-Fluorobiphenyl	*75*		*15 - 128*	*12/08/23 15:22*	*12/13/23 21:47*	*1*
Nitrobenzene-d5	*72*		*10 - 144*	*12/08/23 15:22*	*12/13/23 21:47*	*1*

Lab Sample ID: LCS 400-653593/2-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653593

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	96.5		ug/L		80	40 - 140
Acenaphthylene	120	112		ug/L		93	40 - 140
Anthracene	120	110		ug/L		92	40 - 140
Benzo[a]anthracene	120	137	E	ug/L		114	40 - 140
Benzo[a]pyrene	120	107		ug/L		89	40 - 140
Benzo[b]fluoranthene	120	109		ug/L		91	40 - 140
Benzo[g,h,i]perylene	120	74.1		ug/L		62	40 - 140
Benzo[k]fluoranthene	120	97.0		ug/L		81	40 - 140
Chrysene	120	95.4		ug/L		80	40 - 140
Dibenz(a,h)anthracene	120	86.4		ug/L		72	40 - 140
Fluoranthene	120	111		ug/L		93	40 - 140
Fluorene	120	101		ug/L		84	40 - 140
Indeno[1,2,3-cd]pyrene	120	85.4		ug/L		71	40 - 140
Phenanthrene	120	94.0		ug/L		78	40 - 140
Pyrene	120	89.0		ug/L		74	40 - 140
1-Methylnaphthalene	120	78.7		ug/L		66	40 - 140
2-Methylnaphthalene	120	82.0		ug/L		68	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*65*		*18 - 147*
2-Fluorobiphenyl	*70*		*15 - 128*
Nitrobenzene-d5	*70*		*10 - 144*

Lab Sample ID: LCSD 400-653593/3-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653593

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	120	91.5		ug/L		76	40 - 140	5	40
Acenaphthylene	120	105		ug/L		88	40 - 140	6	40
Anthracene	120	104		ug/L		87	40 - 140	6	40
Benzo[a]anthracene	120	127	E	ug/L		106	40 - 140	8	40

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 400-653593/3-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653593

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[a]pyrene			120	102		ug/L		85	40 - 140	5	40
Benzo[b]fluoranthene			120	108		ug/L		90	40 - 140	1	40
Benzo[g,h,i]perylene			120	73.0		ug/L		61	40 - 140	2	40
Benzo[k]fluoranthene			120	93.8		ug/L		78	40 - 140	3	40
Chrysene			120	90.1		ug/L		75	40 - 140	6	40
Dibenz(a,h)anthracene			120	84.4		ug/L		70	40 - 140	2	40
Fluoranthene			120	101		ug/L		84	40 - 140	10	40
Fluorene			120	94.6		ug/L		79	40 - 140	6	40
Indeno[1,2,3-cd]pyrene			120	83.0		ug/L		69	40 - 140	3	40
Phenanthrene			120	89.0		ug/L		74	40 - 140	6	40
Pyrene			120	85.4		ug/L		71	40 - 140	4	40
1-Methylnaphthalene			120	80.6		ug/L		67	40 - 140	2	40
2-Methylnaphthalene			120	83.5		ug/L		70	40 - 140	2	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*62*		*18 - 147*
2-Fluorobiphenyl	*67*		*15 - 128*
Nitrobenzene-d5	*72*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-653514/1-A
Matrix: Water
Analysis Batch: 653676

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653514

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		12/08/23 10:59	12/11/23 12:10	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/08/23 10:59	12/11/23 12:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*51 - 149*	*12/08/23 10:59*	*12/11/23 12:10*	*1*

Lab Sample ID: LCS 400-653514/2-A
Matrix: Water
Analysis Batch: 653676

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653514

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane			0.101	0.0908		ug/L		90	60 - 140
1,2-Dibromoethane			0.100	0.0899		ug/L		90	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*88*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-653514/3-A
Matrix: Water
Analysis Batch: 653676

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653514

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0974		ug/L		97	60 - 140	7	30
1,2-Dibromoethane			0.100	0.0971		ug/L		97	60 - 140	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*51 - 149*

Lab Sample ID: MB 400-653553/1-A
Matrix: Water
Analysis Batch: 653676

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653553

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		12/08/23 12:50	12/11/23 16:19	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/08/23 12:50	12/11/23 16:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*12/08/23 12:50*	*12/11/23 16:19*	*1*

Lab Sample ID: LCS 400-653553/2-A
Matrix: Water
Analysis Batch: 653676

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653553

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0911		ug/L		91	60 - 140		
1,2-Dibromoethane			0.100	0.0939		ug/L		94	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*89*		*51 - 149*

Lab Sample ID: LCSD 400-653553/3-A
Matrix: Water
Analysis Batch: 653676

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653553

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.100		ug/L		100	60 - 140	10	30
1,2-Dibromoethane			0.100	0.0999		ug/L		100	60 - 140	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*110*		*51 - 149*

LAB (LOCATION)

Shell Oil Products US Chain Of Custody Record

AECOM

☐ 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
Melissa Remiger	25278	DATE: 12/4/2023
PO #	**GSAP Project ID**	PAGE: 1 of 2
60697537 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS: Street and City	State	AECOM Project / Task Number:
AECOM		900 South Central Ave; ROXANA	IL	Roxana Monthly GW 60697537 – 3.4.2

ADDRESS:	EDF DELIVERABLE TO (Name, Company, Office Location):	PHONE NO.:	E-MAIL:	AECOM Other ID:
100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA	Melissa Remiger - please see special instructions	314-802-1207	melissa.remiger@aecom.com	

PROJECT CONTACT (Hardcopy or PDF Report to):	SAMPLER NAME(S) (Print):	LAB USE ONLY
Melissa Remiger, Mary Massa, Brett Howell	C. McDavid, J. Mayer	

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

*** Please include "J" values on Reports.**
*** Please provide sample receipt upon login.**
*** Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com**

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

400-247720 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 8270 SIMS
	TB-ROX-120423-8260-A	12/4/2023	0000	Water	2					2	X			
	TB-ROX-120423-8011-A	12/4/2023	0000	Water	2					2		X		
	MW4-ROX-120423-EB	12/4/2023	0840	Water	6			2		8	X	X	X	X
	MW4-ROX-120423	12/4/2023	0940	Water	6			2		8	X	X	X	X
	MW25-ROX-120423	12/4/2023	1025	Water	6			2		8	X	X	X	X
	MW7-ROX-120423	12/4/2023	1115	Water	6			2		8	X	X	X	X
	MW7-ROX-120423-DUP	12/4/2023	1115	Water	6			2		8	X	X	X	X
	P93D-ROX-120423	12/4/2023	1340	Water	6			2		8	X	X	X	X

CMD 12-04-23

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 6339 6597 5481, 6339 6597 5492	12/4/2023	1600
Relinquished by: (Signature)	Received by: (Signature) BP	Date: 12/5/23	Time: 922
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: 1599800, 1599801, 1599802, 1599803

0.0°C IR4
2.6°C

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12/22/2023

LAB (LOCATION)

Shell Oil Products US Chain Of Custody Record

AECOM

☐ 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
Melissa Remiger	25278	DATE: 12/4/2023
PO #	**GSAP Project ID**	PAGE: 2 of 2
60697537 – 3.4.2	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 Monthly GW 60697537 – 3.4.2
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions
PHONE NO.: 314-802-1207
E-MAIL: melissa.remiger@aecom.com
AECOM Other ID:
PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell
SAMPLER NAME(S) (Print): M. Massa, T. Jenkins
LAB USE ONLY
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: melissa.remiger@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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

*** Please include "J" values on Reports.**
*** Please provide sample receipt upon login.**
*** Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com**

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.4.2

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 8270 SIMS
	TB-ROX-120423-8260-B	12/4/2023	0000	Water	2					2	X			
	TB-ROX-120423-8011-B	12/4/2023	0000	Water	2					2		X		
	P57-ROX-120423	12/4/2023	0930	Water	6			2		8	X	X	X	X
	P74-ROX-120423	12/4/2023	1115	Water	6			2		8	X	X	X	X
	T12-ROX-120423	12/4/2023	1220	Water	6			2		8	X	X	X	X
	T12-ROX-120423-DUP	12/4/2023	1220	Water	6			2		8	X	X	X	X
	P59-ROX-120423	12/4/2023	1325	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
MARY MASSA	FEDEX: See page 1	12/4/2023	1600
Relinquished by: (Signature)	Received by: (Signature) BP	Date: 12/5/23	Time: 920
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: See page 1

0.0°C IR8
2.6°C

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12/22/2023

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc. Job Number: 400-247720-1

Login Number: 247720 **List Source: Eurofins Pensacola**
List Number: 1
Creator: Roberts, Alexis J

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	0.0°C, 2.6°C IR8
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: 400-247720-1
Project/Site: ROXANA MONTHLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Roxana Groundwater Monthly – November/December 2023 Data Review

Laboratory SDG: 400-247828-1

Data Reviewer: Andrei Niculau

Peer Reviewer: Cheyana Cokley

Date Reviewed: 1/8/2024

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

Sample Identification	Sample Identification
TB-ROX-120523-8260	P58-ROX-120523
TB-ROX-120523-8011	P93B-ROX-120523

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 case narrative indicated that benzenethiol LCS/LCSD RPD was outside evaluation criteria. The SVOC surrogate recovery for terphenyl-d_{14} was outside criteria in sample P58-ROX-120523. The continuing calibration verification (CCV) for dichlorodifluoromethane and chloromethane were outside evaluation criteria, biased low. The continuing calibration verification (CCV) for benzo[a]anthracene was outside evaluation criteria, biased high. VOCs in sample P93B-ROX-120523 were diluted to bring target analytes into calibration range of the instrument. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (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
MB 400-653593/1-A	SVOCs	Dimethyl phthalate	1.06 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/LCSD 400-653593/4-A/5-A	SVOCs	Benzenethiol	51/34	**39**	10-120/30

Analytical data associated with LCS/LCSD 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 (%)
P58-ROX-120523	SVOCs	Terphenyl-d_{14}	**43**	44-149

Qualifications due to surrogate recoveries were not required if only one of three base/neutral and/or acid surrogate recoveries were outside evaluation criteria. 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 with the exception of non-detect VOCs in sample P93B-ROX-120523 to bring benzene into calibration range of the instrument. VOCs were non-detect at a dilution factor of 5000X, with raised reporting limits of between 5,000 and 130,000 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, the initial calibration verification (ICV) was outside evaluation criteria for benzo[a]anthracene, biased high. The continuing calibration verification (CCV) for dichlorodifluoromethane and chloromethane were outside evaluation criteria, biased low. Dichlorodifluoromethane and chloromethane in sample P93B-ROX-120523 are qualified per Section 11.0 of this data review due to sample dilution; no further qualification is required. Benzo[a]anthracene was qualified due to continuing calibration verification (CCV) outside evaluation criteria, biased high. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
P58-ROX-120523	VOCs	Dichlorodifluoromethane	**UJ**
P58-ROX-120523	VOCs	Chloromethane	**UJ**
P58-ROX-120523	PAHs	Benzo[a]anthracene	**J**

Additionally, VOCs in sample P93B-ROX-110422 were qualified as estimated non-detect due to sample dilution and historical detections.

Sample ID	Parameter	Analyte	Qualification
P93B-ROX-120523	VOCs	All non-detects	**UJ**

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 12/18/2023 6:18:31 PM

JOB DESCRIPTION

ROXANA MONTHLY GW

JOB NUMBER

400-247828-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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Authorized for release by
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(615)301-5038

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Job ID: 400-247828-1 Eurofins Pensacola

Job Narrative
400-247828-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 12/6/2023 9:21 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 time was 1.2°C

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-653472 recovered outside acceptance criteria, low biased, for Chloromethane and Dichlorodifluoromethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-653472 recovered above the upper control limit for Vinyl acetate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260D: The following samples were diluted to bring the concentration of target analytes within the calibration range: P58-ROX-120523 (400-247828-3) and P93B-ROX-120523 (400-247828-4). Elevated reporting limits (RLs) are provided.

Method 8260D: 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-120523-8260 (400-247828-1), P58-ROX-120523 (400-247828-3) and P93B-ROX-120523 (400-247828-4). 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 8260D: The initial calibration verification (ICV) analyzed in batch 400-627009 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

GC/MS Semi VOA
Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-653593 and analytical batch 400-654186 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270E: 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: P58-ROX-120523 (400-247828-3). These results have been reported and qualified.

Method 8270E: The following sample was diluted to bring the concentration of target analytes within the calibration range: P58-ROX-120523 (400-247828-3). Elevated reporting limits (RLs) are provided.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-654224 recovered above the upper control limit for Benzo[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene and Dibenz(a,h)anthracene. The samples associated with this CCV were below the reporting limit 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: 400-247828-1 (Continued) Eurofins Pensacola

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

Sample Summary

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

Job ID: 400-247828-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-247828-1	TB-ROX-120523-8260	Water	12/05/23 00:00	12/06/23 09:21
400-247828-2	TB-ROX-120523-8011	Water	12/05/23 00:00	12/06/23 09:21
400-247828-3	P58-ROX-120523	Water	12/05/23 09:20	12/06/23 09:21
400-247828-4	P93B-ROX-120523	Water	12/05/23 10:50	12/06/23 09:21

Detection Summary

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

Job ID: 400-247828-1

Client Sample ID: TB-ROX-120523-8260 — Lab Sample ID: 400-247828-1

No Detections.

Client Sample ID: TB-ROX-120523-8011 — Lab Sample ID: 400-247828-2

No Detections.

Client Sample ID: P58-ROX-120523 — Lab Sample ID: 400-247828-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	530000		2000	1000	ug/L	2000		8260D	Total/NA
Acenaphthene	0.35		0.20	0.098	ug/L	1		8270E SIM	Total/NA
Anthracene	0.11	J	0.20	0.047	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.045	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Chrysene	0.053	J	0.20	0.033	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.050	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Fluorene	0.72		0.20	0.088	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.61		0.20	0.089	ug/L	1		8270E SIM	Total/NA
Pyrene	0.088	J	0.20	0.039	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	37		0.20	0.079	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	18		0.20	0.065	ug/L	1		8270E SIM	Total/NA
Dibenzofuran	1.6	J	9.9	0.17	ug/L	1		8270E	Total/NA
Indene	1.2	J	9.9	0.99	ug/L	1		8270E	Total/NA
3 & 4 Methylphenol	1.9	J	20	0.39	ug/L	1		8270E	Total/NA
Phenol - DL	770		50	13	ug/L	5		8270E	Total/NA

Client Sample ID: P93B-ROX-120523 — Lab Sample ID: 400-247828-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene - DL	2100000		10000	5000	ug/L	10000		8260D	Total/NA
Acenaphthylene	0.14	J	0.20	0.043	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	0.15	J	0.20	0.079	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	0.12	J	0.20	0.065	ug/L	1		8270E SIM	Total/NA
Benzoic acid	12	J	29	7.2	ug/L	1		8270E	Total/NA
2,4-Dimethylphenol	3.4	J	9.8	3.4	ug/L	1		8270E	Total/NA
3 & 4 Methylphenol	0.67	J	20	0.38	ug/L	1		8270E	Total/NA
Phenol	240		9.8	2.6	ug/L	1		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-247828-1

Client Sample ID: TB-ROX-120523-8260
Date Collected: 12/05/23 00:00
Date Received: 12/06/23 09:21

Lab Sample ID: 400-247828-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			12/08/23 16:26	1
Acrolein	ND		20	3.3	ug/L			12/08/23 16:26	1
Acrylonitrile	ND		10	2.8	ug/L			12/08/23 16:26	1
Benzene	ND		1.0	0.50	ug/L			12/08/23 16:26	1
Bromobenzene	ND		1.0	0.54	ug/L			12/08/23 16:26	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/08/23 16:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/08/23 16:26	1
Bromoform	ND		5.0	0.25	ug/L			12/08/23 16:26	1
Bromomethane	ND		1.0	0.98	ug/L			12/08/23 16:26	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/08/23 16:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/08/23 16:26	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/08/23 16:26	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/08/23 16:26	1
Chloroethane	ND		1.0	0.76	ug/L			12/08/23 16:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/08/23 16:26	1
Chloroform	ND		1.0	0.90	ug/L			12/08/23 16:26	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/08/23 16:26	1
Chloromethane	ND		1.0	0.90	ug/L			12/08/23 16:26	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/08/23 16:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/08/23 16:26	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/08/23 16:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/08/23 16:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/08/23 16:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/08/23 16:26	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/08/23 16:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/08/23 16:26	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/08/23 16:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/08/23 16:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 16:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 16:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 16:26	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/08/23 16:26	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/08/23 16:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/08/23 16:26	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/08/23 16:26	1
2-Hexanone	ND		25	1.4	ug/L			12/08/23 16:26	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/08/23 16:26	1
Methylene bromide	ND		5.0	0.22	ug/L			12/08/23 16:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/08/23 16:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/08/23 16:26	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/08/23 16:26	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/08/23 16:26	1
Naphthalene	ND		5.0	3.0	ug/L			12/08/23 16:26	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/08/23 16:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/08/23 16:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/08/23 16:26	1
o-Xylene	ND		5.0	0.60	ug/L			12/08/23 16:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/08/23 16:26	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			12/08/23 16:26	1

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

Job ID: 400-247828-1

Client Sample ID: TB-ROX-120523-8260
Date Collected: 12/05/23 00:00
Date Received: 12/06/23 09:21

Lab Sample ID: 400-247828-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/08/23 16:26	1
Styrene	ND		1.0	1.0	ug/L			12/08/23 16:26	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/08/23 16:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/08/23 16:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/08/23 16:26	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/08/23 16:26	1
Toluene	ND		1.0	0.90	ug/L			12/08/23 16:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/08/23 16:26	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/08/23 16:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/08/23 16:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/08/23 16:26	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/08/23 16:26	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/08/23 16:26	1
Trichloroethene	ND		1.0	0.15	ug/L			12/08/23 16:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/08/23 16:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/08/23 16:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/08/23 16:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/08/23 16:26	1
Vinyl acetate	ND		25	0.93	ug/L			12/08/23 16:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/08/23 16:26	1
Xylenes, Total	ND		10	1.6	ug/L			12/08/23 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 130*		*12/08/23 16:26*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*12/08/23 16:26*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*12/08/23 16:26*	*1*

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

Job ID: 400-247828-1

Client Sample ID: TB-ROX-120523-8011
Date Collected: 12/05/23 00:00
Date Received: 12/06/23 09:21

Lab Sample ID: 400-247828-2
Matrix: Water

Method: EPA 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		12/08/23 12:50	12/11/23 23:55	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/08/23 12:50	12/11/23 23:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*51 - 149*	*12/08/23 12:50*	*12/11/23 23:55*	*1*

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

Job ID: 400-247828-1

Client Sample ID: P58-ROX-120523
Date Collected: 12/05/23 09:20
Date Received: 12/06/23 09:21

Lab Sample ID: 400-247828-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		50000	20000	ug/L			12/08/23 19:28	2000
Acrolein	ND		40000	6600	ug/L			12/08/23 19:28	2000
Acrylonitrile	ND		20000	5600	ug/L			12/08/23 19:28	2000
Benzene	**530000**		2000	1000	ug/L			12/08/23 19:28	2000
Bromobenzene	ND		2000	1100	ug/L			12/08/23 19:28	2000
Bromochloromethane	ND		2000	420	ug/L			12/08/23 19:28	2000
Bromodichloromethane	ND		2000	1000	ug/L			12/08/23 19:28	2000
Bromoform	ND		10000	500	ug/L			12/08/23 19:28	2000
Bromomethane	ND		2000	2000	ug/L			12/08/23 19:28	2000
2-Butanone (MEK)	ND		50000	5200	ug/L			12/08/23 19:28	2000
Carbon disulfide	ND		2000	1000	ug/L			12/08/23 19:28	2000
Carbon tetrachloride	ND		2000	380	ug/L			12/08/23 19:28	2000
Chlorobenzene	ND		2000	1800	ug/L			12/08/23 19:28	2000
Chloroethane	ND		2000	1500	ug/L			12/08/23 19:28	2000
2-Chloroethyl vinyl ether	ND		10000	4000	ug/L			12/08/23 19:28	2000
Chloroform	ND		2000	1800	ug/L			12/08/23 19:28	2000
1-Chlorohexane	ND		2000	640	ug/L			12/08/23 19:28	2000
Chloromethane	ND		2000	1800	ug/L			12/08/23 19:28	2000
cis-1,2-Dichloroethene	ND		2000	400	ug/L			12/08/23 19:28	2000
cis-1,3-Dichloropropene	ND		10000	1000	ug/L			12/08/23 19:28	2000
Dibromochloromethane	ND		2000	480	ug/L			12/08/23 19:28	2000
1,2-Dichlorobenzene	ND		2000	1000	ug/L			12/08/23 19:28	2000
1,3-Dichlorobenzene	ND		2000	1100	ug/L			12/08/23 19:28	2000
1,4-Dichlorobenzene	ND		2000	1300	ug/L			12/08/23 19:28	2000
Dichlorodifluoromethane	ND		2000	1700	ug/L			12/08/23 19:28	2000
1,1-Dichloroethane	ND		2000	1000	ug/L			12/08/23 19:28	2000
1,2-Dichloroethane	ND		2000	380	ug/L			12/08/23 19:28	2000
1,1-Dichloroethene	ND		2000	1000	ug/L			12/08/23 19:28	2000
1,2-Dichloropropane	ND		2000	1000	ug/L			12/08/23 19:28	2000
1,3-Dichloropropane	ND		2000	1000	ug/L			12/08/23 19:28	2000
2,2-Dichloropropane	ND		2000	1000	ug/L			12/08/23 19:28	2000
1,1-Dichloropropene	ND		2000	1000	ug/L			12/08/23 19:28	2000
Ethylbenzene	ND		2000	1000	ug/L			12/08/23 19:28	2000
Ethyl methacrylate	ND		2000	1200	ug/L			12/08/23 19:28	2000
Hexachlorobutadiene	ND		10000	1800	ug/L			12/08/23 19:28	2000
2-Hexanone	ND		50000	2800	ug/L			12/08/23 19:28	2000
Isopropylbenzene	ND		2000	1100	ug/L			12/08/23 19:28	2000
Methylene bromide	ND		10000	440	ug/L			12/08/23 19:28	2000
Methylene Chloride	ND		10000	6000	ug/L			12/08/23 19:28	2000
4-Methyl-2-pentanone (MIBK)	ND		50000	3600	ug/L			12/08/23 19:28	2000
Methyl tert-butyl ether	ND		2000	440	ug/L			12/08/23 19:28	2000
m-Xylene & p-Xylene	ND		10000	1300	ug/L			12/08/23 19:28	2000
Naphthalene	ND		10000	6000	ug/L			12/08/23 19:28	2000
n-Butylbenzene	ND		2000	1500	ug/L			12/08/23 19:28	2000
N-Propylbenzene	ND		2000	1400	ug/L			12/08/23 19:28	2000
o-Chlorotoluene	ND		2000	1100	ug/L			12/08/23 19:28	2000
o-Xylene	ND		10000	1200	ug/L			12/08/23 19:28	2000
p-Chlorotoluene	ND		2000	1100	ug/L			12/08/23 19:28	2000
p-Isopropyltoluene	ND		2000	1400	ug/L			12/08/23 19:28	2000

Client Sample ID: P58-ROX-120523
Date Collected: 12/05/23 09:20
Date Received: 12/06/23 09:21

Lab Sample ID: 400-247828-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		2000	1400	ug/L			12/08/23 19:28	2000
Styrene	ND		2000	2000	ug/L			12/08/23 19:28	2000
tert-Butylbenzene	ND		2000	1300	ug/L			12/08/23 19:28	2000
1,1,1,2-Tetrachloroethane	ND		2000	320	ug/L			12/08/23 19:28	2000
1,1,2,2-Tetrachloroethane	ND		2000	1000	ug/L			12/08/23 19:28	2000
Tetrachloroethene	ND		2000	1800	ug/L			12/08/23 19:28	2000
Toluene	ND		2000	1800	ug/L			12/08/23 19:28	2000
trans-1,2-Dichloroethene	ND		2000	1000	ug/L			12/08/23 19:28	2000
trans-1,3-Dichloropropene	ND		10000	400	ug/L			12/08/23 19:28	2000
1,2,3-Trichlorobenzene	ND		2000	1800	ug/L			12/08/23 19:28	2000
1,2,4-Trichlorobenzene	ND		2000	1600	ug/L			12/08/23 19:28	2000
1,1,1-Trichloroethane	ND		2000	360	ug/L			12/08/23 19:28	2000
1,1,2-Trichloroethane	ND		10000	420	ug/L			12/08/23 19:28	2000
Trichloroethene	ND		2000	300	ug/L			12/08/23 19:28	2000
Trichlorofluoromethane	ND		2000	1000	ug/L			12/08/23 19:28	2000
1,2,3-Trichloropropane	ND		10000	1700	ug/L			12/08/23 19:28	2000
1,2,4-Trimethylbenzene	ND		2000	1600	ug/L			12/08/23 19:28	2000
1,3,5-Trimethylbenzene	ND		2000	1100	ug/L			12/08/23 19:28	2000
Vinyl acetate	ND		50000	1900	ug/L			12/08/23 19:28	2000
Vinyl chloride	ND		2000	1000	ug/L			12/08/23 19:28	2000
Xylenes, Total	ND		20000	3200	ug/L			12/08/23 19:28	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*72 - 130*		*12/08/23 19:28*	*2000*
Dibromofluoromethane	*102*		*75 - 126*		*12/08/23 19:28*	*2000*
Toluene-d8 (Surr)	*97*		*64 - 132*		*12/08/23 19:28*	*2000*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.35**		0.20	0.098	ug/L		12/08/23 15:23	12/14/23 01:30	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/08/23 15:23	12/14/23 01:30	1
Anthracene	**0.11**	**J**	0.20	0.047	ug/L		12/08/23 15:23	12/14/23 01:30	1
Benzo[a]anthracene	**0.045**	**J**	0.20	0.034	ug/L		12/08/23 15:23	12/14/23 01:30	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		12/08/23 15:23	12/14/23 01:30	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/08/23 15:23	12/14/23 01:30	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/08/23 15:23	12/14/23 01:30	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		12/08/23 15:23	12/14/23 01:30	1
Chrysene	**0.053**	**J**	0.20	0.033	ug/L		12/08/23 15:23	12/14/23 01:30	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/08/23 15:23	12/14/23 01:30	1
Fluoranthene	**0.050**	**J**	0.20	0.034	ug/L		12/08/23 15:23	12/14/23 01:30	1
Fluorene	**0.72**		0.20	0.088	ug/L		12/08/23 15:23	12/14/23 01:30	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/08/23 15:23	12/14/23 01:30	1
Phenanthrene	**0.61**		0.20	0.089	ug/L		12/08/23 15:23	12/14/23 01:30	1
Pyrene	**0.088**	**J**	0.20	0.039	ug/L		12/08/23 15:23	12/14/23 01:30	1
1-Methylnaphthalene	**37**		0.20	0.079	ug/L		12/08/23 15:23	12/14/23 01:30	1
2-Methylnaphthalene	**18**		0.20	0.065	ug/L		12/08/23 15:23	12/14/23 01:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*36*		*18 - 147*	*12/08/23 15:23*	*12/14/23 01:30*	*1*
2-Fluorobiphenyl	*42*		*15 - 128*	*12/08/23 15:23*	*12/14/23 01:30*	*1*

Client Sample ID: P58-ROX-120523
Date Collected: 12/05/23 09:20
Date Received: 12/06/23 09:21

Lab Sample ID: 400-247828-3
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*56*		*10 - 144*	*12/08/23 15:23*	*12/14/23 01:30*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.9	3.8	ug/L		12/08/23 15:23	12/14/23 23:25	1
Benzenethiol	ND	*1	9.9	1.7	ug/L		12/08/23 15:23	12/14/23 23:25	1
Benzoic acid	ND		30	7.2	ug/L		12/08/23 15:23	12/14/23 23:25	1
Benzyl alcohol	ND		9.9	2.0	ug/L		12/08/23 15:23	12/14/23 23:25	1
Bis(2-chloroethoxy)methane	ND		9.9	0.16	ug/L		12/08/23 15:23	12/14/23 23:25	1
Bis(2-chloroethyl)ether	ND		9.9	2.7	ug/L		12/08/23 15:23	12/14/23 23:25	1
bis (2-chloroisopropyl) ether	ND		9.9	0.16	ug/L		12/08/23 15:23	12/14/23 23:25	1
Bis(2-ethylhexyl) phthalate	ND		9.9	5.0	ug/L		12/08/23 15:23	12/14/23 23:25	1
4-Bromophenyl phenyl ether	ND		9.9	0.20	ug/L		12/08/23 15:23	12/14/23 23:25	1
Butyl benzyl phthalate	ND		9.9	0.19	ug/L		12/08/23 15:23	12/14/23 23:25	1
4-Chloroaniline	ND		9.9	3.4	ug/L		12/08/23 15:23	12/14/23 23:25	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		12/08/23 15:23	12/14/23 23:25	1
2-Chloronaphthalene	ND		9.9	0.14	ug/L		12/08/23 15:23	12/14/23 23:25	1
2-Chlorophenol	ND		9.9	2.2	ug/L		12/08/23 15:23	12/14/23 23:25	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		12/08/23 15:23	12/14/23 23:25	1
Dibenz[a,h]acridine	ND		9.9	0.99	ug/L		12/08/23 15:23	12/14/23 23:25	1
Dibenzofuran	**1.6**	**J**	9.9	0.17	ug/L		12/08/23 15:23	12/14/23 23:25	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		12/08/23 15:23	12/14/23 23:25	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		12/08/23 15:23	12/14/23 23:25	1
Diethyl phthalate	ND		9.9	0.24	ug/L		12/08/23 15:23	12/14/23 23:25	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		12/08/23 15:23	12/14/23 23:25	1
Dimethyl phthalate	ND		9.9	0.17	ug/L		12/08/23 15:23	12/14/23 23:25	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		12/08/23 15:23	12/14/23 23:25	1
4,6-Dinitro-ortho-cresol	ND		9.9	1.6	ug/L		12/08/23 15:23	12/14/23 23:25	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		12/08/23 15:23	12/14/23 23:25	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		12/08/23 15:23	12/14/23 23:25	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		12/08/23 15:23	12/14/23 23:25	1
Di-n-octyl phthalate	ND		9.9	0.17	ug/L		12/08/23 15:23	12/14/23 23:25	1
1,4-Dioxane	ND		9.9	0.99	ug/L		12/08/23 15:23	12/14/23 23:25	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		12/08/23 15:23	12/14/23 23:25	1
Hexachlorobenzene	ND		9.9	0.17	ug/L		12/08/23 15:23	12/14/23 23:25	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/08/23 15:23	12/14/23 23:25	1
Hexachloroethane	ND		9.9	4.2	ug/L		12/08/23 15:23	12/14/23 23:25	1
Indene	**1.2**	**J**	9.9	0.99	ug/L		12/08/23 15:23	12/14/23 23:25	1
Isophorone	ND		9.9	0.14	ug/L		12/08/23 15:23	12/14/23 23:25	1
2-Methylphenol	ND		9.9	1.8	ug/L		12/08/23 15:23	12/14/23 23:25	1
3 & 4 Methylphenol	**1.9**	**J**	20	0.39	ug/L		12/08/23 15:23	12/14/23 23:25	1
2-Nitroaniline	ND		9.9	2.2	ug/L		12/08/23 15:23	12/14/23 23:25	1
3-Nitroaniline	ND		9.9	1.8	ug/L		12/08/23 15:23	12/14/23 23:25	1
4-Nitroaniline	ND		9.9	1.5	ug/L		12/08/23 15:23	12/14/23 23:25	1
Nitrobenzene	ND		9.9	0.13	ug/L		12/08/23 15:23	12/14/23 23:25	1
2-Nitrophenol	ND		9.9	5.2	ug/L		12/08/23 15:23	12/14/23 23:25	1
4-Nitrophenol	ND		9.9	2.1	ug/L		12/08/23 15:23	12/14/23 23:25	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		12/08/23 15:23	12/14/23 23:25	1

Client Sample ID: P58-ROX-120523
Date Collected: 12/05/23 09:20
Date Received: 12/06/23 09:21

Lab Sample ID: 400-247828-3
Matrix: Water

Method: SW846 8270E - 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		12/08/23 15:23	12/14/23 23:25	1
N-Nitrosodiphenylamine	ND		9.9	0.18	ug/L		12/08/23 15:23	12/14/23 23:25	1
Pentachlorophenol	ND		20	1.4	ug/L		12/08/23 15:23	12/14/23 23:25	1
Pyridine	ND		9.9	3.2	ug/L		12/08/23 15:23	12/14/23 23:25	1
Quinoline	ND		9.9	4.5	ug/L		12/08/23 15:23	12/14/23 23:25	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		12/08/23 15:23	12/14/23 23:25	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		12/08/23 15:23	12/14/23 23:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*46 - 124*	*12/08/23 15:23*	*12/14/23 23:25*	*1*
2-Fluorophenol	*43*		*13 - 113*	*12/08/23 15:23*	*12/14/23 23:25*	*1*
Nitrobenzene-d5	*58*		*36 - 126*	*12/08/23 15:23*	*12/14/23 23:25*	*1*
Phenol-d5	*54*		*17 - 127*	*12/08/23 15:23*	*12/14/23 23:25*	*1*
Terphenyl-d14	*43*	*S1-*	*44 - 149*	*12/08/23 15:23*	*12/14/23 23:25*	*1*
2,4,6-Tribromophenol	*83*		*26 - 150*	*12/08/23 15:23*	*12/14/23 23:25*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**770**		50	13	ug/L		12/08/23 15:23	12/15/23 15:35	5

Method: EPA 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		12/08/23 12:50	12/12/23 00:16	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/08/23 12:50	12/12/23 00:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*51 - 149*	*12/08/23 12:50*	*12/12/23 00:16*	*1*

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

Job ID: 400-247828-1

Client Sample ID: P93B-ROX-120523
Date Collected: 12/05/23 10:50
Date Received: 12/06/23 09:21

Lab Sample ID: 400-247828-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130000	50000	ug/L			12/08/23 19:50	5000
Acrolein	ND		100000	17000	ug/L			12/08/23 19:50	5000
Acrylonitrile	ND		50000	14000	ug/L			12/08/23 19:50	5000
Bromobenzene	ND		5000	2700	ug/L			12/08/23 19:50	5000
Bromochloromethane	ND		5000	1100	ug/L			12/08/23 19:50	5000
Bromodichloromethane	ND		5000	2500	ug/L			12/08/23 19:50	5000
Bromoform	ND		25000	1300	ug/L			12/08/23 19:50	5000
Bromomethane	ND		5000	4900	ug/L			12/08/23 19:50	5000
2-Butanone (MEK)	ND		130000	13000	ug/L			12/08/23 19:50	5000
Carbon disulfide	ND		5000	2500	ug/L			12/08/23 19:50	5000
Carbon tetrachloride	ND		5000	950	ug/L			12/08/23 19:50	5000
Chlorobenzene	ND		5000	4500	ug/L			12/08/23 19:50	5000
Chloroethane	ND		5000	3800	ug/L			12/08/23 19:50	5000
2-Chloroethyl vinyl ether	ND		25000	10000	ug/L			12/08/23 19:50	5000
Chloroform	ND		5000	4500	ug/L			12/08/23 19:50	5000
1-Chlorohexane	ND		5000	1600	ug/L			12/08/23 19:50	5000
Chloromethane	ND		5000	4500	ug/L			12/08/23 19:50	5000
cis-1,2-Dichloroethene	ND		5000	1000	ug/L			12/08/23 19:50	5000
cis-1,3-Dichloropropene	ND		25000	2500	ug/L			12/08/23 19:50	5000
Dibromochloromethane	ND		5000	1200	ug/L			12/08/23 19:50	5000
1,2-Dichlorobenzene	ND		5000	2500	ug/L			12/08/23 19:50	5000
1,3-Dichlorobenzene	ND		5000	2700	ug/L			12/08/23 19:50	5000
1,4-Dichlorobenzene	ND		5000	3200	ug/L			12/08/23 19:50	5000
Dichlorodifluoromethane	ND		5000	4300	ug/L			12/08/23 19:50	5000
1,1-Dichloroethane	ND		5000	2500	ug/L			12/08/23 19:50	5000
1,2-Dichloroethane	ND		5000	950	ug/L			12/08/23 19:50	5000
1,1-Dichloroethene	ND		5000	2500	ug/L			12/08/23 19:50	5000
1,2-Dichloropropane	ND		5000	2500	ug/L			12/08/23 19:50	5000
1,3-Dichloropropane	ND		5000	2500	ug/L			12/08/23 19:50	5000
2,2-Dichloropropane	ND		5000	2500	ug/L			12/08/23 19:50	5000
1,1-Dichloropropene	ND		5000	2500	ug/L			12/08/23 19:50	5000
Ethylbenzene	ND		5000	2500	ug/L			12/08/23 19:50	5000
Ethyl methacrylate	ND		5000	3000	ug/L			12/08/23 19:50	5000
Hexachlorobutadiene	ND		25000	4500	ug/L			12/08/23 19:50	5000
2-Hexanone	ND		130000	7000	ug/L			12/08/23 19:50	5000
Isopropylbenzene	ND		5000	2700	ug/L			12/08/23 19:50	5000
Methylene bromide	ND		25000	1100	ug/L			12/08/23 19:50	5000
Methylene Chloride	ND		25000	15000	ug/L			12/08/23 19:50	5000
4-Methyl-2-pentanone (MIBK)	ND		130000	9000	ug/L			12/08/23 19:50	5000
Methyl tert-butyl ether	ND		5000	1100	ug/L			12/08/23 19:50	5000
m-Xylene & p-Xylene	ND		25000	3200	ug/L			12/08/23 19:50	5000
Naphthalene	ND		25000	15000	ug/L			12/08/23 19:50	5000
n-Butylbenzene	ND		5000	3800	ug/L			12/08/23 19:50	5000
N-Propylbenzene	ND		5000	3500	ug/L			12/08/23 19:50	5000
o-Chlorotoluene	ND		5000	2900	ug/L			12/08/23 19:50	5000
o-Xylene	ND		25000	3000	ug/L			12/08/23 19:50	5000
p-Chlorotoluene	ND		5000	2800	ug/L			12/08/23 19:50	5000
p-Isopropyltoluene	ND		5000	3600	ug/L			12/08/23 19:50	5000
sec-Butylbenzene	ND		5000	3500	ug/L			12/08/23 19:50	5000

Client Sample ID: P93B-ROX-120523
Date Collected: 12/05/23 10:50
Date Received: 12/06/23 09:21

Lab Sample ID: 400-247828-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		5000	5000	ug/L			12/08/23 19:50	5000
tert-Butylbenzene	ND		5000	3200	ug/L			12/08/23 19:50	5000
1,1,1,2-Tetrachloroethane	ND		5000	800	ug/L			12/08/23 19:50	5000
1,1,2,2-Tetrachloroethane	ND		5000	2500	ug/L			12/08/23 19:50	5000
Tetrachloroethene	ND		5000	4500	ug/L			12/08/23 19:50	5000
Toluene	ND		5000	4500	ug/L			12/08/23 19:50	5000
trans-1,2-Dichloroethene	ND		5000	2500	ug/L			12/08/23 19:50	5000
trans-1,3-Dichloropropene	ND		25000	1000	ug/L			12/08/23 19:50	5000
1,2,3-Trichlorobenzene	ND		5000	4500	ug/L			12/08/23 19:50	5000
1,2,4-Trichlorobenzene	ND		5000	4100	ug/L			12/08/23 19:50	5000
1,1,1-Trichloroethane	ND		5000	900	ug/L			12/08/23 19:50	5000
1,1,2-Trichloroethane	ND		25000	1100	ug/L			12/08/23 19:50	5000
Trichloroethene	ND		5000	750	ug/L			12/08/23 19:50	5000
Trichlorofluoromethane	ND		5000	2600	ug/L			12/08/23 19:50	5000
1,2,3-Trichloropropane	ND		25000	4200	ug/L			12/08/23 19:50	5000
1,2,4-Trimethylbenzene	ND		5000	4100	ug/L			12/08/23 19:50	5000
1,3,5-Trimethylbenzene	ND		5000	2800	ug/L			12/08/23 19:50	5000
Vinyl acetate	ND		130000	4700	ug/L			12/08/23 19:50	5000
Vinyl chloride	ND		5000	2500	ug/L			12/08/23 19:50	5000
Xylenes, Total	ND		50000	8000	ug/L			12/08/23 19:50	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 130*		*12/08/23 19:50*	*5000*
Dibromofluoromethane	*103*		*75 - 126*		*12/08/23 19:50*	*5000*
Toluene-d8 (Surr)	*97*		*64 - 132*		*12/08/23 19:50*	*5000*

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2100000**		10000	5000	ug/L			12/11/23 20:31	10000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*12/11/23 20:31*	*10000*
Dibromofluoromethane	*93*		*75 - 126*		*12/11/23 20:31*	*10000*
Toluene-d8 (Surr)	*105*		*64 - 132*		*12/11/23 20:31*	*10000*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.097	ug/L		12/08/23 15:23	12/14/23 01:50	1
Acenaphthylene	**0.14**	**J**	0.20	0.043	ug/L		12/08/23 15:23	12/14/23 01:50	1
Anthracene	ND		0.20	0.046	ug/L		12/08/23 15:23	12/14/23 01:50	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		12/08/23 15:23	12/14/23 01:50	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		12/08/23 15:23	12/14/23 01:50	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		12/08/23 15:23	12/14/23 01:50	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/08/23 15:23	12/14/23 01:50	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		12/08/23 15:23	12/14/23 01:50	1
Chrysene	ND		0.20	0.032	ug/L		12/08/23 15:23	12/14/23 01:50	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		12/08/23 15:23	12/14/23 01:50	1
Fluoranthene	ND		0.20	0.033	ug/L		12/08/23 15:23	12/14/23 01:50	1
Fluorene	ND		0.20	0.087	ug/L		12/08/23 15:23	12/14/23 01:50	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		12/08/23 15:23	12/14/23 01:50	1

Client Sample ID: P93B-ROX-120523
Date Collected: 12/05/23 10:50
Date Received: 12/06/23 09:21

Lab Sample ID: 400-247828-4
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		0.20	0.088	ug/L		12/08/23 15:23	12/14/23 01:50	1
Pyrene	ND		0.20	0.038	ug/L		12/08/23 15:23	12/14/23 01:50	1
1-Methylnaphthalene	**0.15**	**J**	0.20	0.079	ug/L		12/08/23 15:23	12/14/23 01:50	1
2-Methylnaphthalene	**0.12**	**J**	0.20	0.065	ug/L		12/08/23 15:23	12/14/23 01:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*41*		*18 - 147*	*12/08/23 15:23*	*12/14/23 01:50*	*1*
2-Fluorobiphenyl	*71*		*15 - 128*	*12/08/23 15:23*	*12/14/23 01:50*	*1*
Nitrobenzene-d5	*34*		*10 - 144*	*12/08/23 15:23*	*12/14/23 01:50*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	3.7	ug/L		12/08/23 15:23	12/14/23 23:51	1
Benzenethiol	ND	*1	9.8	1.7	ug/L		12/08/23 15:23	12/14/23 23:51	1
Benzoic acid	**12**	**J**	29	7.2	ug/L		12/08/23 15:23	12/14/23 23:51	1
Benzyl alcohol	ND		9.8	2.0	ug/L		12/08/23 15:23	12/14/23 23:51	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		12/08/23 15:23	12/14/23 23:51	1
Bis(2-chloroethyl)ether	ND		9.8	2.7	ug/L		12/08/23 15:23	12/14/23 23:51	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		12/08/23 15:23	12/14/23 23:51	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		12/08/23 15:23	12/14/23 23:51	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		12/08/23 15:23	12/14/23 23:51	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		12/08/23 15:23	12/14/23 23:51	1
4-Chloroaniline	ND		9.8	3.3	ug/L		12/08/23 15:23	12/14/23 23:51	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		12/08/23 15:23	12/14/23 23:51	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		12/08/23 15:23	12/14/23 23:51	1
2-Chlorophenol	ND		9.8	2.2	ug/L		12/08/23 15:23	12/14/23 23:51	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		12/08/23 15:23	12/14/23 23:51	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		12/08/23 15:23	12/14/23 23:51	1
Dibenzofuran	ND		9.8	0.17	ug/L		12/08/23 15:23	12/14/23 23:51	1
3,3'-Dichlorobenzidine	ND		9.8	2.6	ug/L		12/08/23 15:23	12/14/23 23:51	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		12/08/23 15:23	12/14/23 23:51	1
Diethyl phthalate	ND		9.8	0.24	ug/L		12/08/23 15:23	12/14/23 23:51	1
2,4-Dimethylphenol	**3.4**	**J**	9.8	3.4	ug/L		12/08/23 15:23	12/14/23 23:51	1
Dimethyl phthalate	ND		9.8	0.17	ug/L		12/08/23 15:23	12/14/23 23:51	1
Di-n-butyl phthalate	ND		9.8	2.7	ug/L		12/08/23 15:23	12/14/23 23:51	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		12/08/23 15:23	12/14/23 23:51	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		12/08/23 15:23	12/14/23 23:51	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		12/08/23 15:23	12/14/23 23:51	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		12/08/23 15:23	12/14/23 23:51	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		12/08/23 15:23	12/14/23 23:51	1
1,4-Dioxane	ND		9.8	0.98	ug/L		12/08/23 15:23	12/14/23 23:51	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		12/08/23 15:23	12/14/23 23:51	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		12/08/23 15:23	12/14/23 23:51	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/08/23 15:23	12/14/23 23:51	1
Hexachloroethane	ND		9.8	4.1	ug/L		12/08/23 15:23	12/14/23 23:51	1
Indene	ND		9.8	0.98	ug/L		12/08/23 15:23	12/14/23 23:51	1
Isophorone	ND		9.8	0.14	ug/L		12/08/23 15:23	12/14/23 23:51	1
2-Methylphenol	ND		9.8	1.8	ug/L		12/08/23 15:23	12/14/23 23:51	1
3 & 4 Methylphenol	**0.67**	**J**	20	0.38	ug/L		12/08/23 15:23	12/14/23 23:51	1

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

Job ID: 400-247828-1

Client Sample ID: P93B-ROX-120523
Date Collected: 12/05/23 10:50
Date Received: 12/06/23 09:21

Lab Sample ID: 400-247828-4
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		9.8	2.2	ug/L		12/08/23 15:23	12/14/23 23:51	1
3-Nitroaniline	ND		9.8	1.8	ug/L		12/08/23 15:23	12/14/23 23:51	1
4-Nitroaniline	ND		9.8	1.5	ug/L		12/08/23 15:23	12/14/23 23:51	1
Nitrobenzene	ND		9.8	0.13	ug/L		12/08/23 15:23	12/14/23 23:51	1
2-Nitrophenol	ND		9.8	5.1	ug/L		12/08/23 15:23	12/14/23 23:51	1
4-Nitrophenol	ND		9.8	2.1	ug/L		12/08/23 15:23	12/14/23 23:51	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		12/08/23 15:23	12/14/23 23:51	1
N-Nitrosodi-n-propylamine	ND		9.8	3.2	ug/L		12/08/23 15:23	12/14/23 23:51	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		12/08/23 15:23	12/14/23 23:51	1
Pentachlorophenol	ND		20	1.4	ug/L		12/08/23 15:23	12/14/23 23:51	1
Phenol	**240**		9.8	2.6	ug/L		12/08/23 15:23	12/14/23 23:51	1
Pyridine	ND		9.8	3.1	ug/L		12/08/23 15:23	12/14/23 23:51	1
Quinoline	ND		9.8	4.4	ug/L		12/08/23 15:23	12/14/23 23:51	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		12/08/23 15:23	12/14/23 23:51	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		12/08/23 15:23	12/14/23 23:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*46 - 124*	*12/08/23 15:23*	*12/14/23 23:51*	*1*
2-Fluorophenol	*42*		*13 - 113*	*12/08/23 15:23*	*12/14/23 23:51*	*1*
Nitrobenzene-d5	*61*		*36 - 126*	*12/08/23 15:23*	*12/14/23 23:51*	*1*
Phenol-d5	*54*		*17 - 127*	*12/08/23 15:23*	*12/14/23 23:51*	*1*
Terphenyl-d14	*51*		*44 - 149*	*12/08/23 15:23*	*12/14/23 23:51*	*1*
2,4,6-Tribromophenol	*86*		*26 - 150*	*12/08/23 15:23*	*12/14/23 23:51*	*1*

Method: EPA 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		12/08/23 12:50	12/12/23 00:36	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/08/23 12:50	12/12/23 00:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*51 - 149*	*12/08/23 12:50*	*12/12/23 00:36*	*1*

Definitions/Glossary

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

Job ID: 400-247828-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
E	Result exceeded calibration range.
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.

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 MONTHLY GW

Job ID: 400-247828-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-130)	(75-126)	(64-132)
400-247828-1	TB-ROX-120523-8260	109	109	97
400-247828-3	P58-ROX-120523	110	102	97
400-247828-4	P93B-ROX-120523	107	103	97
400-247828-4 - DL	P93B-ROX-120523	101	93	105
LCS 400-653472/1001	Lab Control Sample	105	98	98
LCS 400-653690/1001	Lab Control Sample	108	98	105
MB 400-653472/3	Method Blank	108	109	98
MB 400-653690/3	Method Blank	106	89	105

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270E - 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)
400-247828-3	P58-ROX-120523	66	43	58	54	43 S1-	83
400-247828-4	P93B-ROX-120523	72	42	61	54	51	86
LCS 400-653593/2-A	Lab Control Sample	73	54	72	65	82	84
LCS 400-653593/4-A	Lab Control Sample	78	48	63	60	87	76
LCSD 400-653593/3-A	Lab Control Sample Dup	67	45	68	61	76	79
LCSD 400-653593/5-A	Lab Control Sample Dup	79	59	67	66	92	79
MB 400-653593/1-A	Method Blank	80	45	65	60	85	77

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-247828-3	P58-ROX-120523	36	42	56
400-247828-4	P93B-ROX-120523	41	71	34
LCS 400-653593/2-A	Lab Control Sample	65	70	70
LCSD 400-653593/3-A	Lab Control Sample Dup	62	67	72
MB 400-653593/1-A	Method Blank	74	75	72

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Surrogate Summary

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

Job ID: 400-247828-1

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-247828-2	TB-ROX-120523-8011	90
400-247828-3	P58-ROX-120523	109
400-247828-4	P93B-ROX-120523	81
LCS 400-653553/2-A	Lab Control Sample	89
LCSD 400-653553/3-A	Lab Control Sample Dup	110
MB 400-653553/1-A	Method Blank	94

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-247828-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET 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:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

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

Job ID: 400-247828-1

Client Sample ID: TB-ROX-120523-8260
Lab Sample ID: 400-247828-1
Date Collected: 12/05/23 00:00
Matrix: Water
Date Received: 12/06/23 09:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	653472	12/08/23 16:26	BPO	EET PEN

Client Sample ID: TB-ROX-120523-8011
Lab Sample ID: 400-247828-2
Date Collected: 12/05/23 00:00
Matrix: Water
Date Received: 12/06/23 09:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.8 mL	35 mL	653553	12/08/23 12:50	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 23:55	PG	EET PEN

Client Sample ID: P58-ROX-120523
Lab Sample ID: 400-247828-3
Date Collected: 12/05/23 09:20
Matrix: Water
Date Received: 12/06/23 09:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2000	5 mL	5 mL	653472	12/08/23 19:28	BPO	EET PEN
Total/NA	Prep	3520C			252.4 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654340	12/14/23 23:25	S1B	EET PEN
Total/NA	Prep	3520C	DL		252.4 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E	DL	5	0.4 mL	0.4 mL	654464	12/15/23 15:35	S1B	EET PEN
Total/NA	Prep	3520C			252.4 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	654224	12/14/23 01:30	KJA	EET PEN
Total/NA	Prep	8011			35.4 mL	35 mL	653553	12/08/23 12:50	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/12/23 00:16	PG	EET PEN

Client Sample ID: P93B-ROX-120523
Lab Sample ID: 400-247828-4
Date Collected: 12/05/23 10:50
Matrix: Water
Date Received: 12/06/23 09:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D	DL	10000	5 mL	5 mL	653690	12/11/23 20:31	BPO	EET PEN
Total/NA	Analysis	8260D		5000	5 mL	5 mL	653472	12/08/23 19:50	BPO	EET PEN
Total/NA	Prep	3520C			254.6 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654340	12/14/23 23:51	S1B	EET PEN
Total/NA	Prep	3520C			254.6 mL	1 mL	653593	12/08/23 15:23	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	654224	12/14/23 01:50	KJA	EET PEN
Total/NA	Prep	8011			35.5 mL	35 mL	653553	12/08/23 12:50	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/12/23 00:36	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-653472/3
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	8260D		1	5 mL	5 mL	653472	12/08/23 10:45	BPO	EET PEN

Lab Chronicle

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

Job ID: 400-247828-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-653553/1-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	653553	12/08/23 12:50	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 16:19	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-653593/1-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	653593	12/08/23 15:22	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654186	12/13/23 18:46	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	653593	12/08/23 15:22	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	654224	12/13/23 21:47	KJA	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-653690/3

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	8260D		1	5 mL	5 mL	653690	12/11/23 10:57	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653472/1001

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	8260D		1	5 mL	5 mL	653472	12/08/23 09:28	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653553/2-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	653553	12/08/23 12:50	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 16:40	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653593/2-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	653593	12/08/23 15:22	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654186	12/13/23 19:11	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	653593	12/08/23 15:22	STC	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	654224	12/13/23 22:08	KJA	EET PEN

Lab Chronicle

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

Job ID: 400-247828-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653593/4-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	653593	12/08/23 15:22	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654186	12/13/23 20:02	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-653690/1001
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	8260D		1	5 mL	5 mL	653690	12/11/23 09:52	BPO	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653553/3-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	653553	12/08/23 12:50	PG	EET PEN
Total/NA	Analysis	8011		1			653676	12/11/23 17:01	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653593/3-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	653593	12/08/23 15:22	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654186	12/13/23 19:36	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	653593	12/08/23 15:22	STC	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	654224	12/13/23 22:28	KJA	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-653593/5-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	653593	12/08/23 15:22	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	654186	12/13/23 20:28	S1B	EET PEN

Laboratory References:
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 653472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247828-1	TB-ROX-120523-8260	Total/NA	Water	8260D	
400-247828-3	P58-ROX-120523	Total/NA	Water	8260D	
400-247828-4	P93B-ROX-120523	Total/NA	Water	8260D	
MB 400-653472/3	Method Blank	Total/NA	Water	8260D	
LCS 400-653472/1001	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 653690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247828-4 - DL	P93B-ROX-120523	Total/NA	Water	8260D	
MB 400-653690/3	Method Blank	Total/NA	Water	8260D	
LCS 400-653690/1001	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 653593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247828-3	P58-ROX-120523	Total/NA	Water	3520C	
400-247828-3 - DL	P58-ROX-120523	Total/NA	Water	3520C	
400-247828-4	P93B-ROX-120523	Total/NA	Water	3520C	
MB 400-653593/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-653593/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-653593/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-653593/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-653593/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 654186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-653593/1-A	Method Blank	Total/NA	Water	8270E	653593
LCS 400-653593/2-A	Lab Control Sample	Total/NA	Water	8270E	653593
LCS 400-653593/4-A	Lab Control Sample	Total/NA	Water	8270E	653593
LCSD 400-653593/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	653593
LCSD 400-653593/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	653593

Analysis Batch: 654224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247828-3	P58-ROX-120523	Total/NA	Water	8270E SIM	653593
400-247828-4	P93B-ROX-120523	Total/NA	Water	8270E SIM	653593
MB 400-653593/1-A	Method Blank	Total/NA	Water	8270E SIM	653593
LCS 400-653593/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	653593
LCSD 400-653593/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	653593

Analysis Batch: 654340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247828-3	P58-ROX-120523	Total/NA	Water	8270E	653593
400-247828-4	P93B-ROX-120523	Total/NA	Water	8270E	653593

Analysis Batch: 654464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247828-3 - DL	P58-ROX-120523	Total/NA	Water	8270E	653593

QC Association Summary

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

Job ID: 400-247828-1

GC Semi VOA

Prep Batch: 653553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247828-2	TB-ROX-120523-8011	Total/NA	Water	8011	
400-247828-3	P58-ROX-120523	Total/NA	Water	8011	
400-247828-4	P93B-ROX-120523	Total/NA	Water	8011	
MB 400-653553/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-653553/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-653553/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 653676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-247828-2	TB-ROX-120523-8011	Total/NA	Water	8011	653553
400-247828-3	P58-ROX-120523	Total/NA	Water	8011	653553
400-247828-4	P93B-ROX-120523	Total/NA	Water	8011	653553
MB 400-653553/1-A	Method Blank	Total/NA	Water	8011	653553
LCS 400-653553/2-A	Lab Control Sample	Total/NA	Water	8011	653553
LCSD 400-653553/3-A	Lab Control Sample Dup	Total/NA	Water	8011	653553

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-653472/3
Matrix: Water
Analysis Batch: 653472

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			12/08/23 10:45	1
Acrolein	ND		20	3.3	ug/L			12/08/23 10:45	1
Acrylonitrile	ND		10	2.8	ug/L			12/08/23 10:45	1
Benzene	ND		1.0	0.50	ug/L			12/08/23 10:45	1
Bromobenzene	ND		1.0	0.54	ug/L			12/08/23 10:45	1
Bromochloromethane	ND		1.0	0.21	ug/L			12/08/23 10:45	1
Bromodichloromethane	ND		1.0	0.50	ug/L			12/08/23 10:45	1
Bromoform	ND		5.0	0.25	ug/L			12/08/23 10:45	1
Bromomethane	ND		1.0	0.98	ug/L			12/08/23 10:45	1
2-Butanone (MEK)	ND		25	2.6	ug/L			12/08/23 10:45	1
Carbon disulfide	ND		1.0	0.50	ug/L			12/08/23 10:45	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			12/08/23 10:45	1
Chlorobenzene	ND		1.0	0.90	ug/L			12/08/23 10:45	1
Chloroethane	ND		1.0	0.76	ug/L			12/08/23 10:45	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			12/08/23 10:45	1
Chloroform	ND		1.0	0.90	ug/L			12/08/23 10:45	1
1-Chlorohexane	ND		1.0	0.32	ug/L			12/08/23 10:45	1
Chloromethane	ND		1.0	0.90	ug/L			12/08/23 10:45	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			12/08/23 10:45	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/08/23 10:45	1
Dibromochloromethane	ND		1.0	0.24	ug/L			12/08/23 10:45	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			12/08/23 10:45	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			12/08/23 10:45	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			12/08/23 10:45	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			12/08/23 10:45	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			12/08/23 10:45	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/08/23 10:45	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			12/08/23 10:45	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 10:45	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 10:45	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			12/08/23 10:45	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			12/08/23 10:45	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/08/23 10:45	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			12/08/23 10:45	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			12/08/23 10:45	1
2-Hexanone	ND		25	1.4	ug/L			12/08/23 10:45	1
Isopropylbenzene	ND		1.0	0.53	ug/L			12/08/23 10:45	1
Methylene bromide	ND		5.0	0.22	ug/L			12/08/23 10:45	1
Methylene Chloride	ND		5.0	3.0	ug/L			12/08/23 10:45	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			12/08/23 10:45	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			12/08/23 10:45	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			12/08/23 10:45	1
Naphthalene	ND		5.0	3.0	ug/L			12/08/23 10:45	1
n-Butylbenzene	ND		1.0	0.76	ug/L			12/08/23 10:45	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/08/23 10:45	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			12/08/23 10:45	1
o-Xylene	ND		5.0	0.60	ug/L			12/08/23 10:45	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			12/08/23 10:45	1

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

Lab Sample ID: MB 400-653472/3
Matrix: Water
Analysis Batch: 653472

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			12/08/23 10:45	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			12/08/23 10:45	1
Styrene	ND		1.0	1.0	ug/L			12/08/23 10:45	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			12/08/23 10:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/08/23 10:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			12/08/23 10:45	1
Tetrachloroethene	ND		1.0	0.90	ug/L			12/08/23 10:45	1
Toluene	ND		1.0	0.90	ug/L			12/08/23 10:45	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			12/08/23 10:45	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			12/08/23 10:45	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			12/08/23 10:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			12/08/23 10:45	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/08/23 10:45	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			12/08/23 10:45	1
Trichloroethene	ND		1.0	0.15	ug/L			12/08/23 10:45	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			12/08/23 10:45	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			12/08/23 10:45	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			12/08/23 10:45	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			12/08/23 10:45	1
Vinyl acetate	ND		25	0.93	ug/L			12/08/23 10:45	1
Vinyl chloride	ND		1.0	0.50	ug/L			12/08/23 10:45	1
Xylenes, Total	ND		10	1.6	ug/L			12/08/23 10:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*72 - 130*		*12/08/23 10:45*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*12/08/23 10:45*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*12/08/23 10:45*	*1*

Lab Sample ID: LCS 400-653472/1001
Matrix: Water
Analysis Batch: 653472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	220		ug/L		110	43 - 160
Acrolein	500	581		ug/L		116	38 - 160
Acrylonitrile	500	521		ug/L		104	64 - 142
Benzene	50.0	51.0		ug/L		102	70 - 130
Bromobenzene	50.0	49.3		ug/L		99	70 - 132
Bromochloromethane	50.0	49.7		ug/L		99	70 - 130
Bromodichloromethane	50.0	52.5		ug/L		105	67 - 133
Bromoform	50.0	50.3		ug/L		101	57 - 140
Bromomethane	50.0	30.5		ug/L		61	10 - 160
2-Butanone (MEK)	200	222		ug/L		111	61 - 145
Carbon disulfide	50.0	42.4		ug/L		85	61 - 137
Carbon tetrachloride	50.0	46.2		ug/L		92	61 - 137
Chlorobenzene	50.0	49.4		ug/L		99	70 - 130
Chloroethane	50.0	41.7		ug/L		83	55 - 141
2-Chloroethyl vinyl ether	50.0	72.2		ug/L		144	10 - 160

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

Lab Sample ID: LCS 400-653472/1001
Matrix: Water
Analysis Batch: 653472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	50.1		ug/L		100	69 - 130
1-Chlorohexane	50.0	50.2		ug/L		100	69 - 130
Chloromethane	50.0	39.4		ug/L		79	58 - 137
cis-1,2-Dichloroethene	50.0	49.6		ug/L		99	68 - 130
cis-1,3-Dichloropropene	50.0	53.7		ug/L		107	69 - 132
Dibromochloromethane	50.0	52.1		ug/L		104	67 - 135
1,2-Dichlorobenzene	50.0	48.9		ug/L		98	67 - 130
1,3-Dichlorobenzene	50.0	49.3		ug/L		99	70 - 130
1,4-Dichlorobenzene	50.0	49.0		ug/L		98	70 - 130
Dichlorodifluoromethane	50.0	20.8		ug/L		42	41 - 146
1,1-Dichloroethane	50.0	49.4		ug/L		99	70 - 130
1,2-Dichloroethane	50.0	51.4		ug/L		103	69 - 130
1,1-Dichloroethene	50.0	44.9		ug/L		90	63 - 134
1,2-Dichloropropane	50.0	52.7		ug/L		105	70 - 130
1,3-Dichloropropane	50.0	55.5		ug/L		111	70 - 130
2,2-Dichloropropane	50.0	40.2		ug/L		80	52 - 135
1,1-Dichloropropene	50.0	50.1		ug/L		100	70 - 130
Ethylbenzene	50.0	50.8		ug/L		102	70 - 130
Ethyl methacrylate	50.0	52.4		ug/L		105	68 - 130
Hexachlorobutadiene	50.0	52.0		ug/L		104	53 - 140
2-Hexanone	200	229		ug/L		114	65 - 137
Isopropylbenzene	50.0	49.6		ug/L		99	70 - 130
Methylene bromide	50.0	49.9		ug/L		100	70 - 130
Methylene Chloride	50.0	50.3		ug/L		101	66 - 135
4-Methyl-2-pentanone (MIBK)	200	209		ug/L		105	69 - 138
Methyl tert-butyl ether	50.0	51.3		ug/L		103	66 - 130
m-Xylene & p-Xylene	50.0	51.2		ug/L		102	70 - 130
Naphthalene	50.0	45.7		ug/L		91	47 - 149
n-Butylbenzene	50.0	53.3		ug/L		107	67 - 130
N-Propylbenzene	50.0	49.8		ug/L		100	70 - 130
o-Chlorotoluene	50.0	52.1		ug/L		104	70 - 130
o-Xylene	50.0	51.6		ug/L		103	70 - 130
p-Chlorotoluene	50.0	50.0		ug/L		100	70 - 130
p-Isopropyltoluene	50.0	49.8		ug/L		100	65 - 130
sec-Butylbenzene	50.0	48.8		ug/L		98	66 - 130
Styrene	50.0	51.1		ug/L		102	70 - 130
tert-Butylbenzene	50.0	46.1		ug/L		92	64 - 139
1,1,1,2-Tetrachloroethane	50.0	48.8		ug/L		98	67 - 131
1,1,2,2-Tetrachloroethane	50.0	51.6		ug/L		103	70 - 131
Tetrachloroethene	50.0	47.5		ug/L		95	65 - 130
Toluene	50.0	49.2		ug/L		98	70 - 130
trans-1,2-Dichloroethene	50.0	47.4		ug/L		95	70 - 130
trans-1,3-Dichloropropene	50.0	53.1		ug/L		106	63 - 130
1,2,3-Trichlorobenzene	50.0	44.8		ug/L		90	60 - 138
1,2,4-Trichlorobenzene	50.0	44.1		ug/L		88	60 - 140
1,1,1-Trichloroethane	50.0	46.6		ug/L		93	68 - 130
1,1,2-Trichloroethane	50.0	54.6		ug/L		109	70 - 130
Trichloroethene	50.0	48.9		ug/L		98	70 - 130
Trichlorofluoromethane	50.0	47.7		ug/L		95	65 - 138

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

Lab Sample ID: LCS 400-653472/1001
Matrix: Water
Analysis Batch: 653472

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	50.9		ug/L		102	70 - 130
1,2,4-Trimethylbenzene	50.0	50.5		ug/L		101	70 - 130
1,3,5-Trimethylbenzene	50.0	49.8		ug/L		100	69 - 130
Vinyl acetate	100	140		ug/L		140	26 - 160
Vinyl chloride	50.0	45.3		ug/L		91	59 - 136
Xylenes, Total	100	103		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*72 - 130*
Dibromofluoromethane	*98*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Lab Sample ID: MB 400-653690/3
Matrix: Water
Analysis Batch: 653690

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.50	ug/L			12/11/23 10:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*12/11/23 10:57*	*1*
Dibromofluoromethane	*89*		*75 - 126*		*12/11/23 10:57*	*1*
Toluene-d8 (Surr)	*105*		*64 - 132*		*12/11/23 10:57*	*1*

Lab Sample ID: LCS 400-653690/1001
Matrix: Water
Analysis Batch: 653690

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	50.0	42.5		ug/L		85	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*108*		*72 - 130*
Dibromofluoromethane	*98*		*75 - 126*
Toluene-d8 (Surr)	*105*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-653593/1-A
Matrix: Water
Analysis Batch: 654186

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653593

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		12/08/23 15:22	12/13/23 18:46	1
Benzenethiol	ND		10	1.7	ug/L		12/08/23 15:22	12/13/23 18:46	1
Benzoic acid	ND		30	7.3	ug/L		12/08/23 15:22	12/13/23 18:46	1
Benzyl alcohol	ND		10	2.0	ug/L		12/08/23 15:22	12/13/23 18:46	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		12/08/23 15:22	12/13/23 18:46	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-653593/1-A
Matrix: Water
Analysis Batch: 654186

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653593

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		12/08/23 15:22	12/13/23 18:46	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		12/08/23 15:22	12/13/23 18:46	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		12/08/23 15:22	12/13/23 18:46	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		12/08/23 15:22	12/13/23 18:46	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		12/08/23 15:22	12/13/23 18:46	1
4-Chloroaniline	ND		10	3.4	ug/L		12/08/23 15:22	12/13/23 18:46	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		12/08/23 15:22	12/13/23 18:46	1
2-Chloronaphthalene	ND		10	0.14	ug/L		12/08/23 15:22	12/13/23 18:46	1
2-Chlorophenol	ND		10	2.2	ug/L		12/08/23 15:22	12/13/23 18:46	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		12/08/23 15:22	12/13/23 18:46	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		12/08/23 15:22	12/13/23 18:46	1
Dibenzofuran	ND		10	0.17	ug/L		12/08/23 15:22	12/13/23 18:46	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		12/08/23 15:22	12/13/23 18:46	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		12/08/23 15:22	12/13/23 18:46	1
Diethyl phthalate	ND		10	0.24	ug/L		12/08/23 15:22	12/13/23 18:46	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		12/08/23 15:22	12/13/23 18:46	1
Dimethyl phthalate	1.06	J	10	0.17	ug/L		12/08/23 15:22	12/13/23 18:46	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		12/08/23 15:22	12/13/23 18:46	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		12/08/23 15:22	12/13/23 18:46	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		12/08/23 15:22	12/13/23 18:46	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		12/08/23 15:22	12/13/23 18:46	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		12/08/23 15:22	12/13/23 18:46	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		12/08/23 15:22	12/13/23 18:46	1
1,4-Dioxane	ND		10	1.0	ug/L		12/08/23 15:22	12/13/23 18:46	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		12/08/23 15:22	12/13/23 18:46	1
Hexachlorobenzene	ND		10	0.17	ug/L		12/08/23 15:22	12/13/23 18:46	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		12/08/23 15:22	12/13/23 18:46	1
Hexachloroethane	ND		10	4.2	ug/L		12/08/23 15:22	12/13/23 18:46	1
Indene	ND		10	1.0	ug/L		12/08/23 15:22	12/13/23 18:46	1
Isophorone	ND		10	0.14	ug/L		12/08/23 15:22	12/13/23 18:46	1
2-Methylphenol	ND		10	1.8	ug/L		12/08/23 15:22	12/13/23 18:46	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		12/08/23 15:22	12/13/23 18:46	1
2-Nitroaniline	ND		10	2.2	ug/L		12/08/23 15:22	12/13/23 18:46	1
3-Nitroaniline	ND		10	1.8	ug/L		12/08/23 15:22	12/13/23 18:46	1
4-Nitroaniline	ND		10	1.5	ug/L		12/08/23 15:22	12/13/23 18:46	1
Nitrobenzene	ND		10	0.13	ug/L		12/08/23 15:22	12/13/23 18:46	1
2-Nitrophenol	ND		10	5.2	ug/L		12/08/23 15:22	12/13/23 18:46	1
4-Nitrophenol	ND		10	2.1	ug/L		12/08/23 15:22	12/13/23 18:46	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		12/08/23 15:22	12/13/23 18:46	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		12/08/23 15:22	12/13/23 18:46	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		12/08/23 15:22	12/13/23 18:46	1
Pentachlorophenol	ND		20	1.4	ug/L		12/08/23 15:22	12/13/23 18:46	1
Phenol	ND		10	2.6	ug/L		12/08/23 15:22	12/13/23 18:46	1
Pyridine	ND		10	3.2	ug/L		12/08/23 15:22	12/13/23 18:46	1
Quinoline	ND		10	4.5	ug/L		12/08/23 15:22	12/13/23 18:46	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		12/08/23 15:22	12/13/23 18:46	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		12/08/23 15:22	12/13/23 18:46	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-653593/1-A
Matrix: Water
Analysis Batch: 654186

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653593

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	80		46 - 124	12/08/23 15:22	12/13/23 18:46	1
2-Fluorophenol	45		13 - 113	12/08/23 15:22	12/13/23 18:46	1
Nitrobenzene-d5	65		36 - 126	12/08/23 15:22	12/13/23 18:46	1
Phenol-d5	60		17 - 127	12/08/23 15:22	12/13/23 18:46	1
Terphenyl-d14	85		44 - 149	12/08/23 15:22	12/13/23 18:46	1
2,4,6-Tribromophenol	77		26 - 150	12/08/23 15:22	12/13/23 18:46	1

Lab Sample ID: LCS 400-653593/2-A
Matrix: Water
Analysis Batch: 654186

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653593

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	80.5		ug/L		67	21 - 120
Benzoic acid	120	87.6		ug/L		73	10 - 144
Benzyl alcohol	120	85.9		ug/L		72	28 - 120
Bis(2-chloroethoxy)methane	120	77.5		ug/L		65	47 - 120
Bis(2-chloroethyl)ether	120	70.1		ug/L		58	44 - 120
bis (2-chloroisopropyl) ether	120	71.4		ug/L		60	33 - 121
Bis(2-ethylhexyl) phthalate	120	90.0		ug/L		75	52 - 147
4-Bromophenyl phenyl ether	120	89.1		ug/L		74	54 - 122
Butyl benzyl phthalate	120	95.6		ug/L		80	54 - 133
4-Chloroaniline	120	69.5		ug/L		58	26 - 120
4-Chloro-3-methylphenol	120	89.8		ug/L		75	48 - 131
2-Chloronaphthalene	120	88.8		ug/L		74	52 - 121
2-Chlorophenol	120	79.8		ug/L		66	40 - 120
4-Chlorophenyl phenyl ether	120	90.8		ug/L		76	56 - 125
Dibenz[a,h]acridine	120	106		ug/L		88	31 - 150
Dibenzofuran	120	94.2		ug/L		78	56 - 122
3,3'-Dichlorobenzidine	160	124		ug/L		77	36 - 132
2,4-Dichlorophenol	120	88.1		ug/L		73	49 - 120
Diethyl phthalate	120	94.3		ug/L		79	50 - 137
2,4-Dimethylphenol	120	84.5		ug/L		70	48 - 120
Dimethyl phthalate	120	90.8		ug/L		76	57 - 124
Di-n-butyl phthalate	120	98.0		ug/L		82	58 - 126
4,6-Dinitro-ortho-cresol	240	177		ug/L		74	23 - 148
2,4-Dinitrophenol	240	173		ug/L		72	10 - 150
2,4-Dinitrotoluene	120	102		ug/L		85	54 - 142
2,6-Dinitrotoluene	120	93.7		ug/L		78	55 - 130
Di-n-octyl phthalate	120	88.8		ug/L		74	57 - 138
1,4-Dioxane	120	63.1		ug/L		53	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	83.8		ug/L		70	45 - 124
Hexachlorobenzene	120	98.6		ug/L		82	52 - 129
Hexachlorocyclopentadiene	120	75.7		ug/L		63	10 - 134
Hexachloroethane	120	81.4		ug/L		68	20 - 120
Indene	120	92.8		ug/L		77	49 - 120
Isophorone	120	80.7		ug/L		67	48 - 120
2-Methylphenol	120	85.1		ug/L		71	46 - 124
3 & 4 Methylphenol	120	84.5		ug/L		70	45 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-653593/2-A
Matrix: Water
Analysis Batch: 654186

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653593

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Nitroaniline	120	78.9		ug/L		66	51 - 145
3-Nitroaniline	120	73.5		ug/L		61	37 - 127
4-Nitroaniline	120	88.7		ug/L		74	36 - 137
Nitrobenzene	120	77.4		ug/L		64	45 - 120
2-Nitrophenol	120	93.0		ug/L		78	40 - 124
4-Nitrophenol	240	186		ug/L		78	23 - 146
N-Nitrosodimethylamine	120	83.3		ug/L		69	29 - 137
N-Nitrosodi-n-propylamine	120	81.2		ug/L		68	45 - 120
N-Nitrosodiphenylamine	119	86.7		ug/L		73	54 - 120
Pentachlorophenol	240	182		ug/L		76	31 - 130
Phenol	120	77.8		ug/L		65	11 - 120
Pyridine	240	118		ug/L		49	16 - 120
Quinoline	120	112		ug/L		94	49 - 130
2,4,5-Trichlorophenol	120	92.4		ug/L		77	51 - 136
2,4,6-Trichlorophenol	120	90.4		ug/L		75	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*46 - 124*
2-Fluorophenol	*54*		*13 - 113*
Nitrobenzene-d5	*72*		*36 - 126*
Phenol-d5	*65*		*17 - 127*
Terphenyl-d14	*82*		*44 - 149*
2,4,6-Tribromophenol	*84*		*26 - 150*

Lab Sample ID: LCS 400-653593/4-A
Matrix: Water
Analysis Batch: 654186

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653593

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	61.0		ug/L		51	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*46 - 124*
2-Fluorophenol	*48*		*13 - 113*
Nitrobenzene-d5	*63*		*36 - 126*
Phenol-d5	*60*		*17 - 127*
Terphenyl-d14	*87*		*44 - 149*
2,4,6-Tribromophenol	*76*		*26 - 150*

Lab Sample ID: LCSD 400-653593/3-A
Matrix: Water
Analysis Batch: 654186

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653593

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	120	72.0		ug/L		60	21 - 120	11	30
Benzoic acid	120	86.8		ug/L		72	10 - 144	1	30
Benzyl alcohol	120	82.0		ug/L		68	28 - 120	5	30
Bis(2-chloroethoxy)methane	120	75.9		ug/L		63	47 - 120	2	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-653593/3-A
Matrix: Water
Analysis Batch: 654186

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653593

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether			120	71.2		ug/L		59	44 - 120	1	30
bis (2-chloroisopropyl) ether			120	68.7		ug/L		57	33 - 121	4	30
Bis(2-ethylhexyl) phthalate			120	83.8		ug/L		70	52 - 147	7	30
4-Bromophenyl phenyl ether			120	84.6		ug/L		70	54 - 122	5	30
Butyl benzyl phthalate			120	88.2		ug/L		73	54 - 133	8	30
4-Chloroaniline			120	65.1		ug/L		54	26 - 120	7	30
4-Chloro-3-methylphenol			120	83.5		ug/L		70	48 - 131	7	30
2-Chloronaphthalene			120	81.5		ug/L		68	52 - 121	9	30
2-Chlorophenol			120	71.9		ug/L		60	40 - 120	10	30
4-Chlorophenyl phenyl ether			120	84.8		ug/L		71	56 - 125	7	30
Dibenz[a,h]acridine			120	103		ug/L		86	31 - 150	2	30
Dibenzofuran			120	85.7		ug/L		71	56 - 122	9	30
3,3'-Dichlorobenzidine			160	112		ug/L		70	36 - 132	10	30
2,4-Dichlorophenol			120	83.7		ug/L		70	49 - 120	5	30
Diethyl phthalate			120	87.7		ug/L		73	50 - 137	7	30
2,4-Dimethylphenol			120	81.6		ug/L		68	48 - 120	4	30
Dimethyl phthalate			120	80.8		ug/L		67	57 - 124	12	30
Di-n-butyl phthalate			120	92.7		ug/L		77	58 - 126	5	30
4,6-Dinitro-ortho-cresol			240	176		ug/L		73	23 - 148	0	30
2,4-Dinitrophenol			240	158		ug/L		66	10 - 150	9	30
2,4-Dinitrotoluene			120	93.8		ug/L		78	54 - 142	9	30
2,6-Dinitrotoluene			120	85.2		ug/L		71	55 - 130	10	30
Di-n-octyl phthalate			120	83.7		ug/L		70	57 - 138	6	30
1,4-Dioxane			120	58.9		ug/L		49	31 - 120	7	30
1,2-Diphenylhydrazine (as Azobenzene)			120	77.6		ug/L		65	45 - 124	8	30
Hexachlorobenzene			120	92.8		ug/L		77	52 - 129	6	30
Hexachlorocyclopentadiene			120	73.8		ug/L		61	10 - 134	3	30
Hexachloroethane			120	73.7		ug/L		61	20 - 120	10	30
Indene			120	91.8		ug/L		76	49 - 120	1	30
Isophorone			120	78.2		ug/L		65	48 - 120	3	30
2-Methylphenol			120	82.0		ug/L		68	46 - 124	4	30
3 & 4 Methylphenol			120	79.2		ug/L		66	45 - 120	6	30
2-Nitroaniline			120	71.8		ug/L		60	51 - 145	10	30
3-Nitroaniline			120	66.6		ug/L		55	37 - 127	10	30
4-Nitroaniline			120	81.6		ug/L		68	36 - 137	8	30
Nitrobenzene			120	75.1		ug/L		63	45 - 120	3	30
2-Nitrophenol			120	86.2		ug/L		72	40 - 124	8	30
4-Nitrophenol			240	173		ug/L		72	23 - 146	7	30
N-Nitrosodimethylamine			120	84.1		ug/L		70	29 - 137	1	30
N-Nitrosodi-n-propylamine			120	81.0		ug/L		68	45 - 120	0	30
N-Nitrosodiphenylamine			119	82.4		ug/L		69	54 - 120	5	30
Pentachlorophenol			240	172		ug/L		72	31 - 130	5	30
Phenol			120	71.8		ug/L		60	11 - 120	8	30
Pyridine			240	116		ug/L		48	16 - 120	2	30
Quinoline			120	108		ug/L		90	49 - 130	4	30
2,4,5-Trichlorophenol			120	86.4		ug/L		72	51 - 136	7	30
2,4,6-Trichlorophenol			120	83.5		ug/L		70	50 - 127	8	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-653593/3-A
Matrix: Water
Analysis Batch: 654186

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653593

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*46 - 124*
2-Fluorophenol	*45*		*13 - 113*
Nitrobenzene-d5	*68*		*36 - 126*
Phenol-d5	*61*		*17 - 127*
Terphenyl-d14	*76*		*44 - 149*
2,4,6-Tribromophenol	*79*		*26 - 150*

Lab Sample ID: LCSD 400-653593/5-A
Matrix: Water
Analysis Batch: 654186

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653593

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	40.9	*1	ug/L		34	10 - 120	39	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*79*		*46 - 124*
2-Fluorophenol	*59*		*13 - 113*
Nitrobenzene-d5	*67*		*36 - 126*
Phenol-d5	*66*		*17 - 127*
Terphenyl-d14	*92*		*44 - 149*
2,4,6-Tribromophenol	*79*		*26 - 150*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-653593/1-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653593

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		12/08/23 15:22	12/13/23 21:47	1
Acenaphthylene	ND		0.20	0.044	ug/L		12/08/23 15:22	12/13/23 21:47	1
Anthracene	ND		0.20	0.047	ug/L		12/08/23 15:22	12/13/23 21:47	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		12/08/23 15:22	12/13/23 21:47	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		12/08/23 15:22	12/13/23 21:47	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		12/08/23 15:22	12/13/23 21:47	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		12/08/23 15:22	12/13/23 21:47	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		12/08/23 15:22	12/13/23 21:47	1
Chrysene	ND		0.20	0.033	ug/L		12/08/23 15:22	12/13/23 21:47	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		12/08/23 15:22	12/13/23 21:47	1
Fluoranthene	ND		0.20	0.034	ug/L		12/08/23 15:22	12/13/23 21:47	1
Fluorene	ND		0.20	0.089	ug/L		12/08/23 15:22	12/13/23 21:47	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		12/08/23 15:22	12/13/23 21:47	1
Phenanthrene	ND		0.20	0.090	ug/L		12/08/23 15:22	12/13/23 21:47	1
Pyrene	ND		0.20	0.039	ug/L		12/08/23 15:22	12/13/23 21:47	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		12/08/23 15:22	12/13/23 21:47	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		12/08/23 15:22	12/13/23 21:47	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 400-653593/1-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653593

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	74		18 - 147	12/08/23 15:22	12/13/23 21:47	1
2-Fluorobiphenyl	75		15 - 128	12/08/23 15:22	12/13/23 21:47	1
Nitrobenzene-d5	72		10 - 144	12/08/23 15:22	12/13/23 21:47	1

Lab Sample ID: LCS 400-653593/2-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653593

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	96.5		ug/L		80	40 - 140
Acenaphthylene	120	112		ug/L		93	40 - 140
Anthracene	120	110		ug/L		92	40 - 140
Benzo[a]anthracene	120	137	E	ug/L		114	40 - 140
Benzo[a]pyrene	120	107		ug/L		89	40 - 140
Benzo[b]fluoranthene	120	109		ug/L		91	40 - 140
Benzo[g,h,i]perylene	120	74.1		ug/L		62	40 - 140
Benzo[k]fluoranthene	120	97.0		ug/L		81	40 - 140
Chrysene	120	95.4		ug/L		80	40 - 140
Dibenz(a,h)anthracene	120	86.4		ug/L		72	40 - 140
Fluoranthene	120	111		ug/L		93	40 - 140
Fluorene	120	101		ug/L		84	40 - 140
Indeno[1,2,3-cd]pyrene	120	85.4		ug/L		71	40 - 140
Phenanthrene	120	94.0		ug/L		78	40 - 140
Pyrene	120	89.0		ug/L		74	40 - 140
1-Methylnaphthalene	120	78.7		ug/L		66	40 - 140
2-Methylnaphthalene	120	82.0		ug/L		68	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	65		18 - 147
2-Fluorobiphenyl	70		15 - 128
Nitrobenzene-d5	70		10 - 144

Lab Sample ID: LCSD 400-653593/3-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653593

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	120	91.5		ug/L		76	40 - 140	5	40
Acenaphthylene	120	105		ug/L		88	40 - 140	6	40
Anthracene	120	104		ug/L		87	40 - 140	6	40
Benzo[a]anthracene	120	127	E	ug/L		106	40 - 140	8	40
Benzo[a]pyrene	120	102		ug/L		85	40 - 140	5	40
Benzo[b]fluoranthene	120	108		ug/L		90	40 - 140	1	40
Benzo[g,h,i]perylene	120	73.0		ug/L		61	40 - 140	2	40
Benzo[k]fluoranthene	120	93.8		ug/L		78	40 - 140	3	40
Chrysene	120	90.1		ug/L		75	40 - 140	6	40
Dibenz(a,h)anthracene	120	84.4		ug/L		70	40 - 140	2	40
Fluoranthene	120	101		ug/L		84	40 - 140	10	40

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 400-653593/3-A
Matrix: Water
Analysis Batch: 654224

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653593

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluorene			120	94.6		ug/L		79	40 - 140	6	40
Indeno[1,2,3-cd]pyrene			120	83.0		ug/L		69	40 - 140	3	40
Phenanthrene			120	89.0		ug/L		74	40 - 140	6	40
Pyrene			120	85.4		ug/L		71	40 - 140	4	40
1-Methylnaphthalene			120	80.6		ug/L		67	40 - 140	2	40
2-Methylnaphthalene			120	83.5		ug/L		70	40 - 140	2	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*62*		*18 - 147*
2-Fluorobiphenyl	*67*		*15 - 128*
Nitrobenzene-d5	*72*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-653553/1-A
Matrix: Water
Analysis Batch: 653676

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653553

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		12/08/23 12:50	12/11/23 16:19	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		12/08/23 12:50	12/11/23 16:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*12/08/23 12:50*	*12/11/23 16:19*	*1*

Lab Sample ID: LCS 400-653553/2-A
Matrix: Water
Analysis Batch: 653676

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653553

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0911		ug/L		91	60 - 140		
1,2-Dibromoethane			0.100	0.0939		ug/L		94	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*89*		*51 - 149*

Lab Sample ID: LCSD 400-653553/3-A
Matrix: Water
Analysis Batch: 653676

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 653553

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.100		ug/L		100	60 - 140	10	30
1,2-Dibromoethane			0.100	0.0999		ug/L		100	60 - 140	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*110*		*51 - 149*

LAB (LOCATION)

400-247828 COC

Shell Oil Products US Chain Of Custody Record

AECOM

☐ 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
Melissa Remiger	25278	DATE: 12/5/2023
PO #	**GSAP Project ID**	PAGE: 1 of 1
60697537 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS: Street and City	State	AECOM Project / Task Number:
AECOM		900 South Central Ave; ROXANA	IL	Roxana Monthly GW 60697537 – 3.4.2

ADDRESS:	EDF DELIVERABLE TO (Name, Company, Office Location):	PHONE NO.:	E-MAIL:	AECOM Other ID:
100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA	Melissa Remiger - please see special instructions	314-802-1207	melissa.remiger@aecom.com	

PROJECT CONTACT (Hardcopy or PDF Report to):
Melissa Remiger, Mary Massa, Brett Howell

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@aecom.com

SAMPLER NAME(S) (Print):
M. Massa, T. Jenkins

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 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

* Please include "J" values on Reports.
* Please provide sample receipt upon login.
* Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.4.2

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 8270 SIMS
	TB-ROX-120523-8260	12/5/2023	0000	Water	2					2	X			
	TB-ROX-120523-8011	12/5/2023	0000	Water	2					2		X		
	P58-ROX-120523	12/5/2023	0920	Water	6			2		8	X	X	X	X
	P93B-ROX-120523	12/5/2023	1050	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
MARY MASSA	FEDEX: 6339 6597 5518	12/5/2023	1600
Relinquished by: (Signature)	Received by: (Signature) BP	Date: 12/6/23	Time: 921
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: 1599805, 1599804

1.2°C IR8

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12/18/2023

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-247828-1

Login Number: 247828
List Number: 1
Creator: Earnest, Tamantha

List Source: Eurofins 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	1.2°C IR8
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").	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.
Job ID: 400-247828-1
Project/Site: ROXANA MONTHLY GW

Laboratory: Eurofins 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	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

File: C:\USERS\LORENTE\AECOM\GDS GIS SERVICES - GIS CAD PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 4Q23 GW RPT\01_NOVEMBER 2023 ROXANA GROUNDWATER\WORKSPACE\FIGURE 1 - NOVEMBER 2023 CONTOURS WF.DWG Last edited: Nov. 15, 23 @ 6:56 PM by: lorente

LEGEND

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

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 NOVEMBER 3, 2023.

402.75

402.25

403.25

402.75

402.25

401.25

401.75

401.75

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

T-13 402.12
T-1 401.9
MW-10 401.79
MW-9 401.87
ROST-4-PZ(A) 402.56
ROST-4-PZ(B) 402.73
MW-28 403.35
MW-27 402.61
P-55R 403.44
ROST-4-PZ(D) 402.37
ROST-4-PZ(C) 402.19
ROST-4-PZ 402.53
ROST-4-PZ(E) 402.6
ROST-3-MW 401.64
MW-11 401.3
ROST-4-PZ(F) 402.68
ROST-4-PZ(G) 401.48
P-54 401.56
P-60 401.32
P-68 401.46
T-12 401.36
MW-24 401.5
MW-17 401.39
MW-22 401.43
MW-18 401.29
P-74 401.07
MW-19 401.28
P-59 401.23
MW-16 401.34
P-56 401.23
MW-12 401.4
MW-20 401.21
MW-2 401.18
MW-1 401.36
T-6 401.33
MW-26 401.4
P-57 401.35
MW-4 401.39
MW-21 401.31
MW-3 401.4
P-93A 401.41
P-93B
P-93C
P-93D
MW-25 401.46
MW-7 401.44
MW-5 401.55
MW-23 401.57
MW-8
P-58 401.5
P-66 401.6
MW-6A 401.73
MW-6B
MW-6C
MW-6D
MW-13 401.73
MW-14 401.91
P-114R 401.71

W-77 W-85 W-78 W-79 W-80 W-89 W-81

A-31 A-58 A-57 A-34 A-28 A-33 A-37 A-27 A-35 A-16 A-30 A-22 A-29 A-147 F-50 F-76 F-77 F-78 F-79 F-74 F-75 T-24 P-61 P-62 P-69 P-70 P-71 P-72 P-73 S-1 T-2 P-75 P-67 T-7 P-117 P-116 P-115 P-119 T-62 T-63 T-64

DRAFT

0 300
SCALE FEET

N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60697537
AECOM		
DRN. BY: gds December 2023 DSGN. BY: gds CHKD. BY: mr/bh	Groundwater Contours November 2023 – West Fenceline	FIG. NO. 1

File: C:\USERS\LORENTE\AECOM\GDS GIS SERVICES - GIS CAD PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 4023 GW RPT\02_DECEMBER 2023 ROXANA GROUNDWATER\WORKSPACE\FIGURE 1 GW CONTOURS DECEMBER WF.DWG Last edited: Dec. 21, 23 @ 3:48 PM by: lorente

LEGEND

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

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 DECEMBER 5–6, 2023.
4. WELL MW–13 WAS INACCESSIBLE DURING THE MONTHLY GAUGING EVENT DUE TO CONSTRUCTION ACTIVITIES.

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

T-13 401.74
T-1 401.55
MW-9 401.50
MW-10 401.41
MW-28 402.98
ROST-4-PZ(A) 402.20
ROST-4-PZ(B) 402.43
P-55R 403.14
MW-27 402.20
ROST-4-PZ(D) 402.00
ROST-4-PZ(C) 401.82
ROST-3-MW 401.28
ROST-4-PZ 402.34
P-60 401.06
P-68 401.11
ROST-4-PZ(E) 402.30
ROST-4-PZ(G) 401.06
ROST-4-PZ(F) 402.51
MW-11 400.89
MW-17 401.02
T-12 401.00
P-54 401.22
MW-24 401.15
MW-22 401.08
MW-18 400.87
MW-19 400.79
P-59 400.91
P-74 400.75
MW-16 401.91
MW-12 401.01
P-56 400.88
MW-20 400.76
MW-2 400.78
MW-1 400.94
MW-26 400.98
T-6 400.95
MW-21 400.76
P-57 400.97
MW-4 401.97
MW-3 401.00
P-93A 401.02
P-93B
P-93C
P-93D
MW-25 401.01
MW-5 401.07
MW-7 400.96
MW-8
MW-23 401.12
P-58 401.02
P-66 401.20
MW-6A 401.26
MW-6B
MW-6C
MW-6D
MW-14 401.52
MW-13
P-114R 401.33
P-117
P-116
P-115
P-119
T-62
T-63
T-64
P-67
T-7

402
401.50
402.50
403
402
401.50
401.50
401
401.50

W-77 W-85 W-78 W-79 W-80 W-89 W-81

A-32 A-31 A-58 A-57 A-34 A-28 A-33 A-37 A-27 A-35 A-16 A-30 A-22 A-29 A-147
T-24 P-69 P-62 P-70 P-61 P-71 S-1 P-72 P-73 P-75
F-50 F-76 F-77 F-78 F-79 F-74 F-75

0 300
SCALE FEET

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60697537
AECOM		
DRN. BY: gds December 2023 DSGN. BY: gds CHKD. BY: mr/bh	Groundwater Contours December 2023 – West Fenceline	FIG. NO. 1

File: C:\USERS\PADUREANUO\AECOM\EC GIS SERVICES - DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 1Q24 GW RPT\WORKSPACE\FEBRUARY_SAMPLING_02.12.2024\FIGURE 3B GW CONTOURS 1Q24 WF_025.DWG Last edited: Feb. 20, 24 @ 1:50 PM by: padureanuo

LEGEND

- GROUNDWATER MONITORING WELL LOCATION USED TO GENERATE GROUNDWATER CONTOURS
- GROUNDWATER MONITORING WELL LOCATION NOT USED TO GENERATE GROUNDWATER CONTOURS
- WRR GROUNDWATER PRODUCTION WELL
- -401.75- GROUNDWATER SURFACE CONTOUR (CONTOUR INTERVAL 0.5 FT)
- GROUNDWATER GRADIENT

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 FEBRUARY 6-7, 2024.
4. WELLS MW-13 AND P-74 WERE INACCESSIBLE DURING THE MONTHLY GAUGING EVENT DUE TO CONSTRUCTION ACTIVITIES.

401.75

401.75

402.25

401.75

401.25

400.75

399.75

400.25

401.25

TYDEMAN AVE
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
VILLAGE OF ROXANA
NORTH PROPERTY
WOOD RIVER REFINERY
PUBLIC WORKS YARD
BP
WEST PROPERTY
MAIN PROPERTY
1986 APPROXIMATE BENZENE RELEASE SITE
2020 APPROXIMATE BUCKEYE PIPELINE GASOLINE RELEASE SITE

T-13 401.13
T-1 400.93
MW-9 400.81
MW-28 402.38
MW-10 400.75
ROST-4-PZ(A) 401.23
ROST-4-PZ(B) 401.70
P-55R 402.59
MW-27 401.42
ROST-4-PZ(D) 401.32
ROST-4-PZ(C) 401.17
ROST-3-MW 400.96
ROST-4-PZ 401.84
ROST-4-PZ(E) 402.00
ROST-4-PZ(G) 400.49
P-60 400.27
P-68 400.46
ROST-4-PZ(F) 402.12
MW-11 400.31
MW-17 400.48
T-12 400.36
MW-24 400.57
MW-22 400.51
MW-18 400.39
MW-19 400.38
P-59 400.29
MW-16 400.45
MW-12 400.51
P-56 400.33
MW-20 400.36
MW-2 400.43
MW-1 400.39
MW-26 400.53
MW-21 400.51
T-6 400.40
P-57 400.28
MW-4 400.05
MW-3 399.55
P-93A 400.54
P-93B
P-93C
P-93D
MW-25 400.63
MW-5 399.15
MW-23 400.73
MW-7 400.63
MW-8
P-58 400.67
P-54 400.59
MW-13
P-117
P-114R 399.96
P-116
P-115
P-119
T-62
T-63
T-64
P-66 401.56
MW-6A 400.56
MW-6B
MW-6C
MW-6D
MW-14 401.05
P-67
T-7
A-147
W-77
W-78
W-79
W-80
W-81
W-85
W-89
P-74
P-69
P-70
P-62
P-61
P-71
S-1
P-72
T-24
A-32
A-31
A-58
A-57
A-34
A-28
A-33
A-37
A-27
A-35
A-16
F-50
A-30
F-76
F-77
F-78
A-22
A-29
F-73
F-74
F-75

0 300
SCALE FEET

N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60721927
	AECOM	
DRN. BY:gds March 2024 DSGN. BY:gds CHKD. BY:mr/bh	Groundwater Contours February 2024 – West Fenceline	FIG. NO. 1

File: C:\USERS\LORENTE\AECOM\GDS GIS SERVICES - GIS CAD PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 1024 GW RPT\WORKSPACE\MARCH_SAMPLING\WORKSPACE\FIGURE GW CONTOURS MARCH24 WF_025.DWG Last edited: Mar. 15, 24 @ 1:29 AM by: lorente

LEGEND

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

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 MARCH 11–12, 2024.

401.25
402.25
401.75
401.25
401.25
400.75
400.25
400.75

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

T-13 400.88
T-1 400.70
MW-9 400.60
MW-28 402.10
MW-10 400.56
ROST-4-PZ(A) 401.00
ROST-4-PZ(B) 401.45
MW-27 401.17
P-55R 402.38
ROST-4-PZ(D) 401.15
ROST-4-PZ(C) 400.97
ROST-3-MW 400.47
ROST-4-PZ 401.22
ROST-4-PZ(E) 401.65
ROST-4-PZ(G) 400.30
ROST-4-PZ(F) 401.95
MW-11 400.08
MW-17 400.28
T-12 400.16
P-54 400.37
MW-24 400.35
MW-22 400.28
MW-18 400.14
MW-19 400.16
P-74 399.98
P-59 400.13
MW-16 400.30
MW-12 400.31
MW-20 400.15
P-56 400.16
MW-2 400.21
MW-1 400.30
T-6 400.27
MW-26 400.38
MW-21 400.31
P-57 400.34
MW-4 400.31
MW-3 400.40
P-93A 400.40
P-93B
P-93C
P-93D
MW-25 400.43
MW-5 400.46
MW-23 400.57
MW-7 400.43
MW-8
P-58 400.51
P-60 400.22
P-68 400.25
W-77
W-78
W-79
W-80
W-89
W-85
W-81
MW-13 400.80
MW-6A 400.70
MW-6B
MW-6C
MW-6D
P-66 400.59
MW-14 400.86
P-114R 400.80
P-117
P-116
P-115
P-119
T-62
T-63
T-64
P-67
T-7
P-75
P-69
P-70
P-62
T-24
A-32
A-31
A-58
A-57
A-34
A-28
A-33
A-37
A-27
A-35
A-16
A-30
A-22
A-29
A-147
F-76
F-77
F-78
F-50
F-73
F-74
F-75
P-71
P-72
S-1

0 300
SCALE FEET
N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60721927
AECOM		
DRN. BY: gds April 2024 DSGN. BY: gds CHKD. BY: mr/bh	Groundwater Contours March 2024 – West Fenceline	FIG. NO. 1

File: C:\USERS\PADUREANUO\AECOM\EC GIS SERVICES - DCS AMERICAS\SHELL\ILLINOIS\USF00668-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 4Q23 GW RPT\02_DECEMBER 2023 ROXANA GROUNDWATER\WORKSPACE\FIGURE 6 NOV-DEC 23 DISSOLVED PHASE BENZENE CONCENTRATIONS IN GW.DWG Last edited: Jan. 16, 24 @ 2:45 PM by: padureanuo

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)

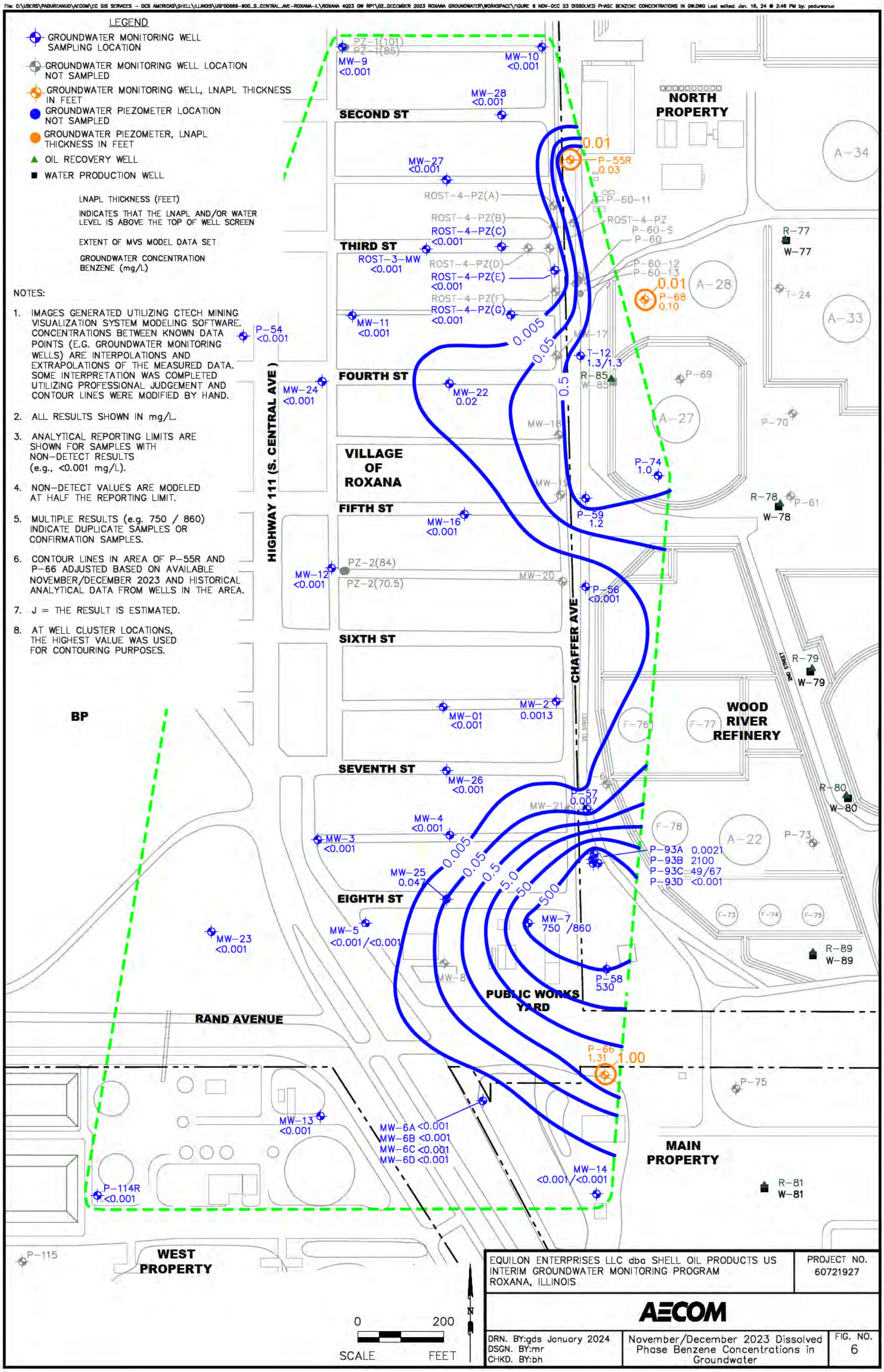
INDICATES THAT THE LNAPL AND/OR WATER LEVEL IS ABOVE THE TOP OF WELL SCREEN

EXTENT OF MVS MODEL DATA SET

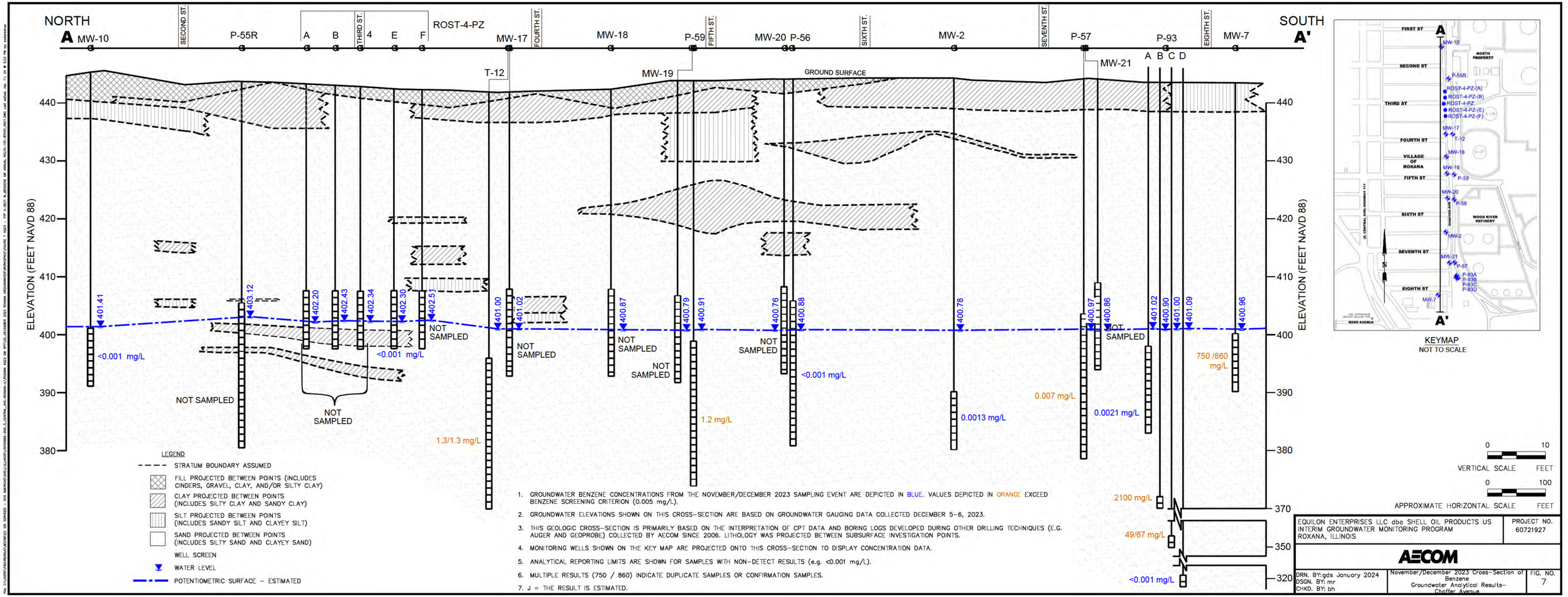
GROUNDWATER CONCENTRATION BENZENE (mg/L)

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. 750 / 860) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
6. CONTOUR LINES IN AREA OF P-55R AND P-66 ADJUSTED BASED ON AVAILABLE NOVEMBER/DECEMBER 2023 AND HISTORICAL ANALYTICAL DATA FROM WELLS IN THE AREA.
7. J = THE RESULT IS ESTIMATED.
8. AT WELL CLUSTER LOCATIONS, THE HIGHEST VALUE WAS USED FOR CONTOURING PURPOSES.



EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60721927
	AECOM	
DRN. BY:gds January 2024 DSGN. BY:mr CHKD. BY:bh	November/December 2023 Dissolved Phase Benzene Concentrations in Groundwater	FIG. NO. 6



1. GROUNDWATER BENZENE CONCENTRATIONS FROM THE NOVEMBER/DECEMBER 2023 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 DECEMBER 5–6, 2023.
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 (750 / 860) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
7. J = THE RESULT IS ESTIMATED.

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

PROJECT NO. 60721927

AECOM

DRN. BY: gds January 2024
DSGN. BY: mr
CHKD. BY: bh

November/December 2023 Cross-Section of Benzene
Groundwater Analytical Results–Chaffer Avenue

FIG. NO. 7

Mary Massa, PG
Geologist
M: 314/795-7580
E: mary.massa@aecom.com

AECOM
100 N. Broadway, 20th Floor
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