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)

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

☐ Well Construction Information

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

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

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

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

☐ Gas Monitoring Reports

☑ Other (identify)

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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October 14, 2023

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 – 3rd Quarter 2023

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: 3rd Quarter 2023 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
IEPA Collinsville FOS (Ali Al-Janabi), IEPA, Collinsville
Michelle Knapp, Atlantic Richfield Company
Greg Mollett, Greensfelder
Repositories - Roxana Public Library, website

AECOM

3rd Quarter 2023 Report

Roxana Interim Groundwater Monitoring Program

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

Project number: 60697537

October 2023

Delivering a better world

Quality information

Prepared by	Checked by	Verified by	Approved by
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Revision History

Revision	Revision date	Details	Authorized	Name	Position

Distribution List

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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
None	Yes	Ms. Michelle Knapp Atlantic Richfield Company
None	Yes	Greg Mollett Greensfelder
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None	Yes	website

Prepared for:

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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 3rd Quarter 2023 (3Q23) groundwater monitoring well gauging and sampling conducted in the Village of Roxana, Illinois (**Figure 1**). The Interim Groundwater Monitoring Program (Program) was established based on direction from Illinois Environmental Protection Agency (IEPA) dated August 5, 2010 (IEPA, 2010a), The study area within the Village of Roxana (Village) is generally bounded by the alley north of First Street, Illinois Route 111, the West Fenceline of the WRB Refining, LP (WRB) Wood River Refinery (WRR), and the Roxana Public Works Yard. Some groundwater monitoring wells within the WRR were also sampled as part of this event; this was conducted in cooperation with WRB/Phillips 66 (P66). For purposes of presentation in this report only, the combined area is collectively referred to as the "Investigation Area."

The bulleted list below summarizes current regulatory-related correspondence between AECOM, on behalf of Shell, and the IEPA during this reporting period (July 2023 through September 2023); prior regulatory-related correspondence which has not yet been addressed by IEPA can be found in **Appendix A**.

- 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.

Groundwater samples were collected and analyzed during 3Q23 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 11, 2023 (AECOM, 2023a).

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

2.2 Additional Activities or Modifications

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 3Q23.

In addition to July 5 – July 7, 2023 comprehensive gauging, August 2023 and September 2023 Interim Groundwater Monitoring Network gauging was performed August 3 – August 4, 2023, and September 7, 2023, respectively. Due to previously scheduled site activities, staff availability, and timing of the clarification of the monthly requirements, August and September monthly sampling events were combined. August/September 2023 (Aug/Sept 23) sampling was performed from August 28 – September 6, 2023. Finalized analytical results, lab reports, and figures for monthly reports are included in **Appendix E**.

2.3 Groundwater Monitoring Well Gauging and Sampling

Groundwater Monitoring Well Gauging

The comprehensive quarterly groundwater monitoring well gauging event was conducted between July 5th and 7th, 2023. The gauging activities were conducted in conjunction with the 3Q23 gauging event for the WRR to evaluate groundwater flow direction and identify possible LNAPL in the Investigation Area. Depth to LNAPL (if present) and depth to water were recorded. Quarterly groundwater monitoring well gauging results can be found in **Table 1**. The groundwater gauging data table also includes well-head PID (photoionization detector) results.

Low-Flow Groundwater Purging and Sampling

Groundwater samples were collected from groundwater monitoring wells between July 10th and July 19th, 2023. 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-74; 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.

[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 submers ble pumps is replaced annually prior to the first quarter sampling event.

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 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 3Q23 groundwater gauging and sampling event.

3.1 Groundwater Monitoring Well Gauging Results

The comprehensive quarterly groundwater monitoring well gauging for the 3Q23 event was conducted between July 5th and July 7th, 2023. 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 risen approximately 0.07 feet since the 2Q23 gauging event. Groundwater levels in most wells in the central and eastern portions of the WRR have fallen approximately 0.20 feet since the 2Q23 gauging event. Water levels are above the top of the screens in the majority of the wells gauged during the 3Q23 event. The potentiometric surface observed during the 3Q23 groundwater monitoring well gauging (**Figures 3a** and **3b**) illustrates an inward gradient with groundwater flow toward the WRR groundwater production wells.

During the 3Q23 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 0.01 to 0.50 feet. Measured LNAPL thickness and the number of locations where it was observed during the 3Q23 quarterly gauging events was generally comparable to that observed in 2Q23.

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 recently 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 the 3Q23 quarterly groundwater gauging event, 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 3Q23 gauging event.

During 3Q23, 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 8 sample delivery groups (SDGs) were prepared and sent to EETA Southeast for the 3Q23 event. Fifty-one different groundwater sample sets were prepared and analyzed for VOCs and SVOCs (including PAHs). The 51 samples included 40 different investigative sample sets, five field duplicate sets, and three matrix spike/matrix spike duplicate (MS/MSD) sets. SDGs for 3Q23 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. Five 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 14 TB sets were analyzed for groundwater VOCs. Laboratory method blanks were analyzed with every analytical batch.

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

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**.

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 2Q23 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-Trimethy benzene
- Benzo(a)anthracene
- 2-Methylnaphthalene
- Phenol

Figure 5 presents concentrations of analytes that exceeded the indicated screening criteria for 3Q23. 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 3Q23, 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 3Q23 Interim Groundwater Monitoring Program, and the following conclusions are based on the data and information collected as part of this program:

- During 3Q23, 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 risen approximately 0.07 feet since the 2Q23 gauging event. Groundwater levels in most wells in the central and eastern portion of the WRR have fallen approximately 0.20 feet since the 2Q23 gauging event.
- Measured LNAPL thickness and the number of locations where it was observed during the 3Q23 quarterly gauging events was generally comparable to that observed in 2Q23. LNAPL has recently been detected in P-66 since 2Q22, however, 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 4Q23 Roxana Interim Groundwater Monitoring program.
- The analytical results from 3Q23 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.

AECOM, 2022 (AECOM, 2022c); *Old Public Works Yard Steam Enhanced Extraction – Response to 8/22/22 Letter and Final Design Report & Construction Work Plan*. Prepared for Shell Oil Products US (Shell), dated December 16, 2022.

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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											
4Q22	442.83	10/18/2022	NE	39.75	NA	NA	NA	403.08	394.03 - 384.03 (48.80 - 58.80)	0.0	*
1Q23		1/3/2023	NE	40.50	NA	NA	NA	402.33		0.0	*
2Q23		4/3/2023	NE	40.76	NA	NA	NA	402.07		0.0	*
3Q23		7/6/2023	NE	40.51	NA	NA	NA	402.32		0.0	*
MW 02											
4Q22	443.93	10/17/2022	NE	40.95	NA	NA	NA	402.98	394.06 - 384.06 (49.87 - 59.87)	146.7	*
1Q23		1/3/2023	NE	41.74	NA	NA	NA	402.19		154.2	*
2Q23		4/3/2023	NE	42.03	NA	NA	NA	401.90		0.0	*
3Q23		7/5/2023	NE	41.71	NA	NA	NA	402.22		0.0	*
MW 03											
4Q22	430.23	10/18/2022	NE	27.05	NA	NA	NA	403.18	395.56 - 385.56 (34.67 - 44.67)	0.0	*
1Q23		1/3/2023	NE	27.80	NA	NA	NA	402.43		0.0	*
2Q23		4/3/2023	NE	28.03	NA	NA	NA	402.20		0.0	*
3Q23		7/6/2023	NE	27.75	NA	NA	NA	402.48		0.0	*
MW 04											
4Q22	441.31	10/18/2022	NE	38.20	NA	NA	NA	403.11	396.25 - 386.25 (45.06 - 55.06)	0.0	*
1Q23		1/3/2023	NE	38.95	NA	NA	NA	402.36		0.0	*
2Q23		4/3/2023	NE	39.21	NA	NA	NA	402.10		0.0	*
3Q23		7/6/2023	NE	38.96	NA	NA	NA	402.35		0.0	*
MW 05											
4Q22	429.98	10/18/2022	NE	26.73	NA	NA	NA	403.25	396.01 - 386.01 (33.97 - 43.97)	0.0	*
1Q23		1/3/2023	NE	27.48	NA	NA	NA	402.50		0.0	*
2Q23		4/3/2023	NE	27.68	NA	NA	NA	402.30		0.0	*
3Q23		7/6/2023	NE	27.53	NA	NA	NA	402.45		0.0	*
MW 06A											
4Q22	432.33	10/18/2022	NE	28.94	NA	NA	NA	403.39	398.48 - 388.48 (33.85 - 43.85)	0.0	*
1Q23		1/3/2023	NE	29.60	NA	NA	NA	402.73		0.0	*
2Q23		4/3/2023	NE	29.80	NA	NA	NA	402.53		0.0	*
3Q23		7/6/2023	NE	29.64	NA	NA	NA	402.69		0.0	*
MW 06B											
4Q22	432.37	10/18/2022	NE	28.97	NA	NA	NA	403.40	368.32 - 363.32 (64.05 - 69.05)	0.0	*
1Q23		1/3/2023	NE	29.65	NA	NA	NA	402.72		0.0	*
2Q23		4/3/2023	NE	29.85	NA	NA	NA	402.52		0.0	*
3Q23		7/6/2023	NE	29.71	NA	NA	NA	402.66		0.0	*
MW 06C											
4Q22	432.18	10/18/2022	NE	28.76	NA	NA	NA	403.42	347.23 - 342.23 (84.95 - 89.95)	0.0	*
1Q23		1/3/2023	NE	29.44	NA	NA	NA	402.74		0.0	*
2Q23		4/3/2023	NE	29.69	NA	NA	NA	402.49		0.0	*
3Q23		7/6/2023	NE	29.52	NA	NA	NA	402.66		0.0	*
MW 06D											
4Q22	432.06	10/18/2022	NE	28.62	NA	NA	NA	403.44	327.34 - 322.34 (104.72 - 109.72)	0.0	*
1Q23		1/3/2023	NE	29.31	NA	NA	NA	402.75		0.0	*
2Q23		4/3/2023	NE	29.50	NA	NA	NA	402.56		0.0	*
3Q23		7/6/2023	NE	29.37	NA	NA	NA	402.69		0.0	*
MW 07											
4Q22	443.31	10/17/2022	NE	40.22	NA	NA	NA	403.09	400.39 - 390.39 (42.92 - 52.92)	0.0	*
1Q23		1/3/2023	NE	40.98	NA	NA	NA	402.33		0.4	*
2Q23		4/3/2023	NE	41.19	NA	NA	NA	402.12		0.0	*
3Q23		7/5/2023	NE	40.97	NA	NA	NA	402.34		33.8	*
MW 08											
1Q23	434.43	10/18/2022	NE	31.20	NA	NA	NA	403.23	400.83 - 390.83 (33.60 - 43.60)	0.0	*
2Q23		1/3/2023	NE	31.94	NA	NA	NA	402.49		0.0	*
MW 09											
4Q22	445.28	10/17/2022	NE	41.33	NA	NA	NA	403.95	399.24 - 389.24 (46.04 - 56.04)	0.0	*
1Q23		1/3/2023	NE	42.16	NA	NA	NA	403.12		0.0	*
2Q23		4/3/2023	NE	42.55	NA	NA	NA	402.73		0.0	*
3Q23		7/5/2023	NE	42.43	NA	NA	NA	402.85		0.0	*

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MW 10											
4Q22	445.06	10/17/2022	NE	41.26	NA	NA	NA	403.80	400.63 - 390.63 (44.43 - 54.43)	0.0	*
1Q23		1/3/2023	NE	41.99	NA	NA	NA	403.07		0.0	*
2Q23		4/3/2023	NE	42.44	NA	NA	NA	402.62		0.0	*
3Q23		7/5/2023	NE	42.43	NA	NA	NA	402.63		0.0	*
MW 11											
4Q22	442.38	10/17/2022	NE	38.91	NA	NA	NA	403.47	400.72 - 390.72 (41.66 - 51.66)	0.0	*
1Q23		1/3/2023	NE	39.77	NA	NA	NA	402.61		0.1	*
2Q23		4/3/2023	NE	40.03	NA	NA	NA	402.35		0.0	*
3Q23		7/5/2023	NE	39.86	NA	NA	NA	402.52		0.0	*
MW 12											
4Q22	442.64	10/17/2022	NE	39.36	NA	NA	NA	403.28	400.72 - 390.72 (41.92 - 51.92)	0.0	*
1Q23		1/3/2023	NE	40.22	NA	NA	NA	402.42		0.0	*
2Q23		4/3/2023	NE	40.47	NA	NA	NA	402.17		0.0	*
3Q23		7/6/2023	NE	40.24	NA	NA	NA	402.40		0.0	*
MW 13											
4Q22	430.30	10/18/2022	NE	26.78	NA	NA	NA	403.52	405.50 - 395.50 (24.80 - 34.80)	0.0	
1Q23		1/4/2023	NE	27.80	NA	NA	NA	402.50		0.2	
2Q23		4/4/2023	NE	27.66	NA	NA	NA	402.64		0.8	
3Q23		7/6/2023	NE	27.46	NA	NA	NA	402.84		0.0	
MW 14											
4Q22	434.61	10/19/2022	NE	30.96	NA	NA	NA	403.65	401.19 - 391.19 (33.42 - 43.42)	64.8	*
1Q23		1/4/2023	NE	31.95	NA	NA	NA	402.66		57.6	*
2Q23		4/6/2023	NE	32.32	NA	NA	NA	402.29		43.8	*
3Q23		7/7/2023	NE	31.86	NA	NA	NA	402.75		52.1	*
MW 16											
4Q22	443.60	10/17/2022	NE	40.46	NA	NA	NA	403.14	406.10 - 396.10 (37.50 - 47.50)	0.0	
1Q23		1/3/2023	NE	41.27	NA	NA	NA	402.33		0.0	
2Q23		4/3/2023	NE	41.52	NA	NA	NA	402.08		0.0	
3Q23		7/7/2023	NE	41.33	NA	NA	NA	402.27			
MW 17											
4Q22	441.78	10/17/2022	NE	38.74	NA	NA	NA	403.04	407.49 - 392.49 (34.29 - 49.29)	0.1	
1Q23		1/3/2023	NE	39.44	NA	NA	NA	402.34		0.0	
2Q23		4/3/2023	NE	39.69	NA	NA	NA	402.09		0.0	
3Q23		7/5/2023	NE	39.52	NA	NA	NA	402.26		0.0	
MW 18											
4Q22	442.24	10/17/2022	NE	39.33	NA	NA	NA	402.91	407.32 - 392.32 (34.92 - 49.92)	0.0	
1Q23		1/3/2023	NE	40.03	NA	NA	NA	402.21		0.0	
2Q23		4/3/2023	NE	40.25	NA	NA	NA	401.99		0.0	
3Q23		7/5/2023	NE	40.08	NA	NA	NA	402.16		0.0	
MW 19											
4Q22	442.98	10/17/2022	NE	40.01	NA	NA	NA	402.97	406.64 - 391.64 (36.34 - 51.34)	0.0	
1Q23		1/3/2023	NE	40.77	NA	NA	NA	402.21		0.0	
2Q23		4/3/2023	NE	41.06	NA	NA	NA	401.92		0.0	
3Q23		7/5/2023	NE	40.74	NA	NA	NA	402.24		0.0	
MW 20											
4Q22	443.86	10/17/2022	NE	40.92	NA	NA	NA	402.94	407.98 - 392.98 (35.88 - 50.88)	0.8	
1Q23		1/3/2023	NE	41.70	NA	NA	NA	402.16		0.0	
2Q23		4/3/2023	NE	42.01	NA	NA	NA	401.85		0.0	
3Q23		7/5/2023	NE	41.72	NA	NA	NA	402.14		0.0	
MW 21											
4Q22	444.01	10/17/2022	NE	41.04	NA	NA	NA	402.97	409.00 - 394.00 (35.01 - 50.01)	0.0	
1Q23		1/3/2023	NE	41.80	NA	NA	NA	402.21		0.0	
2Q23		4/3/2023	NE	42.02	NA	NA	NA	401.99		0.0	
3Q23		7/5/2023	NE	41.91	NA	NA	NA	402.10		0.0	
MW 22											
4Q22	442.38	10/17/2022	NE	39.12	NA	NA	NA	403.26	403.95 - 393.95 (38.43 - 48.43)	0.1	
1Q23		1/3/2023	NE	39.93	NA	NA	NA	402.45		0.0	
2Q23		4/3/2023	NE	40.21	NA	NA	NA	402.17		0.0	
3Q23		7/6/2023	NE	40.04	NA	NA	NA	402.34		0.0	

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MW 23											
4Q22	431.57	10/18/2022	NE	28.26	NA	NA	NA	403.31	402.55 - 392.55 (29.02 - 39.02)	0.0	*
1Q23		1/3/2023	NE	29.06	NA	NA	NA	402.51		0.0	
2Q23		4/3/2023	NE	29.17	NA	NA	NA	402.40		0.0	
3Q23		7/6/2023	NE	29.00	NA	NA	NA	402.57		0.2	*
MW 24											
4Q22	443.65	10/17/2022	NE	40.22	NA	NA	NA	403.43	404.04 - 394.04 (39.61 - 49.61)	0.0	
1Q23		1/3/2023	NE	41.07	NA	NA	NA	402.58		0.0	
2Q23		4/3/2023	NE	41.36	NA	NA	NA	402.29		0.0	
3Q23		7/5/2023	NE	41.12	NA	NA	NA	402.53			
MW 25											
4Q22	438.53	10/18/2022	NE	35.38	NA	NA	NA	403.15	402.94 - 392.94 (35.59 - 45.59)	93.3	*
1Q23		1/3/2023	NE	36.12	NA	NA	NA	402.41		98.6	
2Q23		4/3/2023	NE	36.35	NA	NA	NA	402.18		0.0	
3Q23		7/6/2023	NE	36.11	NA	NA	NA	402.42		141.2	
MW 26											
4Q22	441.23	10/18/2022	NE	38.13	NA	NA	NA	403.10	403.08 - 393.08 (38.15 - 48.15)	0.0	*
1Q23		1/3/2023	NE	38.85	NA	NA	NA	402.38		0.0	
2Q23		4/3/2023	NE	39.14	NA	NA	NA	402.09		0.0	
3Q23		7/6/2023	NE	38.88	NA	NA	NA	402.35		0.0	
MW 27											
4Q22	443.60	10/17/2022	NE	39.08	NA	NA	NA	404.52	403.81 - 393.81 (39.79 - 49.79)	0.0	*
1Q23		1/3/2023	NE	39.86	NA	NA	NA	403.74		0.0	
2Q23		4/3/2023	NE	40.57	NA	NA	NA	403.03		0.0	
3Q23		7/5/2023	NE	40.32	NA	NA	NA	403.28		0.0	
MW 28											
4Q22	443.55	10/17/2022	NE	38.32	NA	NA	NA	405.23	409.94 - 399.94 (33.61 - 43.61)	0.0	
1Q23		1/3/2023	NE	39.08	NA	NA	NA	404.47		0.0	
2Q23		4/3/2023	NE	39.68	NA	NA	NA	403.87		0.0	
3Q23		7/5/2023	NE	39.82	NA	NA	NA	403.73		0.0	
P 01											
4Q22	442.98	10/18/2022	NE	32.34	NA	NA	NA	410.64	380.76 - 375.76 (62.22 - 67.22)	0.0	*
1Q23		1/3/2023	NE	32.68	NA	NA	NA	410.30		0.0	*
2Q23		4/4/2023	NE	32.96	NA	NA	NA	410.02		0.0	*
3Q23		7/7/2023	NE	34.40	NA	NA	NA	408.58		0.0	*
P 4U											
4Q22	442.74	10/18/2022	NE	33.69	NA	NA	NA	409.05	361.59 - 359.59 (81.15 - 83.15)	0.0	*
1Q23		1/3/2023	NE	34.09	NA	NA	NA	408.65		0.0	*
2Q23		4/4/2023	NE	34.68	NA	NA	NA	408.06		0.0	*
3Q23		7/6/2023	NE	35.70	NA	NA	NA	407.04		0.0	*
P 5L											
4Q22	444.01	10/18/2022	NE	33.69	NA	NA	NA	410.32	303.61 - 301.61 (140.40 - 142.40)	0.0	*
1Q23		1/3/2023	NE	34.28	NA	NA	NA	409.73		0.0	*
2Q23		4/4/2023	NE	34.71	NA	NA	NA	409.30		0.0	*
3Q23		7/7/2023	NE	35.75	NA	NA	NA	408.26		0.0	*
P 5U											
4Q22	444.42	10/18/2022	NE	34.94	NA	NA	NA	409.48	313.79 - 311.79 (130.63 - 132.63)	0.0	*
1Q23		1/3/2023	NE	35.25	NA	NA	NA	409.17		0.0	*
2Q23		4/4/2023	NE	35.91	NA	NA	NA	408.51		0.0	*
3Q23		7/7/2023	NE	36.85	NA	NA	NA	407.57		0.0	*
P 6U											
4Q22	443.63	10/18/2022	NE	34.44	NA	NA	NA	409.19	363.13 - 361.13 (80.50 - 82.50)	0.3	*
1Q23		1/3/2023	NE	35.02	NA	NA	NA	408.61		0.0	*
2Q23		4/4/2023	NE	35.58	NA	NA	NA	408.05		0.0	*
3Q23		7/6/2023	NE	36.46	NA	NA	NA	407.17		0.0	*
P 7U											
4Q22	444.08	10/18/2022	NE	34.68	NA	NA	NA	409.40	383.00 - 381.00 (61.08 - 63.08)	0.0	*
1Q23		1/3/2023	NE	35.31	NA	NA	NA	408.77		0.0	*
2Q23		4/4/2023	NE	35.86	NA	NA	NA	408.22		0.0	*
3Q23		7/7/2023	NE	36.70	NA	NA	NA	407.38		0.0	*

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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 8U											
4Q22	442.07	10/18/2022	NE	34.82	NA	NA	NA	407.25	382.72 - 380.72 (59.35 - 61.35)	0.5	*
1Q23		1/3/2023	NE	35.33	NA	NA	NA	406.74		18.4	*
2Q23		4/4/2023	NE	36.15	NA	NA	NA	405.92		0.0	*
3Q23		7/7/2023	NE	36.75	NA	NA	NA	405.32		0.0	*
P 9U											
4Q22	445.20	10/18/2022	NE	39.51	NA	NA	NA	405.69	344.61 - 342.61 (100.59 - 102.59)	0.0	*
1Q23		1/3/2023	NE	40.14	NA	NA	NA	405.06		0.0	*
2Q23		4/4/2023	NE	40.98	NA	NA	NA	404.22		0.0	*
3Q23		7/7/2023	NE	41.42	NA	NA	NA	403.78		0.0	*
P 11L											
4Q22	442.76	10/18/2022	NE	35.50	NA	NA	NA	407.26	332.55 - 330.55 (110.21 - 112.21)	0.0	*
1Q23		1/3/2023	NE	35.88	NA	NA	NA	406.88		0.0	*
2Q23		4/4/2023	NE	36.76	NA	NA	NA	406.00		0.0	*
3Q23		7/6/2023	NE	37.50	NA	NA	NA	405.26		0.0	*
P 11U											
4Q22	443.38	10/18/2022	NE	36.14	NA	NA	NA	407.24	343.46 - 341.46 (99.92 - 101.92)	0.0	*
1Q23		1/3/2023	NE	36.51	NA	NA	NA	406.87		0.0	*
2Q23		4/4/2023	NE	37.34	NA	NA	NA	406.04		0.0	*
3Q23		7/6/2023	NE	38.13	NA	NA	NA	405.25		0.0	*
P 14											
4Q22	443.01	10/18/2022	NE	32.41	NA	NA	NA	410.60	395.54 - 385.54 (47.47 - 57.47)	0.0	*
1Q23		1/3/2023	NE	32.77	NA	NA	NA	410.24		0.0	*
2Q23		4/4/2023	NE	33.04	NA	NA	NA	409.97		0.0	*
3Q23		7/7/2023	NE	34.50	NA	NA	NA	408.51		0.0	*
P 15											
4Q22	443.88	10/18/2022	NE	34.36	NA	NA	NA	409.52	398.43 - 388.43 (45.45 - 55.45)	0.0	*
1Q23		1/3/2023	NE	34.73	NA	NA	NA	409.15		0.0	*
2Q23		4/4/2023	NE	35.38	NA	NA	NA	408.50		0.0	*
3Q23		7/6/2023	NE	36.30	NA	NA	NA	407.58		0.0	*
P 16											
4Q22	442.84	10/18/2022	NE	33.33	NA	NA	NA	409.51	397.10 - 387.10 (45.74 - 55.74)	0.0	*
1Q23		1/3/2023	NE	33.90	NA	NA	NA	408.94		0.0	*
2Q23		4/4/2023	NE	34.49	NA	NA	NA	408.35		0.0	*
3Q23		7/6/2023	NE	35.36	NA	NA	NA	407.48		0.0	*
P 43											
4Q22	444.62	10/18/2022	NE	36.99	NA	NA	NA	407.63	381.06 - 371.06 (63.56 - 73.56)	0.0	*
1Q23		1/3/2023	NE	37.37	NA	NA	NA	407.25		0.2	*
2Q23		4/4/2023	NE	38.20	NA	NA	NA	406.42		0.0	*
3Q23		7/6/2023	NE	39.00	NA	NA	NA	405.62		0.0	*
P 53											
4Q22	446.57	10/17/2022	NE	40.91	NA	NA	NA	405.66	406.26 - 381.26 (40.31 - 65.31)	0.0	
1Q23		1/3/2023	NE	41.53	NA	NA	NA	405.04		0.0	
2Q23		4/3/2023	NE	42.16	NA	NA	NA	404.41		0.0	
3Q23		7/6/2023	NE	42.50	NA	NA	NA	404.07		0.0	
P 54											
4Q22	442.52	10/17/2022	NE	38.98	NA	NA	NA	403.54	404.52 - 379.52 (38.00 - 63.00)	0.0	
1Q23		1/3/2023	NE	39.87	NA	NA	NA	402.65		0.0	
2Q23		4/3/2023	NE	40.13	NA	NA	NA	402.39		0.0	
3Q23		7/5/2023	NE	39.90	NA	NA	NA	402.62		0.0	
P 55R											
4Q22	444.01	10/17/2022	38.75	38.83	405.18	405.26	0.08	405.24	403.58 - 393.58 (40.43 - 50.43)	146.2	*
1Q23		1/3/2023	39.47	39.55	404.46	404.54	0.08	404.52		112.9	*
2Q23		4/3/2023	40.00	40.11	403.90	404.01	0.11	403.99		104.6	*
3Q23		7/5/2023	39.91	39.92	404.09	404.10	0.01	404.10		74.4	*
P 56											
4Q22	446.32	10/17/2022	NE	43.39	NA	NA	NA	402.93	405.50 - 380.50 (40.82 - 65.82)	123.9	
1Q23		1/3/2023	NE	44.19	NA	NA	NA	402.13		9.0	
2Q23		4/3/2023	NE	44.46	NA	NA	NA	401.86		5.7	
3Q23		7/5/2023	NE	44.20	NA	NA	NA	402.12		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 57											
4Q22	447.15	10/17/2022	NE	44.21	NA	NA	NA	402.94	402.96 - 392.96 (44.19 - 54.19)	113.2	
1Q23		1/3/2023	NE	44.94	NA	NA	NA	402.21		72.7	
2Q23		4/3/2023	NE	45.22	NA	NA	NA	401.93		22.9	
3Q23		7/5/2023	NE	44.92	NA	NA	NA	402.23		8.1	
P 58											
4Q22	445.16	10/17/2022	42.13	42.18	402.98	403.03	0.05	403.02	404.95 - 379.95 (40.21 - 65.21)	0.1	
1Q23		1/3/2023	42.82	42.83	402.33	402.34	0.01	402.34		0.1	
2Q23		4/3/2023	NE	43.06	NA	NA	NA	402.10		3.0	
3Q23		7/5/2023	NE	42.82	NA	NA	NA	402.34		0.0	
P 59											
4Q22	447.07	10/17/2022	NE	44.18	NA	NA	NA	402.89	399.16 - 374.16 (47.91 - 72.91)	182.8	*
1Q23		1/3/2023	NE	44.96	NA	NA	NA	402.11		132.6	*
2Q23		4/3/2023	NE	45.18	NA	NA	NA	401.89		201.2	*
3Q23		7/5/2023	NE	44.91	NA	NA	NA	402.16		161.8	*
P 60											
4Q22	446.88	10/17/2022	NE	43.68	NA	NA	NA	403.20	402.23 - 382.23 (44.65 - 64.65)	1.4	*
1Q23		1/3/2023	NE	44.46	NA	NA	NA	402.42		5.1	*
2Q23		4/3/2023	NE	44.72	NA	NA	NA	402.16		0.1	
3Q23		7/5/2023	NE	44.60	NA	NA	NA	402.28		0.0	*
P 61											
4Q22	444.66	10/17/2022	NE	42.18	NA	NA	NA	402.48	398.98 - 373.98 (45.68 - 70.68)	113.9	*
1Q23		1/3/2023	NE	43.06	NA	NA	NA	401.60		34.7	*
2Q23		4/3/2023	NE	43.40	NA	NA	NA	401.26		9.9	*
3Q23		7/5/2023	NE	43.19	NA	NA	NA	401.47		19.5	*
P 62											
4Q22	442.60	10/17/2022	39.73	39.75	402.85	402.87	0.02	402.87	401.13 - 376.13 (41.47 - 66.47)	67.2	*
1Q23		1/3/2023	40.27	41.33	401.27	402.33	1.06	402.12		118.4	*
2Q23		4/3/2023	40.78	41.81	400.79	401.82	1.03	401.61		330.0	*
3Q23		7/6/2023	NE	41.60	NA	NA	NA	401.00		0.0	
P 63											
4Q22	446.06	10/18/2022	43.41	43.42	402.64	402.65	0.01	402.65	398.77 - 373.77 (47.29 - 72.29)	38.8	*
1Q23		1/3/2023	43.96	43.98	402.08	402.10	0.02	402.10		28.4	*
2Q23		4/4/2023	44.59	44.61	401.45	401.47	0.02	401.47		78.9	*
3Q23		7/6/2023	NE	45.10	NA	NA	NA	400.96		1.4	*
P 64											
4Q22	446.78	10/17/2022	45.03	45.09	401.69	401.75	0.06	401.74	399.55 - 374.55 (47.23 - 72.23)	91.6	*
1Q23		1/3/2023	45.09	45.18	401.60	401.69	0.09	401.67		12.8	*
2Q23		4/4/2023	45.75	45.82	400.96	401.03	0.07	401.02		184.3	*
3Q23		7/6/2023	44.09	44.12	402.66	402.69	0.03	402.68		72.0	*
P 65											
4Q22	444.77	10/17/2022	NE	42.08	NA	NA	NA	402.69	397.75 - 372.75 (47.02 - 72.02)	10.5	*
1Q23		1/3/2023	NE	42.76	NA	NA	NA	402.01		22.3	*
2Q23		4/3/2023	43.42	43.43	401.34	401.35	0.01	401.35		4.4	*
3Q23		7/5/2023	NE	43.32	NA	NA	NA	401.45		3.4	*
P 66											
4Q22	437.00	10/19/2022	33.56	34.58	402.42	403.44	1.02	403.24	402.28 - 377.28 (34.72 - 59.72)	103.5	*
1Q23		1/4/2023	34.39	35.91	401.09	402.61	1.52	402.31		159.8	*
2Q23		4/6/2023	34.79	36.21	400.79	402.21	1.42	401.93		58.9	
3Q23		7/7/2023	34.52	35.02	401.98	402.48	0.5	402.38		21.3	*
P 67											
4Q22	444.30	10/19/2022	40.11	40.12	404.18	404.19	0.01	404.19	402.32 - 377.32 (41.98 - 66.98)	0.9	*
1Q23		1/4/2023	41.00	41.01	403.29	403.30	0.01	403.30		1.8	*
2Q23		4/5/2023	41.49	41.50	402.80	402.81	0.01	402.81		0.7	*
3Q23		7/7/2023	41.07	41.11	403.19	403.23	0.04	403.22		0.7	*
P 68											
4Q22	445.38	10/17/2022	42.24	42.28	403.10	403.14	0.04	403.13	401.62 - 376.62 (43.76 - 68.76)	172.8	*
1Q23		1/3/2023	42.97	43.03	402.35	402.41	0.06	402.40		86.2	*
2Q23		4/3/2023	43.25	43.36	402.02	402.13	0.11	402.11		146.2	*
3Q23		7/5/2023	43.17	43.19	402.19	402.21	0.02	402.21		114.3	*

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	COMMENTS
P 69											
4Q22	443.77	10/17/2022	NE	41.03	NA	NA	NA	402.74	402.95 - 377.95 (40.82 - 65.82)	0.0	
1Q23		1/3/2023	NE	41.79	NA	NA	NA	401.98		1.9	
2Q23		4/3/2023	NE	42.03	NA	NA	NA	401.74		0.0	
3Q23		7/5/2023	NE	42.87	NA	NA	NA	400.90		0.0	
P 70											
4Q22	443.11	10/17/2022	NE	40.39	NA	NA	NA	402.72	398.44 - 373.44 (44.67 - 69.67)	188.2	*
1Q23		1/3/2023	NE	41.20	NA	NA	NA	401.91		113.2	*
2Q23		4/3/2023	41.50	41.51	401.60	401.61	0.01	401.61		152.9	*
3Q23		7/5/2023	41.00	41.40	401.71	402.11	0.40	402.03		55.7	*
P 71											
4Q22	445.09	10/17/2022	NE	41.54	NA	NA	NA	403.55	402.48 - 377.48 (42.61 - 67.61)	71.9	*
1Q23		1/3/2023	NE	42.25	NA	NA	NA	402.84		34.8	*
2Q23		4/3/2023	NE	42.43	NA	NA	NA	402.66		44.6	*
3Q23		7/5/2023	NE	40.91	NA	NA	NA	404.18		46.9	*
P 72											
4Q22	444.70	10/17/2022	NE	41.21	NA	NA	NA	403.49	398.93 - 373.93 (45.77 - 70.77)	38.5	*
1Q23		1/3/2023	NE	41.71	NA	NA	NA	402.99		11.1	*
2Q23		4/3/2023	NE	42.33	NA	NA	NA	402.37		2.4	*
3Q23		7/5/2023	NE	42.20	NA	NA	NA	402.50		0.1	*
P 73											
4Q22	444.02	10/19/2022	NE	41.63	NA	NA	NA	402.39	402.42 - 377.42 (41.59 - 66.59)	150.0	
1Q23		1/3/2023	NE	42.10	NA	NA	NA	401.92		29.4	
2Q23		4/3/2023	NE	42.41	NA	NA	NA	401.61		0.0	
3Q23		7/6/2023	NE	42.25	NA	NA	NA	401.77		25.3	
P 74											
4Q22	442.93	10/17/2022	NE	40.19	NA	NA	NA	402.74	399.10 - 374.10 (43.83 - 68.83)	1.1	*
1Q23		1/3/2023	NE	40.54	NA	NA	NA	402.39		0.0	*
2Q23		4/3/2023	NE	41.16	NA	NA	NA	401.77		0.0	*
3Q23		7/5/2023	NE	40.91	NA	NA	NA	402.02		10.6	*
P 75											
4Q22	446.68	10/19/2022	NE	43.62	NA	NA	NA	403.06	403.55 - 378.55 (43.13 - 68.13)	0.7	
1Q23		1/4/2023	NE	44.53	NA	NA	NA	402.15		0.5	
2Q23		4/6/2023	NE	44.98	NA	NA	NA	401.70		0.0	
3Q23		7/7/2023	NE	44.65	NA	NA	NA	402.03		0.2	
P 82A											
4Q22	434.94	10/18/2022	NE	28.10	NA	NA	NA	406.84	401.73 - 386.73 (33.21 - 48.21)	0.0	*
1Q23		1/4/2023	NE	28.92	NA	NA	NA	406.02		0.5	*
2Q23		4/4/2023	NE	28.95	NA	NA	NA	405.99		0.0	*
3Q23		7/6/2023	NE	26.11	NA	NA	NA	408.83		0.0	*
P 82B											
4Q22	434.68	10/18/2022	NE	27.82	NA	NA	NA	406.86	371.88 - 369.88 (62.80 - 64.80)	0.0	*
1Q23		1/4/2023	NE	28.65	NA	NA	NA	406.03		0.0	*
2Q23		4/4/2023	NE	28.66	NA	NA	NA	406.02		0.0	*
3Q23		7/6/2023	NE	25.83	NA	NA	NA	408.85		0.0	*
P 82C											
4Q22	434.41	10/18/2022	NE	27.55	NA	NA	NA	406.86	351.64 - 349.64 (82.77 - 84.77)	0.0	*
1Q23		1/4/2023	NE	28.34	NA	NA	NA	406.07		0.0	*
2Q23		4/4/2023	NE	28.42	NA	NA	NA	405.99		0.0	*
3Q23		7/6/2023	NE	25.54	NA	NA	NA	408.87		0.0	*
P 82D											
4Q22	435.09	10/18/2022	NE	28.32	NA	NA	NA	406.77	323.55 - 321.55 (111.54 - 113.54)		*
1Q23		1/4/2023	NE	29.11	NA	NA	NA	405.98		0.0	*
2Q23		4/4/2023	NE	29.16	NA	NA	NA	405.93		0.0	*
3Q23		7/6/2023	NE	29.31	NA	NA	NA	405.78		0.0	*
P 83A											
4Q22	445.54	10/18/2022	NE	41.46	NA	NA	NA	404.08	398.14 - 383.14 (47.40 - 62.40)	0.0	*
1Q23		1/3/2023	NE	41.92	NA	NA	NA	403.62		0.0	*
2Q23		4/4/2023	NE	42.58	NA	NA	NA	402.96		0.0	*
3Q23		7/6/2023	NE	43.46	NA	NA	NA	402.08		0.0	*

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	COMMENTS
P 83B											
4Q22	445.77	10/18/2022	NE	41.57	NA	NA	NA	404.20	371.97 - 369.97 (73.80 - 75.80)	0.0	*
1Q23		1/3/2023	NE	42.17	NA	NA	NA	403.60		0.0	*
2Q23		4/4/2023	NE	42.93	NA	NA	NA	402.84		0.0	*
3Q23		7/6/2023	NE	43.73	NA	NA	NA	402.04		0.0	*
P 83C											
4Q22	445.95	10/18/2022	NE	41.76	NA	NA	NA	404.19	353.56 - 351.56 (92.39 - 94.39)	0.0	*
1Q23		1/3/2023	NE	42.31	NA	NA	NA	403.64		0.0	*
2Q23		4/4/2023	NE	42.97	NA	NA	NA	402.98		0.0	*
3Q23		7/6/2023	NE	43.87	NA	NA	NA	402.08		0.0	*
P 83D											
4Q22	445.86	10/18/2022	NE	41.83	NA	NA	NA	404.03	312.06 - 310.06 (133.80 - 135.80)	0.0	*
1Q23		1/3/2023	NE	42.28	NA	NA	NA	403.58		0.0	*
2Q23		4/4/2023	NE	42.94	NA	NA	NA	402.92		0.0	*
3Q23		7/6/2023	NE	43.85	NA	NA	NA	402.01		0.0	*
P 84A											
4Q22	446.63	10/18/2022	NE	41.83	NA	NA	NA	404.80	397.71 - 382.71 (48.92 - 63.92)	0.0	*
1Q23		1/4/2023	NE	42.57	NA	NA	NA	404.06		0.0	*
2Q23		4/4/2023	NE	43.03	NA	NA	NA	403.60		0.0	*
3Q23		7/7/2023	NE	43.51	NA	NA	NA	403.12		0.0	*
P 84B											
4Q22	446.35	10/18/2022	NE	41.57	NA	NA	NA	404.78	372.85 - 370.85 (73.50 - 75.50)	0.0	*
1Q23		1/4/2023	NE	42.30	NA	NA	NA	404.05		0.0	*
2Q23		4/4/2023	NE	42.76	NA	NA	NA	403.59		0.0	*
3Q23		7/7/2023	NE	43.23	NA	NA	NA	403.12		0.0	*
P 84C											
4Q22	446.37	10/18/2022	NE	41.58	NA	NA	NA	404.79	352.32 - 350.32 (94.05 - 96.05)	0.0	*
1Q23		1/4/2023	NE	42.32	NA	NA	NA	404.05		0.0	*
2Q23		4/4/2023	NE	42.50	NA	NA	NA	403.87		0.0	*
3Q23		7/7/2023	NE	43.26	NA	NA	NA	403.11		0.0	*
P 84D											
4Q22	446.38	10/18/2022	NE	41.57	NA	NA	NA	404.81	325.55 - 323.55 (120.83 - 122.83)	0.0	*
1Q23		1/4/2023	NE	42.31	NA	NA	NA	404.07		0.0	*
2Q23		4/4/2023	NE	43.76	NA	NA	NA	402.62		0.0	*
3Q23		7/7/2023	NE	43.24	NA	NA	NA	403.14		0.0	*
P 88A											
4Q22	443.27	10/19/2022	NE	33.61	NA	NA	NA	409.66	404.87 - 389.87 (38.40 - 53.40)	0.0	*
1Q23		1/4/2023	NE	34.35	NA	NA	NA	408.92		0.0	*
2Q23		4/4/2023	NE	34.82	NA	NA	NA	408.45		0.0	*
3Q23		7/7/2023	NE	35.08	NA	NA	NA	408.19		0.0	*
P 88B											
4Q22	443.35	10/19/2022	NE	33.66	NA	NA	NA	409.69	371.70 - 369.70 (71.65 - 73.65)	0.0	*
1Q23		1/4/2023	NE	34.40	NA	NA	NA	408.95		0.0	*
2Q23		4/4/2023	NE	34.89	NA	NA	NA	408.46		0.0	*
3Q23		7/7/2023	NE	35.11	NA	NA	NA	408.24		0.0	*
P 88C											
4Q22	443.31	10/19/2022	NE	33.61	NA	NA	NA	409.70	351.01 - 349.01 (92.30 - 94.30)	0.0	*
1Q23		1/4/2023	NE	34.34	NA	NA	NA	408.97		0.0	*
2Q23		4/4/2023	NE	34.85	NA	NA	NA	408.46		0.0	*
3Q23		7/7/2023	NE	35.09	NA	NA	NA	408.22		0.0	*
P 88D											
4Q22	443.38	10/19/2022	NE	33.74	NA	NA	NA	409.64	331.21 - 329.21 (112.17 - 114.17)	0.0	*
1Q23		1/4/2023	NE	34.50	NA	NA	NA	408.88		0.0	*
2Q23		4/4/2023	NE	35.95	NA	NA	NA	407.43		0.0	*
3Q23		7/7/2023	NE	35.20	NA	NA	NA	408.18		0.0	*
P 89B											
4Q22	447.64	10/18/2022	NE	42.33	NA	NA	NA	405.31	370.28 - 368.28 (77.36 - 79.36)	0.0	*
1Q23		1/3/2023	NE	42.76	NA	NA	NA	404.88		0.0	*
2Q23		4/4/2023	NE	43.68	NA	NA	NA	403.96		0.0	*
3Q23		7/6/2023	NE	44.16	NA	NA	NA	403.48		0.0	*

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	COMMENTS
P 89C											
4Q22	447.96	10/18/2022	NE	42.68	NA	NA	NA	405.28	351.56 - 349.56 (96.40 - 98.40)	0.0	*
1Q23		1/3/2023	NE	43.12	NA	NA	NA	404.84		0.0	*
2Q23		4/4/2023	NE	44.05	NA	NA	NA	403.91		0.0	*
3Q23		7/6/2023	NE	44.50	NA	NA	NA	403.46		0.0	*
P 89D											
4Q22	447.83	10/18/2022	NE	42.78	NA	NA	NA	405.05	309.33 - 307.33 (138.50 - 140.50)	0.0	*
1Q23		1/3/2023	NE	43.22	NA	NA	NA	404.61		0.0	*
2Q23		4/4/2023	NE	44.13	NA	NA	NA	403.70		0.0	*
3Q23		7/6/2023	NE	44.60	NA	NA	NA	403.23		0.0	*
P 91A											
4Q22	447.43	10/18/2022	NE	45.72	NA	NA	NA	401.71	395.92 - 380.92 (51.51 - 66.51)	16.3	*
1Q23		1/3/2023	NE	46.31	NA	NA	NA	401.12		37.4	*
2Q23		4/3/2023	46.84	46.85	400.58	400.59	0.01	400.59		9.7	*
3Q23		7/6/2023	NE	48.30	NA	NA	NA	399.13		8.4	*
P 91B											
4Q22	447.47	10/18/2022	NE	45.77	NA	NA	NA	401.70	372.78 - 370.78 (74.69 - 76.69)	10.0	*
1Q23		1/3/2023	NE	46.32	NA	NA	NA	401.15		0.3	*
2Q23		4/3/2023	NE	46.91	NA	NA	NA	400.56		1.2	*
3Q23		7/6/2023	NE	48.45	NA	NA	NA	399.02		0.1	*
P 91C											
4Q22	447.27	10/18/2022	NE	45.54	NA	NA	NA	401.73	352.54 - 350.54 (94.73 - 96.73)	0.0	*
1Q23		1/3/2023	NE	46.12	NA	NA	NA	401.15		0.0	*
2Q23		4/3/2023	NE	46.68	NA	NA	NA	400.59		0.2	*
3Q23		7/6/2023	NE	48.20	NA	NA	NA	399.07		0.0	*
P 91D											
4Q22	447.26	10/18/2022	NE	45.56	NA	NA	NA	401.70	278.94 - 276.94 (168.32 - 170.32)	0.0	*
1Q23		1/3/2023	NE	46.15	NA	NA	NA	401.11		0.0	*
2Q23		4/3/2023	NE	46.69	NA	NA	NA	400.57		0.1	*
3Q23		7/6/2023	NE	48.20	NA	NA	NA	399.06		0.0	*
P 92A											
4Q22	446.39	10/17/2022	44.04	44.20	402.19	402.35	0.16	402.32	398.82 - 383.82 (47.57 - 62.57)	64.1	*
1Q23		1/3/2023	44.75	44.76	401.63	401.64	0.01	401.64		124.6	*
2Q23		4/3/2023	NE	45.44	NA	NA	NA	400.95		108.8	*
3Q23		7/6/2023	45.61	45.76	400.63	400.78	0.15	400.75		55.8	*
P 92B											
4Q22	446.33	10/17/2022	NE	43.98	NA	NA	NA	402.35	371.92 - 369.92 (74.41 - 76.41)	0.0	*
1Q23		1/3/2023	NE	44.47	NA	NA	NA	401.86		0.9	*
2Q23		4/3/2023	NE	45.37	NA	NA	NA	400.96		0.4	*
3Q23		7/6/2023	NE	45.54	NA	NA	NA	400.79		0.0	*
P 92C											
4Q22	446.34	10/17/2022	NE	43.97	NA	NA	NA	402.37	353.38 - 348.38 (92.96 - 97.96)	0.0	*
1Q23		1/3/2023	NE	44.70	NA	NA	NA	401.64		1.3	*
2Q23		4/3/2023	NE	45.38	NA	NA	NA	400.96		2.0	*
3Q23		7/6/2023	NE	45.52	NA	NA	NA	400.82		1.5	*
P 92D											
4Q22	446.15	10/17/2022	NE	43.84	NA	NA	NA	402.31	305.15 - 303.15 (141.00 - 143.00)	0.0	*
1Q23		1/3/2023	NE	44.58	NA	NA	NA	401.57		0.0	*
2Q23		4/3/2023	NE	45.26	NA	NA	NA	400.89		0.6	*
3Q23		7/6/2023	NE	45.42	NA	NA	NA	400.73		0.0	*
P 93A											
4Q22	445.37	10/17/2022	NE	42.40	NA	NA	NA	402.97	402.30 - 392.30 (43.07 - 53.07)	0.0	*
1Q23		1/3/2023	NE	43.13	NA	NA	NA	402.24		0.0	
2Q23		4/3/2023	NE	43.38	NA	NA	NA	401.99		0.0	
3Q23		7/5/2023	NE	43.10	NA	NA	NA	402.27		0.0	
P 93B											
4Q22	446.70	10/17/2022	NE	43.75	NA	NA	NA	402.95	371.92 - 369.92 (74.78 - 76.78)	0.1	*
1Q23		1/3/2023	NE	44.47	NA	NA	NA	402.23		0.0	*
2Q23		4/3/2023	NE	44.74	NA	NA	NA	401.96		0.0	*
3Q23		7/5/2023	NE	44.43	NA	NA	NA	402.27		0.0	*

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TABLE 1
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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 93C											
4Q22	446.55	10/17/2022	NE	43.58	NA	NA	NA	402.97	353.67 - 348.67 (92.88 - 97.88)	0.0	*
1Q23		1/3/2023	NE	44.31	NA	NA	NA	402.24		0.0	*
2Q23		4/3/2023	NE	44.57	NA	NA	NA	401.98		0.0	*
3Q23		7/5/2023	NE	44.30	NA	NA	NA	402.25		0.0	*
P 93D											
4Q22	446.97	10/17/2022	NE	43.93	NA	NA	NA	403.04	321.31 - 319.31 (125.66 - 127.66)	0.1	*
1Q23		1/3/2023	NE	44.67	NA	NA	NA	402.30		0.0	*
2Q23		4/3/2023	NE	44.92	NA	NA	NA	402.05		0.0	*
3Q23		7/5/2023	NE	44.64	NA	NA	NA	402.33		0.0	*
P 94											
4Q22	445.04	10/18/2022	NE	38.35	NA	NA	NA	406.69	398.80 - 383.80 (46.24 - 61.24)	0.0	*
1Q23		1/3/2023	NE	38.95	NA	NA	NA	406.09		0.0	*
2Q23		4/4/2023	NE	39.82	NA	NA	NA	405.22		0.0	*
3Q23		7/6/2023	NE	40.34	NA	NA	NA	404.70		0.0	*
P 95											
4Q22	443.95	10/19/2022	NE	31.61	NA	NA	NA	412.34	407.43 - 392.43 (36.52 - 51.52)	0.0	*
1Q23		1/4/2023	NE	32.22	NA	NA	NA	411.73		0.0	*
2Q23		4/4/2023	NE	32.81	NA	NA	NA	411.14		0.0	*
3Q23		7/7/2023	NE	33.21	NA	NA	NA	410.74		0.0	*
P 102											
4Q22	445.14	10/19/2022	NE	35.29	NA	NA	NA	409.85	402.39 - 382.39 (42.75 - 62.75)	10.0	*
1Q23		1/4/2023	NE	35.81	NA	NA	NA	409.33		2.4	*
2Q23		4/4/2023	NE	36.41	NA	NA	NA	408.73		3.5	*
3Q23		7/7/2023	NE	37.07	NA	NA	NA	408.07		19.1	*
P 114R											
4Q22	429.48	10/18/2022	NE	25.94	NA	NA	NA	403.54	406.47 - 396.47 (23.01 - 33.01)	0.0	
1Q23		1/4/2023	NE	27.07	NA	NA	NA	402.41		0.0	
2Q23		4/4/2023	NE	26.72	NA	NA	NA	402.76		21.8	
3Q23		7/6/2023	NE	26.50	NA	NA	NA	402.98		0.0	
P 115											
4Q22	433.54	10/18/2022	NE	29.96	NA	NA	NA	403.58	401.24 - 381.24 (32.30 - 52.30)	0.0	*
1Q23		1/4/2023	NE	31.15	NA	NA	NA	402.39		0.0	*
2Q23		4/4/2023	NE	30.65	NA	NA	NA	402.89		0.1	*
3Q23		7/6/2023	NE	30.61	NA	NA	NA	402.93		0.0	*
P 116											
4Q22	436.79	10/18/2022	NE	33.43	NA	NA	NA	403.36	399.35 - 379.35 (37.44 - 57.44)	0.0	*
1Q23		1/4/2023	NE	34.63	NA	NA	NA	402.16		0.0	*
2Q23		4/4/2023	NE	34.05	NA	NA	NA	402.74		0.0	*
3Q23		7/6/2023	NE	34.00	NA	NA	NA	402.79		0.1	*
P 117											
4Q22	432.87	10/18/2022	NE	29.68	NA	NA	NA	403.19	399.94 - 379.94 (32.93 - 52.93)	0.0	*
1Q23		1/4/2023	NE	30.86	NA	NA	NA	402.01		0.0	*
2Q23		4/4/2023	NE	30.25	NA	NA	NA	402.62		0.0	*
3Q23		7/6/2023	NE	30.22	NA	NA	NA	402.65		0.0	*
P 118											
4Q22	431.48	10/18/2022	NE	28.73	NA	NA	NA	402.75	400.36 - 384.43 (31.12 - 47.05)	0.0	*
1Q23		1/4/2023	NE	29.95	NA	NA	NA	401.53		0.1	*
2Q23		4/4/2023	NE	29.07	NA	NA	NA	402.41		0.0	*
3Q23		7/6/2023	NE	29.10	NA	NA	NA	402.38		0.2	*
P 119											
4Q22	432.11	10/18/2022	NE	28.20	NA	NA	NA	403.91	401.44 - 385.51 (30.67 - 46.60)	0.0	*
1Q23		1/4/2023	NE	29.24	NA	NA	NA	402.87		0.0	*
2Q23		4/4/2023	NE	29.05	NA	NA	NA	403.06		0.0	*
3Q23		7/6/2023	NE	28.90	NA	NA	NA	403.21		0.0	*
P 120											
4Q22	433.00	10/18/2022	NE	28.63	NA	NA	NA	404.37	401.62 - 385.69 (31.38 - 47.31)	0.0	*
1Q23		1/4/2023	NE	29.72	NA	NA	NA	403.28		0.0	*
2Q23		4/4/2023	NE	29.38	NA	NA	NA	403.62		0.0	*
3Q23		7/6/2023	NE	29.31	NA	NA	NA	403.69		0.0	*

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TABLE 1
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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 129											
4Q22	432.66	10/18/2022	NE	31.28	NA	NA	NA	401.38	400.69 - 384.76 (31.97 - 47.90)	0.0	*
1Q23		1/4/2023	NE	32.46	NA	NA	NA	400.20		17.2	
2Q23		4/4/2023	NE	30.91	NA	NA	NA	401.75		0.0	*
3Q23		7/6/2023	NE	31.41	NA	NA	NA	401.25		0.0	*
ROST 3 MW											
4Q22	442.52	10/17/2022	NE	38.93	NA	NA	NA	403.59	404.71 - 394.71 (37.81 - 47.81)	8.8	
1Q23		1/3/2023	NE	39.77	NA	NA	NA	402.75		361.7	
2Q23		4/3/2023	NE	40.11	NA	NA	NA	402.41		0.0	
3Q23		7/5/2023	NE	40.00	NA	NA	NA	402.52		0.0	
ROST 4 PZ											
4Q22	442.15	10/17/2022	NE	37.93	NA	NA	NA	404.22	407.22 - 397.22 (34.93 - 44.93)	0.0	
1Q23		1/3/2023	NE	38.58	NA	NA	NA	403.57		0.3	
2Q23		4/3/2023	NE	39.30	NA	NA	NA	402.85		0.0	
3Q23		7/5/2023	NE	39.10	NA	NA	NA	403.05		0.0	
ROST 4 PZ(A)											
4Q22	442.15	10/17/2022	NE	36.75	NA	NA	NA	405.40	407.38 - 397.38 (34.77 - 44.77)	0.0	
1Q23		1/3/2023	NE	37.89	NA	NA	NA	404.26		0.0	
2Q23		4/3/2023	NE	38.75	NA	NA	NA	403.40		0.0	
3Q23		7/5/2023	NE	38.56	NA	NA	NA	403.59		0.0	
ROST 4 PZ(B)											
4Q22	442.40	10/17/2022	NE	37.75	NA	NA	NA	404.65	407.35 - 397.35 (35.05 - 45.05)	0.0	
1Q23		1/3/2023	NE	38.54	NA	NA	NA	403.86		0.0	
2Q23		4/3/2023	NE	39.34	NA	NA	NA	403.06		0.0	
3Q23		7/5/2023	NE	39.15	NA	NA	NA	403.25		0.0	
ROST 4 PZ(C)											
4Q22	442.97	10/18/2022	NE	39.03	NA	NA	NA	403.94	408.02 - 398.02 (34.95 - 44.95)	0.0	
1Q23		1/3/2023	NE	39.65	NA	NA	NA	403.32		0.0	
2Q23		4/3/2023	NE	40.29	NA	NA	NA	402.68		0.0	
3Q23		7/5/2023	NE	40.10	NA	NA	NA	402.87		0.0	
ROST 4 PZ(D)											
4Q22	442.92	10/17/2022	NE	38.77	NA	NA	NA	404.15	407.95 - 397.95 (34.97 - 44.97)	0.0	
1Q23		1/3/2023	NE	39.44	NA	NA	NA	403.48		0.1	
2Q23		4/3/2023	NE	40.07	NA	NA	NA	402.85		0.0	
3Q23		7/5/2023	NE	40.05	NA	NA	NA	402.87		0.0	
ROST 4 PZ(E)											
4Q22	441.98	10/17/2022	NE	37.95	NA	NA	NA	404.03	407.23 - 397.23 (34.75 - 44.75)	0.0	
1Q23		1/3/2023	NE	38.51	NA	NA	NA	403.47		0.0	
2Q23		4/3/2023	NE	39.14	NA	NA	NA	402.84		0.0	
3Q23		7/5/2023	NE	38.96	NA	NA	NA	403.02		0.0	
ROST 4 PZ(F)											
4Q22	442.12	10/17/2022	NE	38.09	NA	NA	NA	404.03	407.59 - 397.59 (34.53 - 44.53)	0.0	
1Q23		1/3/2023	NE	38.73	NA	NA	NA	403.39		0.0	
2Q23		4/3/2023	NE	39.23	NA	NA	NA	402.89		0.0	
3Q23		7/5/2023	NE	39.07	NA	NA	NA	403.05		0.0	
ROST 4 PZ(G)											
4Q22	442.20	10/17/2022	NE	38.68	NA	NA	NA	403.52	407.92 - 397.92 (34.28 - 44.28)	0.0	
1Q23		1/3/2023	NE	39.74	NA	NA	NA	402.46		0.2	
2Q23		4/3/2023	NE	40.00	NA	NA	NA	402.20		0.0	
3Q23		7/5/2023	NE	39.82	NA	NA	NA	402.38		0.0	
S 1											
4Q22	444.06	10/17/2022	41.23	41.30	402.76	402.83	0.07	402.82	Unknown	123.4	
1Q23		1/3/2023	41.81	41.96	402.10	402.25	0.15	402.22		138.6	
2Q23		4/3/2023	42.34	42.36	401.70	401.72	0.02	401.72		172.6	
3Q23		7/5/2023	42.18	42.20	401.86	401.88	0.02	401.88		102.3	
T 1											
4Q22	445.61	10/17/2022	NE	41.58	NA	NA	NA	404.03	398.61 - 388.61 (47.00 - 57.00)	0.1	
1Q23		1/3/2023	NE	42.33	NA	NA	NA	403.28		0.0	
2Q23		4/3/2023	NE	42.80	NA	NA	NA	402.81		0.0	
3Q23		7/5/2023	NE	42.90	NA	NA	NA	402.71		0.0	

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T 2											
4Q22	443.40	10/17/2022	NE	39.73	NA	NA	NA	403.67	392.90 - 372.75 (50.49 - 70.64)	0.1	
1Q23		1/3/2023	NE	40.40	NA	NA	NA	403.00		0.0	
2Q23		4/3/2023	NE	40.91	NA	NA	NA	402.49		0.2	
3Q23		7/6/2023	NE	41.35	NA	NA	NA	402.05		0.0	
T 3											
4Q22	449.21	10/18/2022	NE	46.50	NA	NA	NA	402.71	403.99 - 388.99 (45.22 - 60.22)	0.1	
1Q23		1/3/2023	NE	47.13	NA	NA	NA	402.08		0.0	
2Q23		4/4/2023	NE	47.74	NA	NA	NA	401.47		0.0	
3Q23		7/6/2023	NE	48.60	NA	NA	NA	400.61		0.0	
T 4											
4Q22	446.82	10/18/2022	NE	45.82	NA	NA	NA	401.00	396.80 - 381.80 (50.02 - 65.02)	0.1	
1Q23		1/3/2023	NE	46.45	NA	NA	NA	400.37		0.0	
2Q23		4/4/2023	NE	46.88	NA	NA	NA	399.94		0.0	
3Q23		7/6/2023	NE	47.45	NA	NA	NA	399.37		0.0	
T 5											
4Q22	443.66	10/17/2022	NE	40.32	NA	NA	NA	403.34	395.33 - 378.78 (48.33 - 64.88)	0.0	
1Q23		1/3/2023	NE	40.92	NA	NA	NA	402.74		6.0	
2Q23		4/3/2023	NE	41.65	NA	NA	NA	402.01		0.5	
3Q23		7/5/2023	NE	41.31	NA	NA	NA	402.35		5.6	
T 6											
4Q22	446.78	10/17/2022	NE	43.87	NA	NA	NA	402.91	394.27 - 380.02 (52.51 - 66.76)	1.5	
1Q23		1/3/2023	NE	44.59	NA	NA	NA	402.19		0.1	
2Q23		4/3/2023	NE	44.90	NA	NA	NA	401.88		0.0	
3Q23		7/5/2023	NE	44.61	NA	NA	NA	402.17		0.0	
T 7											
4Q22	444.26	10/19/2022	NE	40.11	NA	NA	NA	404.15	395.54 - 380.54 (48.72 - 63.72)	2.3	
1Q23		1/4/2023	NE	41.06	NA	NA	NA	403.20		16.5	
2Q23		4/5/2023	41.47	41.49	402.77	402.79	0.02	402.79		0.8	
3Q23		7/7/2023	NE	41.50	NA	NA	NA	402.76		1.3	
T 12											
4Q22	444.99	10/17/2022	NE	42.03	NA	NA	NA	402.96	398.16 - 372.16 (46.83 - 72.83)	0.2	
1Q23		1/3/2023	NE	42.75	NA	NA	NA	402.24		3.9	
2Q23		4/3/2023	NE	42.93	NA	NA	NA	402.06		0.0	
3Q23		7/5/2023	NE	42.74	NA	NA	NA	402.25		0.0	
T 13											
4Q22	443.76	10/17/2022	NE	39.51	NA	NA	NA	404.25	399.95 - 373.95 (43.81 - 69.81)	0.0	
1Q23		1/3/2023	NE	40.20	NA	NA	NA	403.56		0.0	
2Q23		4/3/2023	NE	40.76	NA	NA	NA	403.00		0.0	
3Q23		7/5/2023	NE	40.81	NA	NA	NA	402.95		0.0	
T 15											
4Q22	445.35	10/18/2022	NE	41.64	NA	NA	NA	403.71	396.95 - 370.95 (48.40 - 74.40)	0.1	
1Q23		1/3/2023	NE	42.13	NA	NA	NA	403.22		0.0	
2Q23		4/3/2023	NE	42.72	NA	NA	NA	402.63		0.1	
3Q23		7/6/2023	NE	43.45	NA	NA	NA	401.90		0.0	
T 17											
4Q22	446.19	10/18/2022	NE	41.47	NA	NA	NA	404.72	401.72 - 375.72 (44.47 - 70.47)	0.4	
1Q23		1/3/2023	NE	41.88	NA	NA	NA	404.31		0.0	
2Q23		4/4/2023	NE	42.84	NA	NA	NA	403.35		0.0	
3Q23		7/7/2023	NE	43.35	NA	NA	NA	402.84		0.0	
T 19											
4Q22	446.99	10/18/2022	NE	45.82	NA	NA	NA	401.17	396.22 - 370.22 (50.77 - 76.77)	8.4	
1Q23		1/3/2023	NE	46.50	NA	NA	NA	400.49		11.7	
2Q23		4/4/2023	NE	47.02	NA	NA	NA	399.97		5.0	
3Q23		7/6/2023	NE	47.46	NA	NA	NA	399.53		14.8	
T 21											
4Q22	444.22	10/19/2022	NE	31.90	NA	NA	NA	412.32	412.26 - 386.26 (31.96 - 57.96)	0.0	
1Q23		1/4/2023	NE	32.57	NA	NA	NA	411.65		0.0	
2Q23		4/4/2023	NE	33.50	NA	NA	NA	410.72		0.0	
3Q23		7/7/2023	NE	33.54	NA	NA	NA	410.68		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 22											
4Q22	442.37	10/19/2022	NE	33.62	NA	NA	NA	408.75	410.82 - 385.12 (31.55 - 57.25)	0.0	
1Q23		1/4/2023	NE	34.43	NA	NA	NA	407.94		0.0	
2Q23		4/4/2023	NE	35.36	NA	NA	NA	407.01		0.0	
3Q23		7/7/2023	NE	34.96	NA	NA	NA	407.41		0.0	
T 23											
4Q22	432.90	10/18/2022	NE	26.57	NA	NA	NA	406.33	405.67 - 379.67 (27.23 - 53.23)	0.0	
1Q23		1/4/2023	NE	27.41	NA	NA	NA	405.49		0.0	
2Q23		4/4/2023	NE	28.37	NA	NA	NA	404.53		0.0	
3Q23		7/6/2023	NE	27.53	NA	NA	NA	405.37		0.0	
T 24											
4Q22	444.00	10/17/2022	NE	41.13	NA	NA	NA	402.87	402.50 - 376.85 (41.50 - 67.15)	0.2	
1Q23		1/3/2023	NE	41.90	NA	NA	NA	402.10		2.1	
2Q23		4/3/2023	42.25	42.26	401.74	401.75	0.01	401.75		0.4	
3Q23		7/5/2023	NE	42.21	NA	NA	NA	401.79		0.0	
T 28											
4Q22	444.56	10/18/2022	NE	40.66	NA	NA	NA	403.90	Unknown	0.1	
1Q23		1/3/2023	NE	41.11	NA	NA	NA	403.45		0.0	
2Q23		4/4/2023	NE	41.81	NA	NA	NA	402.75		0.0	
3Q23		7/6/2023	NE	42.65	NA	NA	NA	401.91		0.0	
T 37											
4Q22	447.44	10/18/2022	NE	42.20	NA	NA	NA	405.24	398.58 - 378.58 (48.85 - 68.85)	0.0	
1Q23		1/3/2023	NE	42.60	NA	NA	NA	404.84		0.0	
2Q23		4/4/2023	NE	43.52	NA	NA	NA	403.92		0.0	
3Q23		7/6/2023	NE	44.00	NA	NA	NA	403.44		0.0	
T 38											
4Q22	445.89	10/18/2022	NE	38.49	NA	NA	NA	407.40	396.75 - 376.75 (49.14 - 69.14)	0.1	
1Q23		1/3/2023	NE	38.83	NA	NA	NA	407.06		0.0	
2Q23		4/4/2023	NE	39.71	NA	NA	NA	406.18		0.0	
3Q23		7/7/2023	NE	40.74	NA	NA	NA	405.15		0.0	
T 62											
4Q22	432.16	10/18/2022	NE	28.19	NA	NA	NA	403.97	412.45 - 382.45 (19.71 - 49.71)	0.0	
1Q23		1/4/2023	NE	29.35	NA	NA	NA	402.81		0.0	
2Q23		4/4/2023	NE	28.73	NA	NA	NA	403.43		0.5	
3Q23		7/6/2023	NE	28.68	NA	NA	NA	403.48		0.2	
T 63											
4Q22	431.55	10/18/2022	NE	27.88	NA	NA	NA	403.67	411.57 - 381.57 (19.98 - 49.98)	0.0	
1Q23		1/4/2023	NE	29.07	NA	NA	NA	402.48		0.0	
2Q23		4/4/2023	NE	28.27	NA	NA	NA	403.28		0.5	
3Q23		7/6/2023	NE	28.34	NA	NA	NA	403.21		0.1	
T 64											
4Q22	429.10	10/18/2022	NE	26.00	NA	NA	NA	403.10	409.29 - 379.29 (19.81 - 49.81)	0.0	
1Q23		1/4/2023	NE	27.20	NA	NA	NA	401.90		0.0	
2Q23		4/4/2023	NE	26.27	NA	NA	NA	402.83		0.6	
3Q23		7/6/2023	NE	26.32	NA	NA	NA	402.78		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 grav ty 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 mil ion; NA Not App icable; 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 Vi lage of Roxana Interim Groundwater Monitoring Program and the WRB Refining LP Wood River Refinery Program.

7) The screened interval for certain monitoring we ls 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 Perm t Condition IV.J.9, which requires we ls 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							
4Q22	6.90	18.15	0.966	4.54	0.63	45.45	
1Q23	6.99	15.65	0.901	10 09	0.88	159.41	
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	
MW-02							
4Q22	7.16	18.23	0.824	6.14	0.64	-50.56	
1Q23	7.32	13.77	0.840	13.19	0.83	67.69	
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	
MW-03							
4Q22	6.61	18.73	1.293	0.00	0.53	-72.66	
1Q23	6.80	17.70	1.595	5.82	0.55	-104 07	
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	
MW-04							
4Q22	6.86	18.56	1.116	2.82	0.49	-38.50	
1Q23	6.81	15.87	1.058	7.84	0.60	-78.06	
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	
MW-05							
4Q22	6.65	17.68	0.984	6.49	0.69	-72.15	
1Q23	6.72	16.17	1.237	3.28	0.63	-83.91	
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	
MW-06A							
4Q22	6.78	20.87	1.066	40 67	0.35	-97.21	
1Q23	6.74	18.82	1.355	27.44	0.51	-81.76	
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	
MW-06B							
4Q22	7.04	20.33	0.773	5.61	0.65	-76.49	
1Q23	7.09	18.41	0.841	4.23	0.76	-80.97	
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	
MW-06C							
4Q22	7.01	19.10	0.779	0.00	0.59	-86.89	
1Q23	7.05	17.05	0.910	4.74	0.72	-88.42	
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	
MW-06D							
4Q22	6.91	18.55	0.952	14 02	0.57	-60.22	
1Q23	7.04	18.12	1.424	34.42	0.68	-105 52	
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	

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							
4Q22	6.65	18.66	1.299	0.00	0.51	-29.52	
1Q23	6.73	17.29	1.130	2.66	0.59	-57.01	
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	
MW-08							
4Q22	6.74	18.47	1.433	15.48	0.51	-78.14	
1Q23	6.84	15.98	1.230	46.70	0.63	-132.72	
MW-09							
4Q22	6.77	17.95	1.031	0.00	0.63	-49.17	
1Q23	6.86	14.64	0.936	22 21	0.71	-67.21	
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	
MW-10							
4Q22	6.84	18.88	1.875	35 09	0.48	-23.18	
1Q23	6.98	15.18	1.445	41.18	0.65	-84.20	
2Q23	6.97	16.02	1.445	35.73	0.61	-110.43	
3Q23	6.89	20.15	1.348	40.74	0.53	-132 65	
MW-11							
4Q22	6.54	16.18	1.328	13 53	0.66	-23.09	
1Q23	6.62	13.71	1.390	20 98	0.90	27.61	
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	
MW-12							
4Q22	6.57	17.18	0.865	1.29	0.68	115 08	
1Q23	6.83	16.76	1.041	2.92	0.76	69.22	
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	
MW-13							
4Q22	6.47	20.99	1.430	19.40	0.50	-92.33	
1Q23	6.59	18.95	1.080	28 30	0.49	-41.18	
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	
MW-14							
4Q22	6.71	19.39	1.121	22.72	0.58	-56.63	
1Q23	6.70	17.87	1.186	14 20	0.62	-25.50	
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	
MW-16							
4Q22	6.72	17.28	0.861	19 96	0.66	43.10	
1Q23	6.70	15.80	0.847	12.13	0.94	40.20	
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	

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							
4Q22	6.77	18.11	0.938	12.41	0.64	-21.70	
1Q23	6.85	17.66	1.309	6.63	0.82	70.00	
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	
MW-23							
4Q22	6.47	18.42	1.073	39 89	0.59	-39.10	
1Q23	6.50	16.82	1.225	23 58	0.61	-43.53	
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	
MW-24							
4Q22	6.93	18.29	1.606	9.66	0.99	39.40	
1Q23	6.81	15.63	1.506	35.70	0.82	64.21	
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	
MW-25							
4Q22	6.88	19.14	1.040	11 01	0.56	-63.06	
1Q23	6.95	17.62	0.898	38.49	0.39	-120 56	
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	
MW-26							
4Q22	6.73	18.53	1.217	7.84	0.72	23.86	
1Q23	6.68	15.75	1.417	11 85	0.68	164.45	
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	
MW-27							
4Q22	6.78	17.67	0.784	46 38	1.07	53.80	
1Q23	6.81	16.50	0.807	14 57	0.68	65.12	
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	
MW-28							
4Q22	6.56	17.88	1.015	32.16	0.65	28.49	
1Q23	6.78	16.80	1.164	25 29	0.72	4 24	
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	
P-54							
4Q22	6.60	16.71	1.022	12 21	5.08	151 35	
1Q23	6.76	15.82	1.268	11.44	4.51	150 86	
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	
P-55R							
4Q22	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q23	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
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.

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							
4Q22	7.20	20.80	1.056	1.71	0.66	-56.35	
1Q23	7.22	18.01	1.097	6.91	0.61	-22.33	
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	
P-57							
4Q22	6.96	19.30	0.936	1.02	0.31	-127.10	
1Q23	6.84	18.83	1.149	0.71	0.62	16.83	
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	
P-58							
4Q22	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q23	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
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	
P-59							
4Q22	6.51	22.21	1.538	2.65	0.49	-38.03	
1Q23	6.67	19.83	1.555	0.32	0.73	2 54	
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	
P-66							
4Q22	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q23	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
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.
P-68							
4Q22	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q23	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
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.
P-74							
4Q22	6.81	20.30	0.209	7.28	0.63	8 60	
1Q23	7.26	19.39	0.196	9.01	1.29	28.23	
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	
P-93A							
4Q22	6.50	19.20	1.299	0.00	0.67	50.44	
1Q23	6.31	16.43	1.225	0.00	0.82	93.44	
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	
P-93B							
4Q22	6.64	19.56	1.485	0.20	0.47	-38.51	
1Q23	6.76	18.29	1.454	2.18	0.46	4 29	
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	

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							
4Q22	6.72	17.75	1.056	0.00	0.73	15.79	
1Q23	6.92	15.15	1.044	0.00	0.78	-29.33	
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	
P-93D							
4Q22	6.90	18.60	1.189	3.89	0.47	3 30	
1Q23	7.07	15.95	1.134	3.76	0.75	-21.56	
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	
P-114R							
4Q22	6.67	22.20	0.989	25 58	0.39	-99.55	
1Q23	6.74	21.34	0.865	36.19	0.39	-93.29	
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	
ROST-3-MW							
4Q22	6.67	17.49	1.124	2.78	0.62	-65.21	
1Q23	6.71	14.79	1.150	12.18	0.61	-97.69	
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	
ROST-4-PZ(C)							
4Q22	6.94	17.58	1.169	7.60	0.63	-47.89	
1Q23	6.92	14.37	1.266	9.86	0.75	-0 84	
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	
ROST-4-PZ(E)							
4Q22	6.88	18.70	1.164	13 99	0.48	-25.70	
1Q23	6.80	17.94	1.876	12 31	0.69	20.86	
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	
ROST-4-PZ(G)							
4Q22	6.83	18.69	1.144	28 04	0.59	-84.25	
1Q23	6.94	17.35	1.414	7.42	0.54	-49.84	
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	
T-12							
4Q22	6.83	21.41	1.803	0.00	0.64	-65.45	
1Q23	6.74	18.43	1.958	0.00	0.72	29.57	
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	

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	Chloroform	Chloromethane	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene (Cumene)	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]	0.07 [1]			0.0002 [1]	0.07 [1]	0.7 [1]	0.7 [1]	0.7 [1]	0.07 [1]	0.14 [1]	0.7 [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-01	MW1-ROX-102022	10/20/2022	< 0.025	0 00066 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0 001 UJ	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	MW1-ROX-011323	1/13/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.000029	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	MW1-ROX-011323-PAH	1/13/2023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW1-ROX-040623	4/6/2023	< 0.025	0 00041 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000028	< 0 001	< 0.001	< 0.001	< 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	< 0.000029	< 0 0010	< 0.0010	< 0.0010	< 0.0010	< 0 0050	< 0.0010	< 0.0010
MW-02	MW2-ROX-102822	10/28/2022	< 0.025	0.0014	< 0.001	0.021 J	0 0060	0 0054	0.00066 J	< 0 001 UJ	< 0.001	< 0 001	0 0050	< 0.000030	< 0 001	0.09	0.047	< 0.001	0 022	0.076	0.0039
	MW2-ROX-011323	1/13/2023	< 0.025	0.0016	< 0.001	0.033	0 0040	0 0046	0.00063 J	0.00063 J	< 0.001	< 0 001	0 0039	< 0.000030	< 0 001	0 036	0.037	< 0.001	0.01	0.058	0.0032
	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	< 0.002	< 0 002	0.0016 J	< 0.000029	< 0 002	0.4	0.023	< 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 0032	< 0.000030	< 0.0010	0.19	0.042	< 0.0010	0.03	0.056	0.0037
MW-03	MW3-ROX-102522	10/25/2022	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.000034	< 0.001	< 0.001	< 0.001	0.0010	< 0.005	< 0.001	< 0.001
	MW3-ROX-011123	1/11/2023	< 0.025	0 00061 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.000029	< 0.001	< 0.001	< 0.001	0.0017	< 0.005	< 0.001	< 0.001
	MW3-ROX-011123-PAH	1/11/2023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW3-ROX-041723	4/17/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001 UJ	< 0.001	< 0.001	< 0.000029	< 0.001	< 0.001	< 0.001	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	< 0.001 UJ	< 0.001	< 0.001	< 0.000030	< 0.001	< 0.001	< 0.001	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	< 0.000028	< 0 0010	< 0.0010	< 0.0010	0.0010	< 0 0050	< 0.0010	< 0.0010
MW-04	MW4-ROX-103122	10/31/2022	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0 00084 J	< 0.001	< 0.000030	< 0 001	< 0.001	< 0.001	0.00036 J	< 0.005	< 0.001	< 0.001
	MW4-ROX-010923	1/9/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.000029	< 0.001	< 0.001	< 0.001	0.00041 J	< 0.005	< 0.001	< 0.001
	MW4-ROX-040723	4/7/2023	< 0.025	0 00076 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.000030	< 0.001	< 0.001	< 0.001	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 UJ	< 0.0010	< 0.000029	< 0 0010	< 0.0010	< 0.0010	< 0.0010	< 0 0050	< 0.0010	< 0.0010
MW-05	MW5-ROX-102722	10/27/2022	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	0.0021	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000032	< 0 001	< 0.001	< 0.001	0.0027	< 0.005	< 0.001	< 0.001
	MW5-ROX-011023	1/10/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	0.0016	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000030	< 0 001	< 0.001	< 0.001	0.0026	< 0.005	< 0.001	< 0.001
	MW5-ROX-041423	4/14/2023	< 0.025	0 00031 J	< 0.001	< 0.025	< 0.001	< 0.001	0.0010	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000029	< 0 001	< 0.001	< 0.001	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	< 0.000029	< 0 0010	< 0.0010	< 0.0010	0.0025	< 0 0050	< 0.0010	< 0.0010
MW-06A	MW6A-ROX-102122	10/21/2022	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0 001 UJ	< 0.001 UJ	< 0.001	< 0.001	< 0.000030	< 0 001	< 0.001	< 0.001	0.00038 J	< 0.005	< 0.001	< 0.001
	MW6A-ROX-102122-PAH	10/21/2022	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW6A-ROX-011123	1/11/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.000030	< 0.001	< 0.001	< 0.001	0.00061 J	< 0.005	< 0.001	< 0.001
	MW6A-ROX-041123	4/11/2023	< 0.025	0 00038 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000030	< 0.001	< 0.001	< 0.001	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	< 0.001	< 0 001	< 0.001	< 0.000030	< 0.001	< 0.001	< 0.001	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	< 0.000028	< 0 0010	< 0.0010	< 0.0010	0.00031 J	< 0 0050	< 0.0010	< 0.0010
MW-06B	MW6B-ROX-102122	10/21/2022	< 0.025	0 00027 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0 001 UJ	< 0.001 UJ	< 0.001	< 0.001	< 0.000030	< 0 001	< 0.001	< 0.001	0.00035 J	< 0.005	< 0.001	< 0.001
	MW6B-ROX-011123	1/11/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.000030	< 0.001	< 0.001	< 0.001	0.00045 J	< 0.005	< 0.001	< 0.001
	MW6B-ROX-011123-PAH	1/11/2023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW6B-ROX-011123-DUP	1/11/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.000030	< 0.001	< 0.001	< 0.001	0.00046 J	< 0.005	< 0.001	< 0.001
	MW6B-ROX-011123-DUP-PAH	1/11/2023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW6B-ROX-041123	4/11/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.000034	< 0.001	< 0.001	< 0.001	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	< 0.000029	< 0 0010	< 0.0010	< 0.0010	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	< 0.000029	< 0 0010	< 0.0010	< 0.0010	0.00031 J	< 0 0050	< 0.0010	< 0.0010
MW-06C	MW6C-ROX-102122	10/21/2022	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001 UJ	< 0.001 UJ	< 0.001	< 0.001	< 0.000030	< 0 001	< 0.001	< 0.001	0.00026 J	< 0.005	< 0.001	< 0.001
	MW6C-ROX-011123	1/11/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.000029	< 0.001	< 0.001	< 0.001	0.00033 J	< 0.005	< 0.001	< 0.001
	MW6C-ROX-011123-PAH	1/11/2023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW6C-ROX-041123	4/11/2023	< 0.025	0 00025 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.000031	< 0.001	< 0.001	< 0.001	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 UJ	< 0.0010	< 0.000029	< 0 0010	< 0.0010	< 0.0010	< 0.0010	< 0 0050	< 0.0010	< 0.0010
MW-06D	MW6D-ROX-102122	10/21/2022	< 0.025	0 00021 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0 001 UJ	< 0.001 UJ	< 0.001	< 0.001	< 0.000031	< 0 001	< 0.001	< 0.001	< 0 001	< 0.005	< 0.001	< 0.001
	MW6D-ROX-102122-PAH	10/21/2022	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW6D-ROX-011123	1/11/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.000029	< 0 001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	MW6D-ROX-011123-PAH	1/11/2023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW6D-ROX-041123	4/11/2023	< 0.025	0 00080 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000031	< 0 001	< 0.001	< 0.001	< 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 UJ	< 0.0010	< 0.000029	< 0 0010	< 0.0010	< 0.0010	< 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	Chloroform	Chloromethane	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene (Cumene)	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]	0.07 [1]			0.0002 [1]	0.07 [1]	0.7 [1]	0.7 [1]	0.7 [1]	0.07 [1]	0.14 [1]	0.7 [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-07	MW7-ROX-103122	10/31/2022	< 13	680	< 0.5	< 13	< 0.5	< 0.5	< 0 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.000031	< 0.5	< 0.5	< 0.5	0.3 J	< 2.5	< 0.5	0.82
	MW7-ROX-103122-DUP	10/31/2022	< 13	760	< 0.5	< 13	< 0.5	< 0.5	< 0 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.000030	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	0.36 J
	MW7-ROX-010923	1/9/2023	< 50	420	< 2	< 50	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0.000020 J*+ J	< 2	< 2	< 2	< 2	< 10	< 2	< 2
	MW7-ROX-040723	4/7/2023	< 25	890 J	< 1	< 25	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.000030	< 1	< 1	< 1	< 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	< 0.000029	< 1	< 1	< 1	< 1	< 5	< 1	0.43 J
	MW7-ROX-071323	7/13/2023	< 130	490	< 5	< 130	< 5	< 5	< 5	< 5	< 5	< 5 UJ	< 5	< 0.000030	< 5	< 5	< 5	< 5	< 25	< 5	< 5
	MW7-ROX-071323-DUP	7/13/2023	< 130	490	< 5	< 130	< 5	< 5	< 5	< 5	< 5	< 5 UJ	< 5	< 0.000030	< 5	< 5	< 5	< 5	< 25	< 5	< 5
MW-08	MW8-ROX-103122	10/31/2022	<6.3	280	< 0.25	<6.3	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.000031	< 0.25	0.31	< 0.25	< 0 25	< 1.3	< 0.25	0.9
	MW8-ROX-010923	1/9/2023	< 25 UJ	390	< 1 UJ	< 25 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	0.000028 J*+ J	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 5 UJ	< 1 UJ	< 1 UJ
	MW8-ROX-010923-DUP	1/9/2023	< 25 UJ	380	< 1 UJ	< 25 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	0.000028 J*+ J	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 5 UJ	< 1 UJ	< 1 UJ
MW-09	MW9-ROX-102722	10/27/2022	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	< 0.001	< 0.005 H UJ	< 0.001	< 0.001
	MW9-ROX-010523	1/5/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000030	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	MW9-ROX-041023	4/10/2023	< 0.025	0 00071 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000031	< 0.001	< 0.001	< 0.001	< 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	< 0.000030	< 0 0010	< 0.0010	< 0.0010	< 0.0010	< 0 0050	< 0.0010	< 0.0010
MW-10	MW10-ROX-102022	10/20/2022	< 0.025	0 00050 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0 001 UJ	< 0.001	< 0 001	< 0.001	< 0.000031	< 0.001	< 0.001	< 0.001	< 0 001	< 0.005	< 0.001	< 0.001
	MW10-ROX-011223	1/12/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000029	< 0.001	< 0.001	< 0.001	< 0 001	< 0.005	< 0.001	< 0.001
	MW10-ROX-040623	4/6/2023	< 0.025	0 00073 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000029	< 0.001	< 0.001	< 0.001	< 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	< 0.000029	< 0 0010	< 0.0010	< 0.0010	< 0.0010	< 0 0050	< 0.0010	< 0.0010
MW-11	MW11-ROX-102022	10/20/2022	< 0.025	0 00049 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0 001 UJ	< 0.001	< 0.001	< 0.001	< 0.000029	< 0.001	< 0.001	< 0.001	< 0 001	< 0.005	< 0.001	< 0.001
	MW11-ROX-011223	1/12/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.000030	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	MW11-ROX-040623	4/6/2023	< 0.025	0 00033 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.000030	< 0.001	< 0.001	< 0.001	< 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 UJ	< 0.0010	< 0.000029	< 0 0010	< 0.0010	< 0.0010	< 0.0010	< 0 0050	< 0.0010	< 0.0010
MW-12	MW12-ROX-102622	10/26/2022	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.000030	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	MW12-ROX-102622-PAH	10/26/2022	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW12-ROX-010623	1/6/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000029	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	MW12-ROX-040723	4/7/2023	< 0.025	0.0020	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000029	< 0.001	< 0.001	< 0.001	< 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 UJ	< 0.0010	< 0.000028	< 0 0010	< 0.0010	< 0.0010	< 0.0010	< 0 0050	< 0.0010	< 0.0010
MW-13	MW13-ROX-102422	10/24/2022	< 0.025	0 00030 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000030	< 0.001	< 0.001	< 0.001	0.0010	< 0.005	< 0.001	< 0.001
	MW13-ROX-010923	1/9/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000029	< 0.001	< 0.001	< 0.001	0.00074 J	< 0.005	< 0.001	< 0.001
	MW13-ROX-041323	4/13/2023	< 0.025	0 00091 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000031	< 0.001	< 0.001	< 0.001	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	< 0.000029	< 0 0010	< 0.0010	< 0.0010	0.0011	< 0 0050	< 0.0010	< 0.0010
MW-14	MW14-ROX-102422	10/24/2022	< 0.025	0 00054 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000031	< 0.001	< 0.001	< 0.001	< 0 001	< 0.005	< 0.001	< 0.001
	MW14-ROX-102422-DUP	10/24/2022	< 0.025	0 00054 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000031	< 0.001	< 0.001	< 0.001	< 0 001	< 0.005	< 0.001	< 0.001
	MW14-ROX-010923	1/9/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000029	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	MW14-ROX-010923-DUP	1/9/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000030	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	MW14-ROX-041223	4/12/2023	0.011 J	0 00052 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000029	< 0.001	< 0.001	< 0.001	< 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	< 0.000029	< 0 0010	< 0.0010	< 0.0010	< 0.0010	< 0 0050	< 0.0010	< 0.0010
MW-16	MW16-ROX-102522	10/25/2022	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000033	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	MW16-ROX-010523	1/5/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000030	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	MW16-ROX-041023	4/10/2023	< 0.025	0 00023 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000030	< 0.001	< 0.001	< 0.001	< 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	< 0.000029	< 0 0010	< 0.0010	< 0.0010	< 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	Chloroform	Chloromethane	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene (Cumene)	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]	**0.07** [1]			**0.0002** [1]	**0.07** [1]	**0.7** [1]	**0.7** [1]	**0.7** [1]	**0.07** [1]	**0.14** [1]	**0.7** [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-22	MW22-ROX-102822	10/28/2022	< 0.025	0.0056	< 0.001	0.0039 J	0 0043	0 0023	0.0045	< 0 001 UJ	< 0.001	< 0 001	0 0029	< 0.000033	< 0 001	0.09	0.02	< 0.001	0 046	0.037	0.0099
	MW22-ROX-011023	1/10/2023	0.029 J	0.0085	< 0.002	0.0086 J	0 0041	0 0022	0.0044	< 0.002	< 0.002	< 0 002	0 0035	0.000041 *+ J	< 0 002	0 085	0.021	< 0.002	0 041	0.042	0.011
	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	< 0.002	< 0 002	0 0020	< 0.000030	< 0 002	0 082	0.02	< 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 UJ	< 0.0020	< 0.000030	< 0.0020	0 031	0.013	< 0.0020	0 043	0.023	0.0093
MW-23	MW23-ROX-102622	10/26/2022	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	0.00042 J	< 0.005	< 0.001	< 0.001
	MW23-ROX-011023	1/10/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000029	< 0 001	< 0.001	< 0.001	0.00032 J	< 0.005	< 0.001	< 0.001
	MW23-ROX-041223	4/12/2023	< 0.025	0 00032 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000031	< 0 001	< 0.001	< 0.001	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 000031	0 00023 J	< 0 0010	< 0.0010	0.00090 J	< 0 0050	< 0.0010	< 0.0010
MW-24	MW24-ROX-102022	10/20/2022	< 0.025	0 00055 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	MW24-ROX-102022-PAH	10/20/2022	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW24-ROX-011223	1/12/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	MW24-ROX-011223-PAH	1/12/2023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW24-ROX-041323	4/13/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000029	< 0 001	< 0.001	< 0.001	< 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 000029	< 0.0010	< 0 0010	< 0.0010	< 0.0010	< 0 0050	< 0.0010	< 0.0010
MW-25	MW25-ROX-103122	10/31/2022	< 0.025	0 02	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	0.00069 J	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	0.00078 J	< 0.005	< 0.001	< 0.001
	MW25-ROX-010923	1/9/2023	< 0.025	0.024	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	0.00071 J	< 0.005	< 0.001	< 0.001
	MW25-ROX-040723	4/7/2023	< 0.025	0 04	< 0.001	0.0036 J	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	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 UJ	< 0.0010	< 0 000029	< 0 0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0010	< 0.0010
MW-26	MW26-ROX-102822	10/28/2022	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	MW26-ROX-010623	1/6/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000029	< 0 001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	MW26-ROX-041023	4/10/2023	< 0.025	0 00027 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000029	< 0 001	< 0.001	< 0.001	< 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 000029	< 0 0010	< 0.0010	< 0.0010	< 0.0010	< 0 0050	< 0.0010	< 0.0010
MW-27	MW27-ROX-102622	10/26/2022	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000031	< 0 001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	MW27-ROX-010623	1/6/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	MW27-ROX-041023	4/10/2023	< 0.025	0 00060 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	< 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 000029	< 0 0010	< 0.0010	< 0.0010	< 0.0010	< 0 0050	< 0.0010	< 0.0010
MW-28	MW28-ROX-102522	10/25/2022	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000031	< 0 001	< 0.001	< 0.001	0.0014	< 0.005	< 0.001	< 0.001
	MW28-ROX-102522-DUP	10/25/2022	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000036	< 0 001	< 0.001	< 0.001	0.0014	< 0.005	< 0.001	< 0.001
	MW28-ROX-010523	1/5/2023	< 0.025	0 00038 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	0.0026	< 0.005	< 0.001	< 0.001
	MW28-ROX-041423	4/14/2023	< 0.025	0 00031 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000029	< 0 001	< 0.001	< 0.001	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 UJ	< 0.0010	< 0 000028	< 0 0010	< 0.0010	< 0.0010	0.0011	< 0 0050	< 0.0010	< 0.0010
P-54	P54-ROX-102722	10/27/2022	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	P54-ROX-010623	1/6/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000029	< 0 001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	P54-ROX-041223	4/12/2023	< 0.025	0 00036 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	< 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	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	< 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 UJ	< 0.0010	< 0 000029	< 0 0010	< 0.0010	< 0.0010	< 0.0010	< 0 0050	< 0.0010	< 0.0010
P-56	P56-ROX-110122	11/1/2022	< 0.025	0 00050 J	< 0.001	< 0.025	< 0.001	0 0011	< 0.001	< 0.001	0.0015	< 0 001	< 0.001	< 0 000031	< 0 001	< 0.001	0 0062	< 0.001	< 0.005	0 0071	0.00042 J
	P56-ROX-010923	1/9/2023	< 0.025	< 0 001	< 0.001	< 0.025	0.00089 J	0 0016	< 0.001	< 0.001	< 0.001	< 0 001	0.00087 J	< 0 000029	< 0 001	0.0012	0.012	< 0.001	< 0.005	0.014	0.00054 J
	P56-ROX-042023	4/20/2023	< 0.025	0 00075 J	< 0.001	0.0047 J	0 0014	0 0019	< 0.001	< 0.001	< 0 001 UJ	< 0.001	0 0013	< 0 000029	< 0 001	0.0061	0.02	< 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 000030	< 0.0010	0.00083 J	0.016	< 0.0010	< 0 0050	0.019	0.0014

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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	Chloroform	Chloromethane	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene (Cumene)	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]	0.07 [1]			0.0002 [1]	0.07 [1]	0.7 [1]	0.7 [1]	0.7 [1]	0.07 [1]	0.14 [1]	0.7 [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
P-57	P57-ROX-102822	10/28/2022	0.02 J*+ J	0.054	< 0.001	< 0.025	0 0036	0 0058	0.0078	< 0.001	< 0.001	< 0 001	0.00076 J	< 0.000030	< 0 001	0.0014	0.031	< 0.001	0 012	0.035	0.0043
	P57-ROX-102822-PAH	10/28/2022	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	P57-ROX-011023	1/10/2023	0.01 J	0 05	< 0.001	0.0028 J	0 0023	0 0046	0.0054	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000030	< 0 001	0.00095 J	0.021	< 0.001	0.0082	0.023	0.0028
	P57-ROX-041923	4/19/2023	< 0.025	0 27	< 0.001	< 0.025	0.00088 J	0 0017	0.0021	< 0.001	< 0 001 UJ	< 0 001	< 0.001	< 0.000029	< 0 001	0.0012	0 0093	< 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	< 0.000029	< 0.0020	0.0028	0.032	< 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	< 0.000029	< 0 0020	0.0044	0.038	< 0.0020	0 041	0.05	0.0057
P-58	P58-ROX-041923	4/19/2023	< 25	150	< 1	< 25	< 1	< 1	< 1	< 1	< 1 UJ	< 1	< 1	< 0.000030	< 1	< 1	< 1	< 1	< 5	< 1	< 1
	P58-ROX-071823	7/18/2023	< 25	220	< 1	< 25	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.000029	< 1	< 1	< 1	< 1	< 5	< 1	< 1
	P58-ROX-071823-DUP	7/18/2023	< 25	250	< 1	< 25	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.000029	< 1	< 1	< 1	< 1	< 5	< 1	< 1
P-59	P59-ROX-110422	11/4/2022	0.14 J	2.2	< 0.01	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 000030	< 0.01	0.17	0.044	< 0 01	0 096	0.077	0.11
	P59-ROX-011123	1/11/2023	< 0.5	2.5	< 0.02	< 0.5	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0 000029	< 0.02	0.16	0.045	< 0 02	0.12	0.073	0.1
	P59-ROX-011123-DUP	1/11/2023	< 0.5	2.7	< 0.02	< 0.5	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0 000030	< 0.02	0.17	0.049	< 0 02	0.13	0.076	0.11
	P59-ROX-011123-DUP-PAH	1/11/2023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	P59-ROX-042023	4/20/2023	< 0 25	1.4	< 0.01	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 UJ	< 0.01	< 0.01	< 0 000030	< 0.01	0 084	0.028	< 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 0010	< 0.0010	< 0.0050	< 0 000030	< 0.0050	0 038	0.017	< 0.0050	0 029	0.023	0.043
P-74	P74-ROX-102822	10/28/2022	< 0.025	0.029 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	0.00077 J	< 0.005	< 0.001	0.00050 J
	P74-ROX-102822-DUP	10/28/2022	< 0.025	0.022 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0 001 UJ	< 0.001	0.0010	< 0.001	< 0.000029	< 0 001	< 0.001	< 0.001	0.00091 J	< 0.005	< 0.001	< 0.001
	P74-ROX-011023	1/10/2023	< 0.025	0.0013	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000030	< 0.001	< 0.001	< 0.001	< 0 001	< 0.005	< 0.001	< 0.001
	P74-ROX-041723	4/17/2023	0.022 J	0.012	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001 UJ	< 0.001	< 0.001	< 0.000029	< 0 001	< 0.001	< 0.001	< 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 UJ	< 0.0010	< 0.000029	< 0 0010	0.0019	< 0.0010	0.0036	< 0 0050	< 0.0010	0.0040
P-93A	P93A-ROX-110122	11/1/2022	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.000031	< 0 001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	P93A-ROX-010523	1/5/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.000030	< 0 001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	P93A-ROX-010523-PAH	1/5/2023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	P93A-ROX-041923	4/19/2023	< 0.025	0 00093 J	< 0.001	< 0.025	< 0.001	< 0.001	0.00085 J	< 0.001	< 0 001 UJ	< 0 001	< 0.001	< 0.000030	< 0 001	< 0.001	< 0.001	< 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 000028	< 0.0010	< 0 0010	< 0.0010	< 0.0010	< 0 0050	< 0.0010	< 0.0010
P-93B	P93B-ROX-110422	11/4/2022	< 50 UJ	790	< 2 UJ	< 50 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 0.000031	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 10 UJ	< 2 UJ	< 2 UJ
	P93B-ROX-011123	1/11/2023	< 25 UJ	1400	< 1 UJ	< 25 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 0.000029	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 5 UJ	< 1 UJ	< 1 UJ
	P93B-ROX-042023	4/20/2023	< 50	400	< 2	< 50	< 2	< 2	< 2	< 2	< 2 UJ	< 2	< 2	< 0.000031	< 2	< 2	< 2	< 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 UJ	< 1 UJ	< 1 UJ	< 0.000030	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 5 UJ	< 1 UJ	< 1 UJ
P-93C	P93C-ROX-110122	11/1/2022	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000031	< 0 001	< 0.001	< 0.001	0.0016	< 0.005	< 0.001	< 0.001
	P93C-ROX-010523	1/5/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000030	< 0.001	< 0.001	< 0.001	0.0019	< 0.005	< 0.001	< 0.001
	P93C-ROX-041923	4/19/2023	< 0.025	0.071	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001 UJ	< 0.001	< 0.001	< 0.000030	< 0 001	< 0.001	< 0.001	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	< 0.000029	< 0 0010	< 0.0010	< 0.0010	0.0028	< 0 0050	< 0.0010	< 0.0010
P-93D	P93D-ROX-110322	11/3/2022	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.0011	< 0.001	< 0.000030	< 0 001	< 0.001	< 0.001	0.00073 J	< 0.005	< 0.001	< 0.001
	P93D-ROX-010523	1/5/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.000032	< 0.001	< 0.001	< 0.001	0.00061 J	< 0.005	< 0.001	< 0.001
	P93D-ROX-010523-PAH	1/5/2023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	P93D-ROX-042123	4/21/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	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 UJ	< 0.0010	< 0 000028	< 0.0010	< 0 0010	< 0.0010	0.00072 J	< 0 0050	< 0.0010	< 0.0010

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			VOCs																		
			Acetone	Benzene	Bromodichloromethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chloroform	Chloromethane	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene (Cumene)	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]	0.07 [1]			0.0002 [1]	0.07 [1]	0.7 [1]	0.7 [1]	0.7 [1]	0.07 [1]	0.14 [1]	0.7 [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
P-114R	P114R-ROX-102422	10/24/2022	< 0.025	0 00047 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000031	< 0 001	< 0.001	< 0.001	0.00098 J	< 0.005	< 0.001	< 0.001
	P114R-ROX-010623	1/6/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	0.0014	< 0.005	< 0.001	< 0.001
	P114R-ROX-010623-PAH	1/6/2023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	P114R-ROX-041323	4/13/2023	< 0.025	0 00031 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	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 000029	< 0.0010	< 0 0010	< 0.0010	0.0018	< 0 0050	< 0.0010	< 0.0010
ROST-3-MW	ROST3MW-ROX-102722	10/27/2022	0.023 J	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	ROST3MW-ROX-010523	1/5/2023	< 0.025	< 0 001	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001
	ROST3MW-ROX-041123	4/11/2023	< 0.025	0 00056 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001 UJ	< 0.001	< 0 000030	< 0 001	< 0.001	< 0.001	< 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 000030	< 0 0010	< 0.0010	< 0.0010	< 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 000030	< 0 0010	< 0.0010	< 0.0010	< 0.0010	< 0 0050	< 0.0010	< 0.0010
ROST-4-PZ(C)	ROST4PZ(C)-ROX-102822	10/28/2022	< 0.025	0.0025	< 0.001	0.0041 J	< 0.001	< 0.001	< 0.001	< 0 001 UJ	< 0.001	< 0 001	0.00079 J	< 0.000030	< 0 001	0.0022	0 0050	< 0.001	0 048	0 0086	0.0030
	ROST4PZ(C)-ROX-011323	1/13/2023	< 0.025	< 0 001	< 0.001	0.0028 J	< 0.001	< 0.001	< 0.001	0.00090 J	< 0.001	< 0 001	< 0.001	< 0.000029	< 0 001	< 0.001	0.00094 J	< 0.001	< 0.005	0 0020	< 0.001
	ROST4PZ(C)-ROX-041723	4/17/2023	< 0.025	0.0010	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001 UJ	< 0.001	< 0.001	< 0.000030	< 0 001	< 0.001	< 0.001	< 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 UJ	< 0.0010	< 0.000028	< 0 0010	0.0020	0 0030	< 0.0010	0 035	0 0056	0.0064
ROST-4-PZ(E)	ROST4PZ(E)-ROX-102822	10/28/2022	< 0.025	0.014	< 0.001	0.076	0 0020	0.00077 J	< 0.001	< 0 001 UJ	< 0.001	< 0 001	0 0015	< 0.000030	< 0 001	0.09	0 0045	< 0.001	0.11	0 0067	0.0089
	ROST4PZ(E)-ROX-102822-DUP	10/28/2022	< 0.025	0.014	< 0.001	0.08	0 0017	< 0.001	< 0.001	< 0 001 UJ	< 0.001	< 0 001	0 0014	< 0.000030	< 0 001	0 098	0 0046	< 0.001	0.12	0 0070	0.0093
	ROST4PZ(E)-ROX-011023	1/10/2023	0.085	0.0043	< 0.001	0.038	0 0016	0.00082 J	< 0.001	< 0.001	< 0.001	< 0 001	0.00075 J	< 0.000029	< 0 001	0 033	0 0052	< 0.001	0 063	0 0048	0.0037
	ROST4PZ(E)-ROX-041823	4/18/2023	< 0.025	0.0016	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000029	< 0 001	0.0091	0 0024	< 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	< 0.001	< 0 001	< 0.001	< 0.000029	< 0 001	0.01	0 0026	< 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 UJ	< 0.0010	< 0.000029	< 0 0010	0.0046	0.00089 J	< 0.0010	0.0058	< 0.0010	< 0.0010
ROST-4-PZ(G)	ROST4PZ(G)-ROX-102722	10/27/2022	< 0.025	0 00047 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000032	< 0 001	< 0.001	< 0.001	< 0 001	< 0.005	< 0.001	< 0.001
	ROST4PZ(G)-ROX-102722-PAH	10/27/2022	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	ROST4PZ(G)-ROX-010623	1/6/2023	0.55	0 00032 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000030	< 0 001	< 0.001	< 0.001	< 0 001	< 0.005	< 0.001	< 0.001
	ROST4PZ(G)-ROX-041423	4/14/2023	< 0.025	0 00041 J	< 0.001	< 0.025	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0 001	< 0.001	< 0.000030	< 0 001	< 0.001	< 0.001	< 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	< 0.000030	< 0 0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0010	< 0.0010
T-12	T12-ROX-110122	11/1/2022	< 0.13	2.2	< 0.005	< 0.13	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0 005	< 0.005	< 0.000032	< 0.005	0 011	0 0050	< 0.005	0.02 J	0 0075	0.044
	T12-ROX-011123	1/11/2023	< 0 25	2.1	< 0.01	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.01	< 0.000029	< 0 01	0 026	0.0069 J	< 0 01	0.07	0.0090 J	0.053
	T12-ROX-011123-DUP	1/11/2023	< 0 25	2.1	< 0.01	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.01	< 0.000029	< 0 01	0 025	0.0068 J	< 0 01	0 058	0.0088 J	0.053
	T12-ROX-042023	4/20/2023	< 0 25	1.2	< 0.01	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 UJ	< 0.01	< 0.01	< 0.000029	< 0 01	0 012	< 0.01	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	< 0.000030	< 0 01	0 011	0.0077 J	< 0 01	< 0.05	0.0092 J	0.031

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)acridine
Screening Values (mg/L)			1.0 [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]	
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-01	MW1-ROX-102022	10/20/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	< 0.00019	0.000081 J	< 0.00019 U	< 0 00019 U	< 0.00019 U	< 0.00019	< 0.00019 U	< 0 029 UJ	< 0.0095	< 0.0095	< 0.00019 U	< 0 0095
	MW1-ROX-011323	1/13/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00021	< 0.00021	< 0.00021	0.00014 J	0.00016 J	0.00029	0.00026	0.00017 J	< 0.031	< 0 01	< 0.01	0 00023	< 0.01
	MW1-ROX-011323-PAH	1/13/2023	--	--	--	--	--	--	--	--	--	< 0.0002 H UJ	< 0 0002 H UJ	< 0.0002 H UJ	< 0.0002 H UJ	< 0.0002 H UJ	--	--	--	< 0.0002 H UJ	--
	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	< 0.01
	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 0099
MW-02	MW2-ROX-102822	10/28/2022	< 0 001	0 018	0.026	0.04	0 0037 J	0.044	< 0 00096	< 0.00096	< 0.00019	< 0.00019 U	< 0.00019	0 00014 J	< 0.00019 UJ	0.00016 J	< 0.029	< 0.0096	< 0 0096	0.000081 J	< 0 0096
	MW2-ROX-011323	1/13/2023	< 0 001	0.0057	0.011	0.015	0 0017 J	0.016	< 0 00021	< 0.00021	< 0.00021	< 0 00021	< 0.00021	< 0.00021	< 0.00021	< 0 00021 UJ	< 0.032	< 0.011	< 0.011	< 0.00021	< 0.011
	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 0098
	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	< 0.01
MW-03	MW3-ROX-102522	10/25/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	< 0.00019	< 0.00019	< 0.00019 U	< 0 00019 U	< 0.00019 U	< 0.00019	< 0.00019 U	< 0.028	< 0.0093	< 0 0093	< 0.00019	< 0 0093
	MW3-ROX-011123	1/11/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.000066 J	< 0.00020	< 0.00020	< 0.03	< 0 01	< 0.01	< 0.00020	< 0.01
	MW3-ROX-011123-PAH	1/11/2023	--	--	--	--	--	--	--	--	--	--	--	< 0.00020 H UJ	--	--	--	--	--	--	--
	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 0097
	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 0096
	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	< 0.01
MW-04	MW4-ROX-103122	10/31/2022	< 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	< 0.028	< 0.0094	< 0 0094	< 0.00019	< 0 0094
	MW4-ROX-010923	1/9/2023	< 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	< 0.01
	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	< 0.02
	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	< 0.01
MW-05	MW5-ROX-102722	10/27/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0.00038 UJ	< 0.00038 UJ	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	< 0.0093 H UJ	< 0.0094	< 0.00019	< 0 0094
	MW5-ROX-011023	1/10/2023	< 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	0 034	< 0 01	< 0.01	< 0.00020	< 0.01
	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 0097
	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	< 0.01
MW-06A	MW6A-ROX-102122	10/21/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00018	0.00039	0.00017 J J	0.0034 B	0.0028 B	0.0051 B	0.0016	0.0019 B	< 0.028	< 0.0092	< 0 0092	0.0041 B	< 0 0092
	MW6A-ROX-102122-PAH	10/21/2022	--	--	--	--	--	--	< 0.00032 H UJ	< 0.00032 H UJ	< 0.00032 H UJ	< 0.00032 H UJ	0.00018 J H J	< 0.00032 H UJ	< 0.00032 H UJ	< 0.00032 H UJ	--	--	--	0.00014 J H J	--
	MW6A-ROX-011123	1/11/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 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	< 0.01
	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	< 0.0098 UJ
	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	< 0.0099 UJ
	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	< 0.01
MW-06B	MW6B-ROX-102122	10/21/2022	< 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	< 0 028 UJ	< 0.0091 H UJ	< 0.0093	< 0.00019 U	< 0 0093
	MW6B-ROX-011123	1/11/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00021	0.000062 J J	< 0.00021	0.00017 J	< 0.00021	0.00028	< 0.00021	0 00025	< 0.032	< 0.011	< 0.011	0.00016 J	< 0.011
	MW6B-ROX-011123-PAH	1/11/2023	--	--	--	--	--	--	--	< 0.00021 H UJ	--	0.00015 J H J	--	0.000096 J H J	--	< 0.00021 H UJ	--	--	--	0.00011 J H J	--
	MW6B-ROX-011123-DUP	1/11/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	0.000036 J	< 0.00021	< 0.00021	< 0.031	< 0 01	< 0.01	< 0.00021	< 0.01
	MW6B-ROX-011123-DUP-PAH	1/11/2023	--	--	--	--	--	--	--	--	--	--	--	< 0.00021 H UJ	--	--	--	--	--	--	--
	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	< 0.0099 UJ
	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	< 0.01
	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	< 0.01
MW-06C	MW6C-ROX-102122	10/21/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	< 0.00019	< 0.00019	< 0.00019 U	< 0.00019	< 0.00019 U	< 0.00019	< 0.00019	< 0.028	0 0059 J	< 0 0093	< 0.00019 U	< 0 0093
	MW6C-ROX-011123	1/11/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.000044 J	< 0.00020	< 0.00020	< 0.03	< 0 01	< 0.01	< 0.00020	< 0.01
	MW6C-ROX-011123-PAH	1/11/2023	--	--	--	--	--	--	--	--	--	--	--	< 0.0002 H UJ	--	--	--	--	--	--	--
	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	< 0.01 UJ
	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	< 0.01
MW-06D	MW6D-ROX-102122	10/21/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	0.00013 J	0.00017 J J	0.0043 B	0.0028 B	0.0045 B	0.0015	0.0023 B	< 0.028	0 0047 J	< 0 0093	0.0056 B	< 0 0093
	MW6D-ROX-102122-PAH	10/21/2022	--	--	--	--	--	--	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	0.000094 J H J	< 0.00019 H UJ	< 0.00019 H UJ	0 000093 J H J	--	--	--	< 0.00019 H UJ	--
	MW6D-ROX-011123	1/11/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00021	0.000054 J J	< 0.00021	< 0 00021	< 0.00021	0.000050 J	< 0.00021	< 0.00021	< 0.031	< 0 01	< 0.01	< 0.00021	< 0.01
	MW6D-ROX-011123-PAH	1/11/2023	--	--	--	--	--	--	--	< 0 00021 H UJ	--	--	--	< 0.00021 H UJ	--	--	--	--	--	--	--
	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	< 0.0097 UJ
	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 0098

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)acridine
Screening Values (mg/L)			1.0 [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]	
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-07	MW7-ROX-103122	10/31/2022	< 0.5	< 0.5	< 0.5	< 2 5	< 2.5	< 5	< 0 00018	< 0.00018	< 0.00018	< 0 00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	0.026 J	< 0.0092	< 0 0092	< 0.00018	< 0 0092
	MW7-ROX-103122-DUP	10/31/2022	< 0.5	< 0.5	< 0.5	< 2 5	< 2.5	< 5	< 0 00018	< 0.00018	< 0.00018	< 0 00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.028	< 0.0092	< 0 0092	< 0.00018	< 0 0092
	MW7-ROX-010923	1/9/2023	< 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 01	< 0.01	< 0.00020	< 0.01
	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	< 0.01
	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	< 0.01
	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	< 0.011
	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 0099
MW-08	MW8-ROX-103122	10/31/2022	< 0.25	< 0.25	< 0.25	0.74 J	0.26 J	0.99 J	< 0 00019	< 0.00019	< 0.00019	< 0 00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	< 0.0093	< 0.0093	< 0.00019	< 0 0093
	MW8-ROX-010923	1/9/2023	< 1 UJ	< 1 UJ	< 1 UJ	< 5 UJ	< 5 UJ	< 10 UJ	< 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 0097
	MW8-ROX-010923-DUP	1/9/2023	< 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	< 0.01
MW-09	MW9-ROX-102722	10/27/2022	< 0 001	< 0.005 H UJ	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	< 0.00019	< 0.00019 U	< 0 00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	0 0060 J	< 0 0094	< 0.00019	< 0 0094
	MW9-ROX-010523	1/5/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 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	< 0.01
	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 0097
	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	< 0.01
MW-10	MW10-ROX-102022	10/20/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	< 0.00019	0.000034 J	< 0.00025 U	< 0 00019 U	< 0.00021 U	< 0.00019	< 0.00021 U	< 0.028	< 0.0093	< 0.0093	< 0.00020 U	< 0 0093
	MW10-ROX-011223	1/12/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 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	< 0.01
	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	< 0.01
	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 0098
MW-11	MW11-ROX-102022	10/20/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	< 0.00019	< 0.00019	< 0.00019 U	< 0.00019	< 0.00019 U	< 0.00019	< 0.00019 U	< 0.029	< 0.0096	< 0 0096	< 0.00019 U	< 0 0096
	MW11-ROX-011223	1/12/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 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	< 0.01
	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 0098
	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 0099
MW-12	MW12-ROX-102622	10/26/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	< 0.00019	0.000068 J	< 0.00019 U	0.00026	0.00022	0.00020	0 00025	< 0.028	< 0.0093	< 0 0093	0.000072 J	< 0 0093
	MW12-ROX-102622-PAH	10/26/2022	--	--	--	--	--	--	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	--	--	--	< 0.00019 H UJ	--
	MW12-ROX-010623	1/6/2023	< 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 0095
	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 0098
	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	< 0.01
MW-13	MW13-ROX-102422	10/24/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	< 0.00019	< 0.00019	< 0.00019 U	< 0 00022 U	< 0.00019 U	0.00013 J	< 0.00022 U	< 0.028	< 0.0094	< 0 0094	0.00014 J	< 0 0094
	MW13-ROX-010923	1/9/2023	< 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 0096
	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 0099
	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 0099
MW-14	MW14-ROX-102422	10/24/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00018	< 0.00018	0.000036 J	< 0.00018 U	< 0 00027 U	< 0.00023 U	0.00015 J	< 0.00033 U	< 0.028	< 0.0092	< 0 0092	0.00012 J	< 0 0092
	MW14-ROX-102422-DUP	10/24/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	< 0.00019	0.000034 J	< 0.00019 U	< 0 00020 U	< 0.00019 U	< 0.00019	< 0.00021 U	< 0.028	< 0.0093	< 0 0093	0.000080 J	< 0 0093
	MW14-ROX-010923	1/9/2023	< 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	< 0.028	< 0.0095	< 0 0095	< 0.00019	< 0 0095
	MW14-ROX-010923-DUP	1/9/2023	< 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 00023	< 0 0097
	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	< 0.0097 UJ
	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	< 0 011 UJ
MW-16	MW16-ROX-102522	10/25/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019 U	< 0.00019	< 0.00019 U	< 0.028	< 0.0094	< 0 0094	< 0.00019	< 0 0094
	MW16-ROX-010523	1/5/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 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	< 0.011
	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 0098
	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 0099

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)acridine
Screening Values (mg/L)			1.0 [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]	
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-22	MW22-ROX-102822	10/28/2022	< 0 001	0.2	0.049	0.27	0.01	0 28	< 0 00019	< 0.00019	< 0.00019	< 0.00019 UJ	0.00013 J	0 00010 J	< 0.00019 UJ	0.00013 J	< 0.028	< 0.0094	< 0 0094	< 0.00019	< 0 0094
	MW22-ROX-011023	1/10/2023	< 0 002	0.21	0.047	0.24	0 0097 J	0 25	< 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 0097
	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 0098
	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	< 0.01
MW-23	MW23-ROX-102622	10/26/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	< 0.00019	0.000059 J	< 0.00019 U	0.00015 J	0 00011 J	< 0.00019	0.00015 J	< 0.028	< 0.0093	< 0 0093	< 0.00019	< 0 0093
	MW23-ROX-011023	1/10/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00021	0.00010 J	< 0.00021	< 0 00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.031	< 0 01	< 0.01	< 0.00021	< 0.01
	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	< 0.01
	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 0099
MW-24	MW24-ROX-102022	10/20/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00018	< 0.00018	0.00012 J	0 00094 B	0.00061 B	0.00067 B	0.00030	< 0.00059 U	< 0.028	< 0.0092	< 0 0092	0 00098 B	< 0 0092
	MW24-ROX-102022-PAH	10/20/2022	--	--	--	--	--	--	< 0.00019 H UJ	< 0.00019 H UJ	0.000062 J H J	< 0.00019 H UJ	0.00012 J H J	< 0.00019 H UJ	< 0.00019 H UJ	0.00012 J H J	--	--	--	0.000072 J H J	--
	MW24-ROX-011223	1/12/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	0 00013 J	< 0.00021	< 0.00021	< 0.032	< 0.011	< 0.011	< 0.00021	< 0.011
	MW24-ROX-011223-PAH	1/12/2023	--	--	--	--	--	--	--	--	--	--	--	0.000086 J H J	--	--	--	--	--	--	--
	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 0095
	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 0098
MW-25	MW25-ROX-103122	10/31/2022	< 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	< 0.028	< 0.0093	< 0 0093	< 0.00019	< 0 0093
	MW25-ROX-010923	1/9/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 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	< 0.01
	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	< 0.01
	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	< 0.01
MW-26	MW26-ROX-102822	10/28/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	< 0.00019	< 0.00019	< 0.00019 U	< 0.00019	0 00011 J	< 0.00019 UJ	< 0.00019	< 0.028	< 0.0094	< 0 0094	< 0.00019	< 0 0094
	MW26-ROX-010623	1/6/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020 UJ	< 0.00020	< 0.00020	< 0.031	< 0 01	< 0.01	< 0.00020	< 0.01
	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 0097
	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 0097
MW-27	MW27-ROX-102622	10/26/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00018	< 0.00018	0.000033 J	< 0.00018 U	0.00017 J	0 00012 J	< 0.00018	0.00014 J	< 0.028	< 0.0092	< 0 0092	< 0.00018	< 0 0092
	MW27-ROX-010623	1/6/2023	< 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	< 0.0099	< 0 0099	< 0.00020	< 0 0099
	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 0098
	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	< 0.01
MW-28	MW28-ROX-102522	10/25/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	< 0.00019	< 0.00019	< 0.00019 U	< 0 00019 U	< 0.00023 U	0.00014 J	< 0.00028 U	< 0.028	< 0.0094	< 0 0094	0.00015 J	< 0 0094
	MW28-ROX-102522-DUP	10/25/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	< 0.00019	< 0.00019	< 0.00019 U	< 0 00019 U	< 0.00025 U	0.00016 J	< 0.00035 U	< 0.028	< 0.0094	< 0 0094	0.00015 J	< 0 0094
	MW28-ROX-010523	1/5/2023	< 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 0098
	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 0098
	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 0097
P-54	P54-ROX-102722	10/27/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	< 0.00019	< 0.00019	< 0 00019 UJ	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	0 0046 J	< 0 0093	< 0.00019	< 0 0093
	P54-ROX-010623	1/6/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.000056 JB	< 0.00020	< 0.00020	< 0.031	< 0 01	< 0.01	< 0.00020	< 0.01
	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	< 0.0099 UJ
	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	< 0.0097 UJ
	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	< 0.01
P-56	P56-ROX-110122	11/1/2022	< 0 001	< 0.001	< 0.001	0.0018 J	< 0.005	0.0018 J	0.00046	0.00014 J	< 0.00020	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.031	0 0051 J	< 0.01	< 0.00020	< 0.01
	P56-ROX-010923	1/9/2023	< 0 001	0.0070	0 0028	0.015	< 0.005	0.015	0.00084	< 0.00019	< 0.00019	< 0 00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0097	< 0.0097	< 0.00019	< 0 0097
	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	< 0.01
	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	< 0.01

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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)acridine
Screening Values (mg/L)			1.0 [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]	
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
P-57	P57-ROX-102822	10/28/2022	< 0 001	< 0.001	< 0.001	0.0014 J	< 0.005	0.0018 J	0.00033 J	< 0.00093	< 0.00019	< 0.00020 U	0.00023	0.00025	< 0.00093	0 00026	< 0.028	0.0054 J H J	< 0 0093	0 00021	< 0 0093
	P57-ROX-102822-PAH	10/28/2022	--	--	--	--	--	--	0.00035 J H J	< 0.00038 H UJ	< 0.00038 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	0.00011 J H J	--	--	--	< 0.00019 H UJ	--
	P57-ROX-011023	1/10/2023	< 0 001	< 0.001	< 0.001	0.00092 J	< 0.005	< 0.01	0.00047	< 0.00019	< 0.00019	< 0 00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0095	< 0.0095	< 0.00019	< 0 0095
	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 0099
	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	< 0.011
	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 0099
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 0098
	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	< 0.01
	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 0098
P-59	P59-ROX-110422	11/4/2022	< 0.01	0 069	0.038	0.16	< 0 05	0.16	0.00039	< 0.00019	< 0.00019	< 0 00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	< 0.0094	< 0.0093	< 0.00019	< 0 0093
	P59-ROX-011123	1/11/2023	< 0.02	0 051	0.039	0.15	< 0.1	0.16 J	0.00044	< 0.00019	< 0.00019	< 0 00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0097	< 0.0097	< 0.00019	< 0 0097
	P59-ROX-011123-DUP	1/11/2023	< 0.02	0 058	0.04	0.17	< 0.1	0.17 J	< 0 00019	< 0.00019	< 0.00019	< 0 00019	< 0.00019	0.000075 J	< 0.00019	< 0.00019	< 0 029 UJ	< 0.0096 UJ	< 0.0096	0.000092 J	< 0.0096 UJ
	P59-ROX-011123-DUP-PAH	1/11/2023	--	--	--	--	--	--	--	--	--	--	--	< 0.00038 H UJ	--	--	--	--	--	< 0.00038 H UJ	--
	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	< 0.02
	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	< 0.01
P-74	P74-ROX-102822	10/28/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00038 UJ	< 0.00038 UJ	0.000030 J	< 0.00019 U	0.00014 J	0 00011 J	< 0.00019 U	0.00015 J	< 0.028	< 0.0094	< 0.0094	< 0.00019	< 0 0094
	P74-ROX-102822-DUP	10/28/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	< 0.00019	< 0.00019	< 0 00019 U	< 0.00019	< 0.00019	< 0 00019 U	< 0.00019	< 0.028	< 0.0095 H UJ	< 0.0094	< 0.00019	< 0 0094
	P74-ROX-011023	1/10/2023	< 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	< 0.0096	< 0 0096	< 0.00019	< 0 0096
	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 0098
	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	< 0.01
P-93A	P93A-ROX-110122	11/1/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00020	< 0.00020	< 0.00020	< 0.00020	0.00019 J	0 00016 J	< 0.00020	0.00011 J	< 0.031	0.0055 J H J	< 0.01	< 0.00020	< 0.01
	P93A-ROX-010523	1/5/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	0.00029	< 0.00019	< 0.00019	< 0.029	< 0.0096	< 0 0096	< 0.00019	< 0 0096
	P93A-ROX-010523-PAH	1/5/2023	--	--	--	--	--	--	--	--	--	--	--	< 0.00019 H UJ	--	--	--	--	--	--	--
	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 0099
	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	< 0.01
P-93B	P93B-ROX-110422	11/4/2022	< 2 UJ	< 2 UJ	< 2 UJ	< 10 UJ	< 10 UJ	< 20 UJ	< 0 00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	0 0049 J	< 0 0093	< 0.00019	< 0 0093
	P93B-ROX-011123	1/11/2023	< 1 UJ	< 1 UJ	< 1 UJ	< 5 UJ	< 5 UJ	< 10 UJ	< 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 0096
	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 0099
	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	< 0.01
P-93C	P93C-ROX-110122	11/1/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00020	< 0.00020	< 0.00020	< 0.00020	< 0 00020 U	0.00028	< 0.00020	0 00030	< 0.031	< 0 01	< 0.01	< 0.00020	< 0.01
	P93C-ROX-010523	1/5/2023	< 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 0097
	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	< 0.01
	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	< 0.01
P-93D	P93D-ROX-110322	11/3/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	0 00012 J	< 0.00018	< 0.00018	< 0.028	0 0051 J	< 0 0092	< 0.00018	< 0 0092
	P93D-ROX-010523	1/5/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	< 0.00019	< 0.00019	0.00022	< 0.00019	0.00033	< 0.00019	0 00026	< 0.028	< 0.0094	< 0 0094	0 00021	< 0 0094
	P93D-ROX-010523-PAH	1/5/2023	--	--	--	--	--	--	--	--	--	< 0.00019 H UJ	--	< 0.00019 H UJ	--	< 0.00019 H UJ	--	--	--	< 0.00019 H UJ	--
	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 0099
	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	< 0.01

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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)acridine
Screening Values (mg/L)			1.0 [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]	
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
P-114R	P114R-ROX-102422	10/24/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	0.00043	< 0.00019	< 0.00019	< 0.00021 U	< 0 00027 U	< 0.00026 U	0.00018 J	< 0.00027 U	< 0.028	0 0050 J	< 0 0094	0 00023	< 0 0094
	P114R-ROX-010623	1/6/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	0 00013 JB	< 0.00019	< 0.00019	< 0.029	< 0.0097	< 0 0097	< 0.00019	< 0 0097
	P114R-ROX-010623-PAH	1/6/2023	--	--	--	--	--	--	--	--	--	--	--	< 0.00019 H UJ	--	--	--	--	--	--	--
	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 0098
	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 0099
ROST-3-MW	ROST3MW-ROX-102722	10/27/2022	< 0 001	< 0.001	< 0.001	0.00071 J	< 0.005	< 0.01	< 0 00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	< 0.0093	< 0.0093	< 0.00019	< 0 0093
	ROST3MW-ROX-010523	1/5/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 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	< 0.01
	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	< 0.0098 UJ
	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	< 0.01
	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	< 0.01
ROST-4-PZ(C)	ROST4PZ(C)-ROX-102822	10/28/2022	< 0 001	0 011	0 0025	0.023	0 0015 J	0.025	< 0 00093	0.00033 J	0.00047	< 0.00019 U	< 0.00019	< 0.00019	< 0.00019 UJ	< 0.00019	< 0.028	< 0.0093	< 0.0093	< 0.00019	< 0 0093
	ROST4PZ(C)-ROX-011323	1/13/2023	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	0.00080	< 0.00021	0.00038	< 0 00021	< 0.00021	< 0.00021	< 0.00021	< 0 00021 UJ	< 0.031	< 0 01	< 0.01	< 0.00021	< 0.01
	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 0096
	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	< 0.01
ROST-4-PZ(E)	ROST4PZ(E)-ROX-102822	10/28/2022	< 0 001	0.13	0.013	0.21	0.026	0 24	0 0030	0.00056 J	< 0.00019	< 0.00019 U	< 0.00019	< 0.00019 U	< 0.00019 UJ	< 0.00019	< 0 028 UJ	< 0.0094	< 0.0094	0.00010 J	< 0 0094
	ROST4PZ(E)-ROX-102822-DUP	10/28/2022	< 0 001	0.13	0.013	0.22	0.027	0 24	0 0030	0.00048 J	< 0.00019	< 0.00019 U	< 0.00019	< 0.00019	< 0.00019 UJ	< 0.00019	< 0.028	< 0.0093	< 0.0093	0.000090 J	< 0 0093
	ROST4PZ(E)-ROX-011023	1/10/2023	< 0 001	0.12	0 0066	0.097	0.014	0.11	0 0040	0.00064	0.0017	0.00015 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	< 0.0095	< 0.0095	0.00015 J	< 0 0095
	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 0098
	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 0097
	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 0099
ROST-4-PZ(G)	ROST4PZ(G)-ROX-102722	10/27/2022	< 0 001	< 0.001	< 0.001	< 0.005	< 0.005	< 0.01	< 0 00019	< 0.00019	0.000075 J	< 0 00019	0.00044	0.00038	< 0.00019	0 00038	< 0.028	< 0.0094	< 0 0094	0.00016 J	< 0 0094
	ROST4PZ(G)-ROX-102722-PAH	10/27/2022	--	--	--	--	--	--	< 0.00019 H UJ	< 0.00019 H UJ	0.000067 J H J	< 0.00037 H UJ	< 0 00037 H UJ	< 0.00037 H UJ	< 0.00037 H UJ	< 0.00037 H UJ	--	--	--	< 0.00037 H UJ	--
	ROST4PZ(G)-ROX-010623	1/6/2023	< 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 0097
	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 0098
	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	< 0.01
T-12	T12-ROX-110122	11/1/2022	< 0 005	0.0059	0.011	0.059	0 0051 J	0.064	0.00027	< 0.00020	< 0.00020	< 0 00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	0 0055 J	< 0.01	< 0.00020	< 0.01
	T12-ROX-011123	1/11/2023	< 0.01	0 019	0.022	0.11	0 0079 J	0.12	0.00032	< 0.00019	< 0.00019	< 0 00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0 029 UJ	< 0.0095	< 0.0095	< 0.00019	< 0 0095
	T12-ROX-011123-DUP	1/11/2023	< 0.01	0 018	0.022	0.11	0 0076 J	0.12	0.00026	0.00011 J J	< 0.00019	< 0 00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0095	< 0.0095	< 0.00019	< 0 0095
	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	< 0.01
	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	< 0.01

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs																	
			Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Hexachlorobenzene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	3&4-Methylphenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)			0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]		0.7 [1]	0.14 [2]	0.28 [1]	0.28 [1]	0.00006 [2]		0.00043 [1]	0.49 [3]	0.028 [1]	0.14 [3]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-01	MW1-ROX-102022	10/20/2022	< 0.00019	< 0.0095	< 0.0095	< 0.0095	< 0.0095	0.0033 J	< 0.0095	< 0.00019 U	< 0.00019	< 0.0095	< 0.0095	0.000057 J	< 0.00019	< 0.00019	< 0 019	< 0.00019 U	< 0.0095	< 0.00019 U	< 0.0095
	MW1-ROX-011323	1/13/2023	0.00018 J	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	0.00023	< 0.00021	< 0 01	< 0.01	0.00025	< 0.00021	< 0.00021	< 0 021	0.000080 J	< 0.01	0.00014 J	< 0.01
	MW1-ROX-011323-PAH	1/13/2023	< 0.0002 H UJ	--	--	--	--	--	--	< 0.0002 H UJ	--	--	--	< 0.0002 H UJ	--	--	--	< 0.0002 H UJ	--	< 0.0002 H UJ	--
	MW1-ROX-040623	4/6/2023	< 0.00020	< 0 01	< 0.01 U	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0 00020	< 0.01
	MW1-ROX-071023	7/10/2023	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0 099	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0099	< 0.00020 UJ	< 0.0099
MW-02	MW2-ROX-102822	10/28/2022	0 000085 J	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0 0096	< 0.0096	< 0.00096	< 0.00096	< 0.0096	< 0.0096	0.000087 J	0 0096	0.017	< 0 019	0.000076 J	< 0.0096	0 000083 J	< 0.0096
	MW2-ROX-011323	1/13/2023	< 0.00021	< 0.011	0.00060 J	< 0 011	< 0.011	< 0.011	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.011	< 0.00021	0 0091	0.013	< 0 021	0.000039 J	< 0.011	< 0 00021	< 0 011
	MW2-ROX-041823	4/18/2023	< 0.00020	< 0.0098	< 0.0098 U	< 0.0098	< 0.0098	< 0 0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	0 0095	0.026	< 0.02	< 0.00020	< 0.0098	< 0 00020	< 0.0098
	MW2-ROX-071823	7/18/2023	< 0.00020	< 0 01	0.00062 J	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	0 0090	0.017	< 0.02	< 0.00020	< 0.01	< 0 00020	< 0.01
MW-03	MW3-ROX-102522	10/25/2022	< 0 00019 U	< 0.0093	< 0.0093	< 0.0093	< 0.0093	< 0 093	< 0.0093	< 0.00019	< 0.00019	< 0.0093	< 0.0093	< 0.00019 U	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0093	< 0.00019 U	< 0.0093
	MW3-ROX-011123	1/11/2023	< 0.00020	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0 00020	< 0.01
	MW3-ROX-011123-PAH	1/11/2023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW3-ROX-041723	4/17/2023	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0 097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0097	< 0 00019	< 0.0097
	MW3-ROX-041723-DUP	4/17/2023	< 0.00019	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0 096	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.0096	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0096	< 0 00019	< 0.0096
	MW3-ROX-071023	7/10/2023	< 0.00020	< 0 01	0.00065 J	< 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	< 0.00020	< 0.01	< 0.00020 UJ	< 0.01
MW-04	MW4-ROX-103122	10/31/2022	< 0.00019	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0 094	< 0.0094	< 0.00019	< 0.00019	< 0.0094	< 0.0094	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0094	< 0 00019	< 0.0094
	MW4-ROX-010923	1/9/2023	< 0.00020	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0 00020	< 0.01
	MW4-ROX-040723	4/7/2023	< 0.00039 UJ	< 0 02	< 0.02 U	< 0.02	< 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	< 0 039	< 0.00039 UJ	< 0.02	< 0.00039 UJ	< 0.02
	MW4-ROX-071323	7/13/2023	< 0.00021	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.0010	< 0.00021	< 0.00021	< 0 01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.02	< 0.00021	< 0.01	< 0.00021 UJ	< 0.01
MW-05	MW5-ROX-102722	10/27/2022	< 0.00019	< 0.0094	0.00046 J	< 0.0094	0.00035 J	0.0026 J	< 0.0094	< 0.00019	< 0.00038 UJ	< 0.0094	< 0.0094	0.000042 J	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0094	< 0 00019	< 0.0094
	MW5-ROX-011023	1/10/2023	< 0.00020	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	0.0037 J F1 J	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0 00020	< 0.01
	MW5-ROX-041423	4/14/2023	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0 0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0097	< 0 00019	< 0.0097
	MW5-ROX-071723	7/17/2023	< 0.00021	< 0 01	0.00027 J	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00021	< 0.00021	< 0 01	< 0.01	< 0.00021	0.00017 J	0.00026	< 0 019	< 0.00021	< 0.01	< 0 00021	< 0 01 UJ
MW-06A	MW6A-ROX-102122	10/21/2022	< 0.00018	< 0.0092	< 0.0092	< 0.0092	< 0.0092	< 0 0092	< 0.0092	0.0012 B	< 0.00018	< 0.0092	< 0.0092	0 0015	< 0.00018	< 0.00018	< 0 018	< 0.00025 U	< 0.0092	0 0010 B	< 0.0092
	MW6A-ROX-102122-PAH	10/21/2022	< 0 00032 H UJ	--	--	--	--	--	--	< 0.00032 H UJ	< 0.00032 H UJ	--	--	< 0.00032 H UJ	< 0.00032 H UJ	< 0.00032 H UJ	--	< 0.00032 H UJ	--	< 0 00032 H UJ	--
	MW6A-ROX-011123	1/11/2023	< 0.00021	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00021	< 0.00021	< 0 01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0 021	< 0.00021	< 0.01	< 0 00021	< 0.01
	MW6A-ROX-041123	4/11/2023	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0 0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0098	< 0 00020	< 0.0098
	MW6A-ROX-041123-DUP	4/11/2023	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0 0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0099	< 0 00020	< 0.0099
	MW6A-ROX-071123	7/11/2023	< 0 00020 H UJ	< 0 01	< 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	< 0.02	< 0.00020	< 0.01	< 0.00020 UJ	< 0.01
MW-06B	MW6B-ROX-102122	10/21/2022	< 0.00019	< 0.0093	0.0013 JB	< 0.0093 UJ	< 0.0093	< 0 0093	< 0.0093	< 0.00019	< 0.00019	< 0.0093	< 0.0093	< 0.00019	< 0.00019	< 0.00019	< 0.019 UJ	< 0.00019	< 0.0093 UJ	< 0.00019 U	< 0.0093
	MW6B-ROX-011123	1/11/2023	0.00011 J	< 0.011	< 0.011	< 0 011	< 0.011	< 0 011	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.011	< 0.00021	< 0.00021	< 0.00021	< 0 021	< 0.00021	< 0.011	0.00017 J	< 0 011
	MW6B-ROX-011123-PAH	1/11/2023	0.000092 J H J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0001 J H J	--
	MW6B-ROX-011123-DUP	1/11/2023	< 0.00021	< 0 01	< 0.01	< 0.01	< 0.01	< 0 01	< 0 01	< 0.00021	< 0.00021	< 0 01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0 021	< 0.00021	< 0.01	< 0 00021	< 0.01
	MW6B-ROX-011123-DUP-PAH	1/11/2023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW6B-ROX-041123	4/11/2023	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0 0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0099	< 0 00020	< 0.0099
	MW6B-ROX-071123	7/11/2023	< 0.00021	< 0 01	< 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	< 0.02	< 0.00021	< 0.01	< 0.00021 UJ	< 0.01
	MW6B-ROX-071123-DUP	7/11/2023	< 0.00021	< 0 01	< 0.01	< 0.01	< 0.01	< 0 01	< 0 01	< 0.00021	< 0.00021	< 0 01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.02	< 0.00021	< 0.01	< 0.00021 UJ	< 0.01
MW-06C	MW6C-ROX-102122	10/21/2022	< 0.00019	< 0.0093	< 0.0093	< 0.0093	< 0.0093	< 0 0093	< 0.0093	< 0.00019 U	< 0.00019	< 0.0093	< 0.0093	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019 U	< 0.0093	< 0.00019 U	< 0.0093
	MW6C-ROX-011123	1/11/2023	< 0.00020	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0 00020	< 0.01
	MW6C-ROX-011123-PAH	1/11/2023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW6C-ROX-041123	4/11/2023	< 0.00020	< 0 01	< 0.01 U	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0 00020	< 0.01
	MW6C-ROX-071123	7/11/2023	< 0.00020	< 0 01	< 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	< 0.02	< 0.00020	< 0.01	< 0.00020 UJ	< 0.01
MW-06D	MW6D-ROX-102122	10/21/2022	0.00034	< 0.0093	< 0.0093	< 0.0093	< 0.0093	< 0 0093	< 0.0093	0.0029 B	< 0.00019	< 0.0093	< 0.0093	0 0015	< 0.00019	< 0.00019	< 0 019	< 0.00025 U	< 0.0093	0 0029 B	< 0.0093
	MW6D-ROX-102122-PAH	10/21/2022	< 0 00019 H UJ	--	--	--	--	--	--	< 0.00019 H UJ	< 0.00019 H UJ	--	--	< 0.00019 H UJ	< 0.00019 H UJ	0 0001 J H J	--	< 0.00019 H UJ	--	< 0 00019 H UJ	--
	MW6D-ROX-011123	1/11/2023	< 0.00021	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00021	< 0.00021	< 0 01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0 021	< 0.00021	< 0.01	< 0 00021	< 0.01
	MW6D-ROX-011123-PAH	1/11/2023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW6D-ROX-041123	4/11/2023	< 0.00019	< 0.0097	< 0.0097 U	< 0.0097	< 0.0097	< 0 0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0097	< 0 00019	< 0.0097
	MW6D-ROX-071223	7/12/2023	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0 0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0 019	< 0.00020	< 0.0098	< 0.00020 UJ	< 0.0098

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs																	
			Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Hexachlorobenzene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	3&4-Methylphenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)			**0.0003** [1]	**0.007** [3]	**5.6** [1]	**0.14** [2]		**0.7** [1]	**0.14** [2]	**0.28** [1]	**0.28** [1]	**0.00006** [2]		**0.00043** [1]	**0.49** [3]	**0.028** [1]	**0.14** [3]	**0.21** [3]	**0.1** [1]	**0.21** [1]	**0.007** [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-07	MW7-ROX-103122	10/31/2022	< 0.00018	< 0.0092	< 0.0092	< 0.0092	< 0.0092	< 0.0092	< 0.0092	< 0.00018	< 0.00018	< 0.0092	< 0.0092	< 0.00018	0.00098	0.0017	0 0014 J	< 0.00018	0.12	< 0 00018	< 0.0092
	MW7-ROX-103122-DUP	10/31/2022	< 0.00018	< 0.0092	0.00082 J	< 0.0092	< 0.0092	< 0.0092	< 0.0092	< 0.00018	< 0.00018	< 0.0092	< 0.0092	< 0.00018	0 0010	0.0017	0 0013 J	0.00012 J	0.11	< 0 00018	< 0.0092
	MW7-ROX-010923	1/9/2023	< 0.00020	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	0.00018 J	< 0.00020	< 0 01	< 0.01	< 0.00020	0 0011	0.0015	< 0.02	0.00012 J	0.034	< 0.0002 U	< 0.01
	MW7-ROX-040723	4/7/2023	< 0.00020	< 0 01	0.00042 J	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	0.00097	0.0013 J	< 0.02	< 0.00020	0 082 J	< 0 00020	< 0.01
	MW7-ROX-040723-DUP	4/7/2023	< 0.00020	< 0 01	0.00073 J	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	0 0011	0.0018 J	0.00073 J	< 0.00020	0.13 J	< 0 00020	< 0.01
	MW7-ROX-071323	7/13/2023	< 0.00021	< 0.011	0.00044 J	< 0 011	< 0.011	< 0.011	< 0 01	< 0.00021	< 0.00021	< 0 01	< 0.01	< 0.00021	0.00088	0.0013	< 0.02	0.00011 J	0.12 J	< 0.00021 UJ	< 0 011
	MW7-ROX-071323-DUP	7/13/2023	< 0.00020	< 0.0099	< 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	< 0.02	0.00011 J	0 084 J	< 0.00020 UJ	< 0.0099
MW-08	MW8-ROX-103122	10/31/2022	< 0.00019	< 0.0093	< 0.0093	< 0.0093	< 0.0093	< 0 0093	< 0.0093	0.000097 J	< 0.00019	< 0.0093	< 0.0093	< 0.00019	0.014	0.0061	< 0 019	< 0.00019	0.26	< 0 00019	< 0.0093
	MW8-ROX-010923	1/9/2023	< 0.00019	0.00042 J	< 0.0097	< 0.0097	< 0.0097	< 0 0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	0.011	0.0042	< 0 019	0.00018 J	0.27	< 0 00019	< 0.0097
	MW8-ROX-010923-DUP	1/9/2023	< 0.00020	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	0.0011 J	< 0.00020	0 0096	0.0037	< 0.02	0.00024	0.23	< 0 00020	< 0.01
MW-09	MW9-ROX-102722	10/27/2022	< 0.00019	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.00019	< 0.00019	< 0.0094	< 0.0094	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0094	< 0 00019	< 0.0094
	MW9-ROX-010523	1/5/2023	< 0.00021	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00021	< 0.00021	< 0 01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0 021	< 0.00021	< 0.01	< 0 00021	< 0.01 UJ
	MW9-ROX-041023	4/10/2023	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0 0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0097	< 0 00019	< 0.0097
	MW9-ROX-071823	7/18/2023	< 0.00020	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0 019	< 0.00020	< 0.01	< 0 00020	< 0.01
MW-10	MW10-ROX-102022	10/20/2022	< 0.00019	< 0.0093	< 0.0093	< 0.0093	< 0.0093	< 0 0093	< 0.0093	< 0.00032 U	< 0.00019	< 0.0093	< 0.0093	0.000044 J	< 0.00019	< 0.00019	< 0 019	< 0.00019 U	< 0.0093	< 0.00024 U	< 0.0093
	MW10-ROX-011223	1/12/2023	< 0.00021	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00021	< 0.00021	< 0 01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0 021	< 0.00021	< 0.01	< 0 00021	< 0.01
	MW10-ROX-040623	4/6/2023	< 0.00020	< 0 01	0.00033 J	< 0.01	< 0.01	< 0.01	0 0034 J	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0 00020	< 0.01
	MW10-ROX-071823	7/18/2023	< 0.00020	< 0.0098	0.00031 J	< 0.0098	< 0.0098	< 0 0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0098	< 0 00020	< 0.0098
MW-11	MW11-ROX-102022	10/20/2022	< 0.00019	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0 0096	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.0096	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019 U	< 0.0096	< 0.00019 U	0.0058 J
	MW11-ROX-011223	1/12/2023	< 0.00021	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00021	< 0.00021	< 0 01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0 021	< 0.00021	< 0.01	< 0 00021	< 0.01
	MW11-ROX-040623	4/6/2023	< 0.00020	< 0.0098	0.00044 J	< 0.0098	< 0.0098	< 0 0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0098	< 0 00020	< 0.0098
	MW11-ROX-071223	7/12/2023	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0 0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0099	< 0.00020 UJ	< 0.0099
MW-12	MW12-ROX-102622	10/26/2022	0.00018 J	< 0.0093	0.00057 J	< 0.0093	< 0.0093	< 0 0093	< 0.0093	0.000088 J J	< 0.00019 UJ	< 0.0093	< 0.0093	0.00017 J	< 0.00019	< 0.00019	< 0 019	0.000097 J	< 0.0093	0 000080 J	< 0.0093 UJ
	MW12-ROX-102622-PAH	10/26/2022	< 0 00019 H UJ	--	--	--	--	--	--	< 0.00019 H UJ	< 0.00019 H UJ	--	--	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	--	< 0.00019 H UJ	--	< 0 00019 H UJ	--
	MW12-ROX-010623	1/6/2023	< 0.00019	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0 0095	< 0.0095	< 0.00019	< 0.00019	< 0.0095	< 0.0095	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0095	< 0 00019	< 0.0095
	MW12-ROX-040723	4/7/2023	< 0.00020	< 0.0098	0.00064 J	< 0.0098 UJ	< 0.0098	< 0 0098	0 0027 J	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0 02 UJ	< 0.00020	< 0.0098 UJ	< 0 00020	< 0.0098
	MW12-ROX-071223	7/12/2023	< 0.00020	< 0 01	0.00078 J	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0.00020 UJ	< 0.01
MW-13	MW13-ROX-102422	10/24/2022	0.00013 J	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0 0094	< 0.0094	< 0.00019	< 0.00019	< 0.0094	< 0.0094	< 0.00019 U	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0094	< 0 00019	< 0.0094
	MW13-ROX-010923	1/9/2023	< 0.00019	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0 0096	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.0096	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0096	< 0 00019	< 0.0096
	MW13-ROX-041323	4/13/2023	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0 0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0099	< 0 00020	< 0.0099
	MW13-ROX-071423	7/14/2023	< 0.00020	< 0.0099	< 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	< 0.02	< 0.00020	< 0.0099 UJ	< 0 00020	< 0.0099 UJ
MW-14	MW14-ROX-102422	10/24/2022	0.00014 J	< 0.0092	< 0.0092	< 0.0092	< 0.0092	< 0 0092	< 0.0092	0.000063 J	< 0.00018	< 0.0092	< 0.0092	< 0.00018 U	< 0.00018	0.000074 J	< 0 018	< 0.00018 U	< 0.0092	< 0.00018 U	< 0.0092
	MW14-ROX-102422-DUP	10/24/2022	0 000078 J	< 0.0093	< 0.0093	< 0.0093	< 0.0093	< 0 0093	< 0.0093	< 0.00019	< 0.00019	< 0.0093	< 0.0093	< 0.00019 U	< 0.00019	< 0.00019	< 0 019	< 0.00019 U	< 0.0093	< 0.00019 U	< 0.0093
	MW14-ROX-010923	1/9/2023	< 0.00019	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0 0095	< 0.0095	< 0.00019	< 0.00019	< 0.0095	< 0.0095	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0095	< 0 00019	< 0.0095
	MW14-ROX-010923-DUP	1/9/2023	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0 0097	< 0.0097	0.00032	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0097	< 0.00033 U	< 0.0097
	MW14-ROX-041223	4/12/2023	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0 0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0097	< 0 00019	< 0.0097
	MW14-ROX-071723	7/17/2023	< 0.00022 UJ	< 0.011 UJ	< 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		< 0.00022 UJ		< 0.00022 UJ	< 0.0097 UJ
MW-16	MW16-ROX-102522	10/25/2022	< 0.00019	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0 0094	< 0.0094	< 0.00019	< 0.00019	< 0.0094	< 0.0094	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0094	< 0 00019	< 0.0094
	MW16-ROX-010523	1/5/2023	< 0.00021	< 0.011	< 0.011	< 0 011	< 0.011	< 0.011	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.011	< 0.00021	< 0.00021	0 00011 J	< 0 021	< 0.00021	< 0.011	< 0 00021	< 0.011 UJ
	MW16-ROX-041023	4/10/2023	< 0.00020	< 0.0098	0.00043 J	< 0.0098	< 0.0098	< 0 0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0098	< 0 00020	< 0.0098
	MW16-ROX-071123	7/11/2023	< 0.00020	< 0.0099	0.00061 J	< 0.0099	< 0.0099	< 0 0099	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0099	< 0.00020 UJ	< 0.01

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TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs																	
			Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Hexachlorobenzene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	3&4-Methylphenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)			**0.0003** [1]	**0.007** [3]	**5.6** [1]	**0.14** [2]		**0.7** [1]	**0.14** [2]	**0.28** [1]	**0.28** [1]	**0.00006** [2]		**0.00043** [1]	**0.49** [3]	**0.028** [1]	**0.14** [3]	**0.21** [3]	**0.1** [1]	**0.21** [1]	**0.007** [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-22	MW22-ROX-102822	10/28/2022	0.00010 J	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0 0094	< 0.0094	< 0.00019	< 0.00019 UJ	< 0.0094	< 0.0094	0.00010 J	0 0072	0.0082	< 0 019	0.000080 J	< 0.0094	0 000070 J	< 0.0094
	MW22-ROX-011023	1/10/2023	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0 0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	0 0067	0.0063	< 0 019	< 0.00019	< 0.0097	< 0 00019	< 0.0097
	MW22-ROX-041823	4/18/2023	< 0.00020	< 0.0098	0.00069 J	0 0043 J	< 0.0098	< 0 0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	0.01	0.011	< 0.02	< 0.00020	< 0.0098	< 0 00020	< 0.0098
	MW22-ROX-071323	7/13/2023	< 0.00020	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	0 0059	0.0073	< 0.02	< 0.00020	< 0.01	< 0 00020	< 0.01
MW-23	MW23-ROX-102622	10/26/2022	0.00013 J	< 0.0093	0.00057 J	< 0.0093	0.00052 J	< 0 0093	< 0.0093	0.000083 J	< 0.00019	< 0.0093	< 0.0093	0.00012 J	< 0.00019	0.000056 J	< 0 019	0.000056 J	< 0.0093	0 000062 J	< 0.0093
	MW23-ROX-011023	1/10/2023	< 0.00021	< 0 01	0.00093 J	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00021	< 0.00021	< 0 01	< 0.01	< 0.00021	< 0.00021	0 00012 J	< 0 021	< 0.00021	< 0.01	< 0 00021	< 0.01
	MW23-ROX-041223	4/12/2023	< 0.00020	< 0 01	< 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	< 0.02	< 0.00020	< 0.01	< 0 00020	< 0.01
	MW23-ROX-071423	7/14/2023	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0 0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0099	< 0 00020	< 0.0099 UJ
MW-24	MW24-ROX-102022	10/20/2022	0 000052 J	< 0.0092	< 0.0092	< 0.0092	< 0.0092	< 0 0092	< 0.0092	0 00098 B	< 0.00018	< 0.0092	< 0.0092	0.00027	< 0.00018	< 0.00018	< 0 018	< 0.00028 U	< 0.0092	0.00076 B	< 0.0092
	MW24-ROX-102022-PAH	10/20/2022	< 0 00019 H UJ	--	--	--	--	--	--	< 0.00019 H UJ	< 0.00019 H UJ	--	--	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019 H UJ	--	< 0.00019 H UJ	--	< 0 00019 H UJ	--
	MW24-ROX-011223	1/12/2023	0 000063 J	< 0.011	< 0.011	< 0 011	< 0.011	< 0 011	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.011	0.000065 J	< 0.00021	< 0.00021	< 0 021	0.000066 J	< 0.011	< 0 00021	< 0 011
	MW24-ROX-011223-PAH	1/12/2023	--	--	--	--	--	--	--	--	--	--	--	0.00013 J H J	--	--	--	< 0.00021 H UJ	--	--	--
	MW24-ROX-041323	4/13/2023	< 0.00019	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0 0095	< 0.0095	< 0.00019	< 0.00019	< 0.0095	< 0.0095	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0095	< 0 00019	< 0.0095
	MW24-ROX-071023	7/10/2023	< 0.00020	< 0.0098	< 0.0098 U	< 0.0098	< 0.0098	< 0 0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0 019	< 0.00020	< 0.0098	< 0.00020 UJ	< 0.0098
MW-25	MW25-ROX-103122	10/31/2022	< 0.00019	< 0.0093	< 0.0093	< 0.0093	< 0.0093	< 0 0093	< 0.0093	< 0.00019	< 0.00019	< 0.0093	< 0.0093	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0093	< 0 00019	< 0.0093
	MW25-ROX-010923	1/9/2023	< 0.00021	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00021	< 0.00021	< 0 01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0 021	< 0.00021	< 0.01	< 0 00021 U	< 0.01
	MW25-ROX-040723	4/7/2023	< 0.00020	< 0 01	0.00062 J	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0 00020	< 0.01
	MW25-ROX-071323	7/13/2023	< 0.00021	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00021	< 0.00021	< 0 01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.02	< 0.00021	< 0.01	< 0 00021 UJ	< 0.01
MW-26	MW26-ROX-102822	10/28/2022	0 000059 J	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0 0094	< 0.0094	< 0.00019	< 0.00019 UJ	< 0.0094	< 0.0094	0.000048 J	< 0.00019	0.000066 J	< 0 019	0.000044 J	< 0.0094	0 000046 J	< 0.0094
	MW26-ROX-010623	1/6/2023	< 0.00020	< 0 01	0.00067 J	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0 00020	< 0.01
	MW26-ROX-041023	4/10/2023	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0 0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0097	< 0 00019	< 0.0097
	MW26-ROX-071023	7/10/2023	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0 0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0097	< 0.00019 UJ	< 0.0097
MW-27	MW27-ROX-102622	10/26/2022	0.00012 J	< 0.0092	0.00060 J	< 0.0092	0.00045 J	< 0 0092	< 0.0092	< 0.00018	< 0.00018 UJ	< 0.0092	< 0.0092	0.00014 J	< 0.00018	< 0.00018	< 0 018	0.000044 J	< 0.0092	0 000039 J	< 0.0092 UJ
	MW27-ROX-010623	1/6/2023	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0 0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0099	< 0 00020	< 0.0099
	MW27-ROX-041023	4/10/2023	< 0.00020	< 0.0098	0.00031 J	< 0.0098	< 0.0098	< 0 0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0098	< 0 00020	< 0.0098
	MW27-ROX-071823	7/18/2023	< 0.00021	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00021	< 0.00021	< 0 01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.02	< 0.00021	< 0.01	< 0 00021	< 0.01
MW-28	MW28-ROX-102522	10/25/2022	0.00015 J	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0 0094	< 0.0094	< 0.00019	< 0.00019	< 0.0094	< 0.0094	< 0.00019 U	< 0.00019	0.000069 J	< 0 019	< 0.00019	< 0.0094	< 0 00019	< 0.0094
	MW28-ROX-102522-DUP	10/25/2022	0.00013 J	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0 0094	< 0.0094	< 0.00019	< 0.00019	< 0.0094	< 0.0094	< 0.00019 U	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0094	< 0.00019 U	< 0.0094
	MW28-ROX-010523	1/5/2023	< 0.00020	< 0.0098	0.0010 J	< 0.0098	< 0.0098	< 0 0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0098	< 0 00020	< 0.0098 UJ
	MW28-ROX-041423	4/14/2023	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0 0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0098	< 0 00020	< 0.0098
	MW28-ROX-071223	7/12/2023	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0 0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.02	< 0.00019	< 0.0097	< 0.00019 UJ	< 0.0097
P-54	P54-ROX-102722	10/27/2022	< 0.00019	< 0.0093	0.00032 J	< 0.0093	< 0.0093	< 0 0093	< 0.0093	< 0.00019	< 0.00019	< 0.0093	< 0.0093	< 0.00019	< 0.00019	< 0.00019	< 0 019	0.000039 J	< 0.0093	< 0 00019	< 0.0093
	P54-ROX-010623	1/6/2023	< 0.00020	< 0 01	0.00064 J	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0 00020	< 0.01
	P54-ROX-041223	4/12/2023	< 0.00020	< 0.0099	< 0.0099 U	< 0.0099	< 0.0099	< 0 0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0099	< 0 00020	< 0.0099
	P54-ROX-041223-DUP	4/12/2023	< 0.00019	< 0.0097	< 0.0097 U	< 0.0097	< 0.0097	< 0 0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0097	< 0 00019	< 0.0097
	P54-ROX-071223	7/12/2023	< 0.00020	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0 019	< 0.00020	< 0.01	< 0.00020 UJ	< 0.01
P-56	P56-ROX-110122	11/1/2022	< 0.00020	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	0.000091 J	0.00030	< 0 01	< 0.01	< 0.00020	0 0038	0.0020	< 0.02	0.00042	< 0.01	0 000064 J	< 0.01
	P56-ROX-010923	1/9/2023	< 0.00019	0.00066 J	< 0.0097	< 0.0097	< 0.0097	< 0 0097	< 0.0097	< 0.00019	0.00039	< 0.0097	< 0.0097	< 0.00019	0.012	0.012	< 0 019	0.0011	< 0.0097	< 0 00019 U	< 0.0097
	P56-ROX-042023	4/20/2023	< 0.00020	0.00047 J	< 0.01 U	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	0.00052	< 0 01	< 0.01	< 0.00020	0.019	0.018	< 0.02	0.0011	< 0.01	< 0 00020	< 0.01
	P56-ROX-071023	7/10/2023	< 0.00020	0.00049 J	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	0.00022	< 0 01	< 0.01	< 0.00020	0 0088	0.0074	< 0.02	0.00063	< 0.01	< 0.00020 UJ	< 0.01

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs																	
			Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Hexachlorobenzene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	3&4-Methylphenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)			**0.0003** [1]	**0.007** [3]	**5.6** [1]	**0.14** [2]		**0.7** [1]	**0.14** [2]	**0.28** [1]	**0.28** [1]	**0.00006** [2]		**0.00043** [1]	**0.49** [3]	**0.028** [1]	**0.14** [3]	**0.21** [3]	**0.1** [1]	**0.21** [1]	**0.007** [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
P-57	P57-ROX-102822	10/28/2022	0.00014 J	< 0.0093	< 0.0093	< 0.0093	< 0.0093	< 0 093	< 0.0093	< 0.00093	< 0.00093 UJ	< 0.0093	< 0.0093	0.00014 J	0.022	0.029	< 0 019	0.00055	< 0.0093	0.00020	< 0.0093
	P57-ROX-102822-PAH	10/28/2022	< 0 00019 H UJ	--	--	--	--	--	--	< 0.00038 H UJ	0.0008 H J	--	--	< 0.00019 H UJ	0 025 H J	0.027 H J	--	0.00028 J H J	--	< 0 00019 H UJ	--
	P57-ROX-011023	1/10/2023	< 0.00019	0.00077 J	0.00091 J	< 0.0095	< 0.0095	< 0 0095	< 0.0095	< 0.00019	0.00069	< 0.0095	< 0.0095	< 0.00019	0.027	0.0079	< 0 019	0.00045	0.0071 J J	< 0 00019	< 0.0095
	P57-ROX-041923	4/19/2023	< 0.00020	0.00048 J	< 0.0099	< 0.0099	< 0.0099	< 0 0099	< 0.0099	< 0.00020	0.00071	< 0.0099	< 0.0099	< 0.00020	0.034	0.029	< 0.02	0.00045	0.0069 J	< 0 00020	< 0.0099
	P57-ROX-071323	7/13/2023	< 0.00022	< 0.011	< 0.011	< 0 011	< 0.011	< 0.011	< 0.011	< 0.00022	0.00033	< 0.011	< 0.011	< 0.00022	0.018	0.022	< 0.02	0.00030	0.0079 J	< 0 00022	< 0 011
	P57-ROX-071323-DUP	7/13/2023	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0 0099	< 0.0099	< 0.00020	0.00041	< 0.0099	< 0.0099	< 0.00020	0.022	0.026	< 0.02	0.00034	0.0072 J	< 0 00020	< 0.0099
P-58	P58-ROX-041923	4/19/2023	< 0.00020	0.0018 J	< 0.0098	< 0.0098	< 0.0098	< 0 0098	< 0.0098	< 0.00020	0.0019	< 0.0098	< 0.0098	< 0.00020	0.093	0.045	< 0.02	0.0018	0.72	0.00076	< 0.0098
	P58-ROX-071823	7/18/2023	< 0.00020	< 0 01	< 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	< 0.02	0.0012	0.51 J	0.00032	< 0.01
	P58-ROX-071823-DUP	7/18/2023	< 0.00020	< 0.0098	< 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	< 0.02	0.00080	0.25 J	0 000069 J	< 0.0098
P-59	P59-ROX-110422	11/4/2022	< 0.00019	< 0.0093	< 0.0093	< 0.0093	< 0.0093	< 0 0093	< 0.0093	0.00045	< 0.00019	< 0.0093	< 0.0093	< 0.00019	0.013	0.019	< 0 019	0.0011	0.024	< 0 00019	< 0.0093
	P59-ROX-011123	1/11/2023	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0 0097	< 0.0097	< 0.00019	0 00036 J	< 0.0097	< 0.0097	< 0.00019	0.012 J	0.015 J	0 0012 J	0.00092 J	0 035 J	0.00037 J	< 0.0097
	P59-ROX-011123-DUP	1/11/2023	< 0.00019	< 0.0096 UJ	< 0 0096 UJ	< 0.0096 UJ	< 0.0096	< 0.0096 UJ	< 0.0096 UJ	0.000089 J	< 0.00019	0.0036 J J	< 0 0096 UJ	< 0.00019	0.0039 J	0.0053 J	< 0.019 UJ	0.00037 J	0.0025 J J	0.00019 J	< 0.0096 UJ
	P59-ROX-011123-DUP-PAH	1/11/2023	--	--	--	--	--	--	--	0.00022 J H J	--	--	--	--	0 012 H J	0.016 H J	--	0 00076 H J	--	0.0004 H J	--
	P59-ROX-042023	4/20/2023	< 0.00099	< 0 02	< 0.02	< 0.02	< 0.02	< 0.02	< 0 02	< 0.00099	< 0.00099	< 0 02	< 0.02	< 0.00099	0 0099	0.014	< 0.04	< 0.00099	0 016 J	< 0 00099	< 0.02
	P59-ROX-071823	7/18/2023	< 0.00020	< 0 01	< 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	< 0.04	0.00059	< 0.01	0.00029	< 0.01
P-74	P74-ROX-102822	10/28/2022	0 000048 J	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0 0094	< 0.0094	< 0 00038 UJ	< 0.00038 UJ	< 0.0094	< 0.0094	< 0.00019	< 0.00019	< 0.00019	< 0 019	0.000052 J	< 0.0094	0 000055 J	< 0.0094
	P74-ROX-102822-DUP	10/28/2022	< 0.00019	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0 0094	< 0.0094	< 0.00019	< 0.00019 UJ	< 0.0094	< 0.0094	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0094	< 0 00019	< 0.0094
	P74-ROX-011023	1/10/2023	< 0.00019	< 0.0096	0.00031 J	< 0.0096	< 0.0096	< 0 0096	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.0096	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0096	0 000044 J	< 0.0096
	P74-ROX-041723	4/17/2023	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0 0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0098	< 0 00020	< 0.0098
	P74-ROX-071223	7/12/2023	< 0.00020	< 0 01	0.0010 J	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	0.00020	0 00017 J	< 0.02	< 0.00020	< 0.01	< 0.00020 UJ	< 0.01
P-93A	P93A-ROX-110122	11/1/2022	< 0.00020	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	< 0.00020	0.000098 J	< 0.02	< 0.00020	< 0.01	< 0 00020	< 0.01
	P93A-ROX-010523	1/5/2023	< 0.00019	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0 0096	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.0096	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0096	< 0 00019	< 0.0096 UJ
	P93A-ROX-010523-PAH	1/5/2023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	P93A-ROX-041923	4/19/2023	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0 0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0099	< 0 00020	< 0.0099
	P93A-ROX-071123	7/11/2023	< 0.00021	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00021	< 0.00021	< 0 01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.02	< 0.00021	< 0.01	< 0.00021 UJ	< 0.01
P-93B	P93B-ROX-110422	11/4/2022	< 0.00019	< 0.0093	< 0.0093	0 0044 J	< 0.0093	< 0 0093	< 0.0093	< 0.00019	< 0.00019	< 0.0093	< 0.0093	< 0.00019	0.00016 J	< 0.00019	0 0012 J	< 0.00019	0.31	< 0 00019	< 0.0093
	P93B-ROX-011123	1/11/2023	< 0.00019	< 0.0096	< 0.0096	0 0045 J	< 0.0096	< 0 0096	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.0096	< 0.00019	< 0.00019	< 0.00019	0 0014 J	< 0.00019	0.31	< 0 00019	< 0.0096
	P93B-ROX-042023	4/20/2023	< 0.00020	< 0.0099	< 0.0099 U	0 0036 J	< 0.0099	< 0 0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	0 0010 J	< 0.00020	0.38	< 0 00020	< 0.0099
	P93B-ROX-071823	7/18/2023	< 0.00020	< 0 01	< 0.01	0 0036 J	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	0.000085 J	0.000090 J	< 0.02	< 0.00020	0.24	< 0 00020	< 0.01
P-93C	P93C-ROX-110122	11/1/2022	0 000094 J	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020 U	< 0.00020	0.000082 J	< 0.02	< 0.00020	< 0.01	0 000064 J	< 0.01
	P93C-ROX-010523	1/5/2023	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0 0097	< 0.0097	0.00016 J	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0097	0 000072 J	< 0.0097 UJ
	P93C-ROX-041923	4/19/2023	< 0.00020	< 0 01	< 0.01	< 0.01	< 0 01 U	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0 00020	< 0.01
	P93C-ROX-071423	7/14/2023	< 0.00021	< 0 01	0.00029 J	< 0.01	< 0.01	< 0 01	< 0.01	< 0.00021	< 0.00021	< 0 01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.02	< 0.00021	< 0.01 UJ	< 0 00021	< 0 01 UJ
P-93D	P93D-ROX-110322	11/3/2022	< 0.00018	< 0.0092	0.00084 J	< 0.0092	< 0.0092	0.0026 J	< 0.0092	0.000092 J	< 0.00018	< 0.0092	< 0.0092	< 0.00018	< 0.00018	< 0.00018	< 0 019	< 0.00018	< 0.0092	0 000068 J	< 0.0092
	P93D-ROX-010523	1/5/2023	< 0.00019	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0 0094	< 0.0094	0.00018 J	< 0.00019	< 0.0094	< 0.0094	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0094	0.00015 J	< 0.0094 UJ
	P93D-ROX-010523-PAH	1/5/2023	< 0 00019 H UJ	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0 00019 H UJ	--
	P93D-ROX-042123	4/21/2023	< 0.00020	< 0.0099	< 0.0099 U	< 0.0099	< 0.0099	< 0 0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0099	< 0 00020	< 0.0099
	P93D-ROX-071123	7/11/2023	< 0.00020	< 0 01	< 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	< 0.02	< 0.00020	< 0.01	< 0.00020 UJ	< 0.01

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs																	
			Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Hexachlorobenzene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	3&4-Methylphenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)			0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]		0.7 [1]	0.14 [2]	0.28 [1]	0.28 [1]	0.00006 [2]		0.00043 [1]	0.49 [3]	0.028 [1]	0.14 [3]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
P-114R	P114R-ROX-102422	10/24/2022	0.00016 J	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0 0094	< 0.0094	0.00022	< 0.00019	< 0.0094	< 0.0094	< 0.00020 U	< 0.00019	< 0.00019	< 0 018	< 0.00019 U	< 0.0094	0.00022 B	< 0.0094
	P114R-ROX-010623	1/6/2023	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0 0097	< 0.0097	0.00016 J	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0 019	< 0.00019	< 0.0097	0.00018 J	< 0.0097
	P114R-ROX-010623-PAH	1/6/2023	--	--	--	--	--	--	--	< 0.00019 H UJ	--	--	--	--	--	--	--	--	--	< 0 00019 H UJ	--
	P114R-ROX-041323	4/13/2023	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0 0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0098	< 0 00020	< 0.0098
	P114R-ROX-071423	7/14/2023	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0 0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020		< 0.00020	< 0.0099 UJ	< 0 00020	< 0.0099 UJ
ROST-3-MW	ROST3MW-ROX-102722	10/27/2022	< 0.00019	< 0.0093	< 0.0093	< 0.0093	< 0.0093	< 0 0093	< 0.0093	< 0.00019	< 0.00019	< 0.0093	< 0.0093	< 0.00019	0.00020	< 0.00019	< 0 019	< 0.00019	< 0.0093	< 0 00019	< 0.0093 UJ
	ROST3MW-ROX-010523	1/5/2023	< 0.00021	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00021	< 0.00021	< 0 01	< 0.01	< 0.00021	0.00022	< 0.00021	< 0 021	< 0.00021	< 0.01	< 0 00021	< 0.01 UJ
	ROST3MW-ROX-041123	4/11/2023	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0 0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0098	< 0 00020	< 0.0098
	ROST3MW-ROX-071723	7/17/2023	< 0.00021	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00021	< 0.00021	< 0 01	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.02	< 0.00021	< 0.01	< 0 00021	< 0 01 UJ
	ROST3MW-ROX-071723-DUP	7/17/2023	< 0.00020	< 0 01	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0 00020	< 0 01 UJ
ROST-4-PZ(C)	ROST4PZ(C)-ROX-102822	10/28/2022	0 000065 J	0.00064 J	< 0.0093	< 0.0093	< 0.0093	< 0 0093	< 0.0093	< 0.00093	0.0013	< 0.0093	< 0.0093	0.000066 J	0.027	0.0084	< 0 019	0.0029	< 0.0093	0.00012 J	< 0.0093
	ROST4PZ(C)-ROX-011323	1/13/2023	< 0.00021	0.00041 J J	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	< 0.00021	0.00080	< 0 01	< 0.01	< 0.00021	0 0048	< 0.00021	< 0 021	0.0024	< 0.01	0 000092 J	< 0.01
	ROST4PZ(C)-ROX-041723	4/17/2023	< 0.00019	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0 0096	< 0.0096	< 0.00019	0.00065	< 0.0096	< 0.0096	< 0.00019	0 0017	< 0.00019	< 0 019	0.00069	< 0.0096	0.00025	< 0.0096
	ROST4PZC-ROX-071123	7/11/2023	< 0.00021	0.00060 J	< 0.01	< 0.01	< 0.01	< 0.01	< 0 01	0.00011 J	0.00059	< 0 01	< 0.01	< 0.00021	0.014	0.0016	< 0 019	0.0015	< 0.01	0.000070 J J	< 0.01
ROST-4-PZ(E)	ROST4PZ(E)-ROX-102822	10/28/2022	< 0.00019	0.0011 J	< 0.0094	< 0.0094 UJ	< 0.0094	< 0 0094	< 0.0094	< 0.00094	0.0021	< 0.0094	0.0017 J	0.000044 J	0.038 J	0.033 J	< 0.019 UJ	0.0044	< 0.0094 UJ	0.00029	< 0.0094
	ROST4PZ(E)-ROX-102822-DUP	10/28/2022	< 0.00019	0.0010 J	< 0.0093	< 0.0093	< 0.0093	< 0 0093	< 0.0093	< 0.00093	0.0020	< 0.0093	0.0021 J	< 0.00019	0.064 J	0.057 J	< 0 019	0.0047	< 0.0093	0.00035	< 0.0093
	ROST4PZ(E)-ROX-011023	1/10/2023	< 0.00019	0.0030 J	< 0.0095	< 0.0095	< 0.0095	< 0 0095	< 0.0095	0.00032	0.0027	< 0.0095	< 0.0095	< 0.00019	0.065	0.049	< 0 019	0.0085	< 0.0095	0.00070	< 0.0095
	ROST4PZ(E)-ROX-041823	4/18/2023	< 0.00020	0.0014 J	< 0.0098	< 0.0098	< 0.0098	< 0 0098	< 0.0098	0.00022	0.0017	< 0.0098	< 0.0098	< 0.00020	0.056	0.021	< 0.02	0.0047	< 0.0098	0.00042	< 0.0098
	ROST4PZ(E)-ROX-041823-DUP	4/18/2023	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0 0097	< 0.0097	< 0.00019	0.0014	< 0.0097	< 0.0097	< 0.00019	0.055	0 02	< 0 019	0.0039	< 0.0097	0.00029	< 0.0097
	ROST4PZ(E)-ROX-071223	7/12/2023	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0 0099	< 0.0099	0.00026	0.0011	< 0.0099	< 0.0099	< 0.00020	0.02	0.0041	< 0 019	0.0051	< 0.0099	0.00048	< 0.0099
ROST-4-PZ(G)	ROST4PZ(G)-ROX-102722	10/27/2022	0.00024	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0 0094	< 0.0094	0.00012 J	< 0.00019	< 0.0094	< 0.0094	0.00025	< 0.00019	< 0.00019	< 0 019	0.00012 J	< 0.0094	0.00012 J	< 0.0094
	ROST4PZ(G)-ROX-102722-PAH	10/27/2022	< 0 00037 H UJ	--	--	--	--	--	--	< 0.00019 H UJ	< 0.00019 H UJ	--	--	< 0.00037 H UJ	< 0.00019 H UJ	0.00012 J H J	--	< 0.00019 H UJ	--	< 0 00037 H UJ	--
	ROST4PZ(G)-ROX-010623	1/6/2023	< 0.00019	< 0.0097	0.00030 J	< 0.0097	< 0.0097	< 0 0097	0.0029 J J	< 0.00019	< 0.00019	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0 019	0.000037 J	< 0.0097	< 0 00019	< 0.0097
	ROST4PZ(G)-ROX-041423	4/14/2023	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0 0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.0098	< 0 00020	< 0.0098
	ROST4PZ(G)-ROX-071023	7/10/2023	< 0.00020	< 0 01	0.00029 J	< 0.01	< 0.01	< 0 01	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.00020	< 0.01	< 0.00020 UJ	< 0.01
T-12	T12-ROX-110122	11/1/2022	< 0.00020	< 0 01	< 0.01	< 0.01	< 0.01	0.0029 J	< 0 01	< 0.00020	< 0.00020	< 0 01	< 0.01	< 0.00020	0.013	0.016	< 0.02	0.00019 J	0.12	< 0 00020	< 0.01
	T12-ROX-011123	1/11/2023	< 0.00019	< 0.0095	< 0.0095	0.0039 J J	< 0.0095	< 0 0095	< 0.0095	< 0.00019	0 00037 J	< 0.0095	0.0054 J	< 0.00019	0.022	0.032	< 0.019 UJ	0.00045	0 023 J	< 0 00019	< 0.0095
	T12-ROX-011123-DUP	1/11/2023	< 0.00019	< 0.0095	< 0.0095	0 0042 J	< 0.0095	< 0 0095	< 0.0095	< 0.00019	0 00034 J	< 0.0095	< 0.0095	< 0.00019	0.022	0.031	0.00087 J	0.00048	0 056 J	0.000051 J J	< 0.0095
	T12-ROX-042023	4/20/2023	< 0.00020	< 0 01	< 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	< 0.02	0.00048	0.036	< 0 00020	< 0.01
	T12-ROX-071423	7/14/2023	< 0.00020	< 0 01	0.0011 J	< 0.01	< 0.01	< 0 01	< 0 01	< 0.00020	0.00023	< 0 01	< 0.01	< 0.00020	0.015	0.023	< 0.02	0.00042	0.05 J	< 0 00020	< 0 01 UJ

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.

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.

H = Analyzed or extracted out of holding time criteria.

F2 = Indicates MS/MSD RPD is outside acceptance limit.

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

*1 = LCS/LCSD RPD is outside contol limit

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

AECOM QUALIFIERS

J = The result is estimated.

UJ = Estimated non-detect.

U = Result is non-detect.

Figures

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

MVS Descriptions and Assumptions:

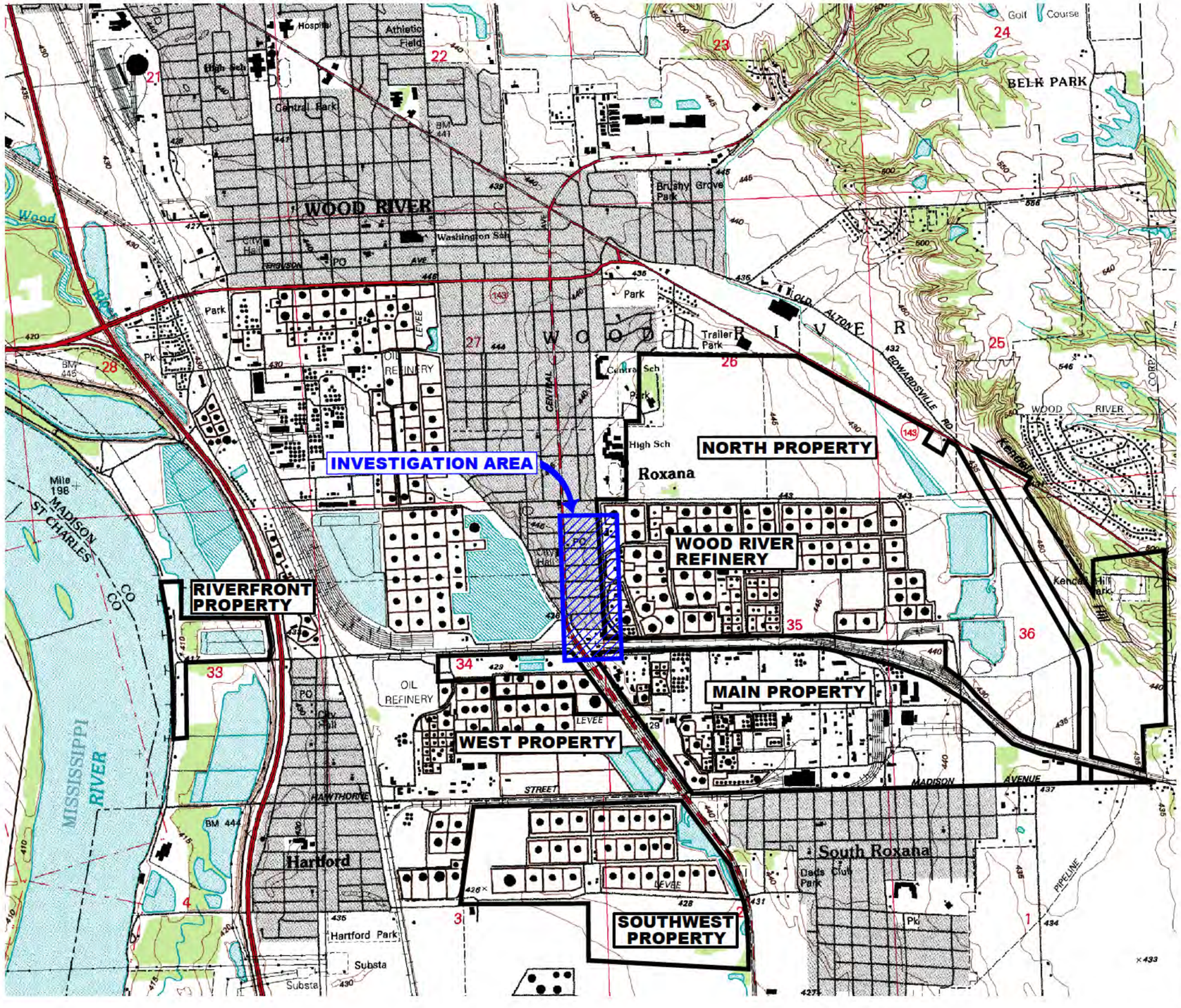
Plan View Model Output – The data input for the plan view model was not limited by depth and was modeled in two dimensions (2D). Regardless of sample depth, benzene concentrations were modeled on a flat horizontal plane.

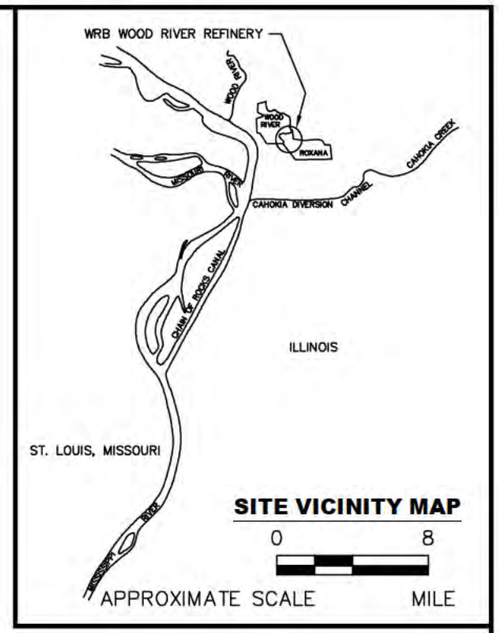
Inward Kriging / Boundary Cut-off – This method of Kriging limits the horizontal extent of data modeling to the extent of the data on the x/y plane in a convex hull.

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

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

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





LEGEND

- WOOD RIVER REFINERY PROPERTY BOUNDARY
- INVESTIGATION AREA

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

0 2000

APPROXIMATE SCALE FEET

N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60697537
AECOM	
DRN. BY:gds October 2023 DSGN. BY:mar CHKD. BY:wmp	Investigation Area Location Map
	FIG. NO. 1

File: C:\USERS\LORENTE.MEDINA\GDS (US SERVICES) - DS CAD PROJECTS\DGS AMERICAS\SHELL\ILLINOIS\US70066-WRG_IL_CENTRAL_AVE--ROXANA--IL\ROXANA 2023.DWG RPT\WORKSPACES\FIGURE 1 INVESTIGATION AREA LOCATION MAP.DWG Last edited: 07/05/23 @ 3:05 PM @ WCC-ST-LOUIS

File: C:\USERS\LORENTE\AECOM\GDS GIS SERVICES - GIS CAD PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USF00686-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 3Q23 GW RPT\WORKSPACE\FIGURE 2 GROUNDWATER MONITORING WELL SAMPLING LOCATIONS.DWG Last edited: Jul. 05, 23 @ 3:09 PM by: lorente

LEGEND

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

FIRST ST
SECOND ST
THIRD ST
FOURTH ST
FIFTH ST
SIXTH ST
SEVENTH ST
EIGHTH ST
HIGHWAY 111 (S. CENTRAL AVE)
CHAFFER AVE
1ST STREET
2ND STREET
RAND AVENUE
VILLAGE OF ROXANA
NORTH PROPERTY
MAIN PROPERTY
WEST 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
P-68 *
P-60-13
ROST-4-PZ(G) *
MW-11 *
P-54 *
MW-17
T-12 *
MW-24 *
MW-22 *
P-69
MW-18
A-27
P-70
P-74 *
MW-19
P-59 *
P-61
MW-16 *
GP-9-PZ
PZ-2(84)
PZ-2(70.5)
MW-12 *
MW-20
P-56 *
MW-2 *
MW-1 *
SEVENTH ST
MW-26 *
MW-21
T-6
P-57 *
MW-4 *
MW-3 *
P-93A *
P-93B *
P-93C *
P-93D *
MW-25 *
EIGHTH ST
MW-5 *
MW-7 *
MW-23 *
MW-8
P-58 *
MW-13 *
MW-6A *
MW-6B *
MW-6C *
MW-6D *
P-66 *
P-75
MW-14 *
P-114R *

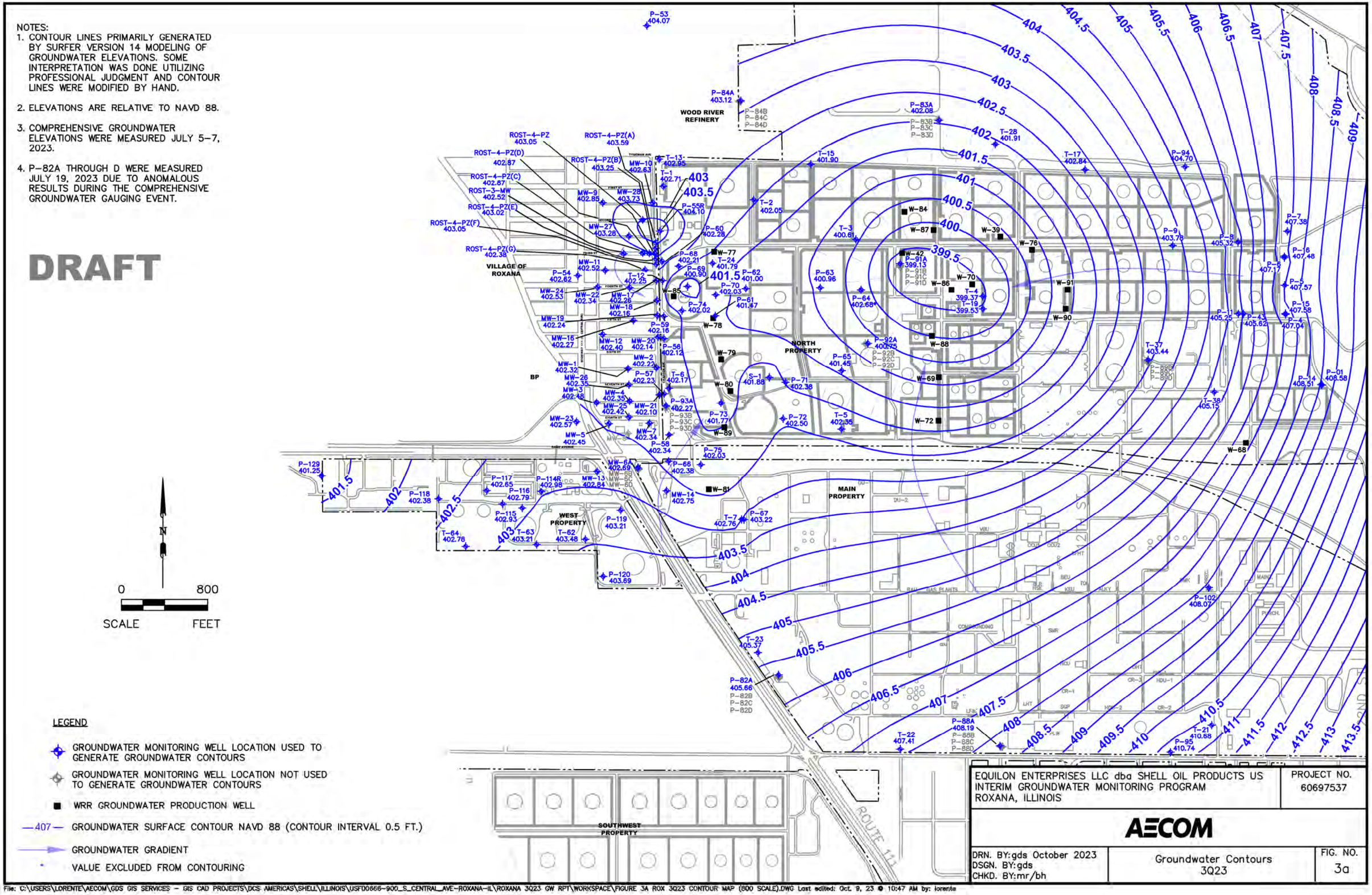
A-31
A-32
A-34
A-28
T-24
A-33
F-76
F-77
F-78
A-22
P-73
F-73
F-74
F-75

0 200
SCALE FEET
N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60697537
AECOM	
DRN. BY:gds October 2023 DSGN. BY:mr CHKD. BY:wmp	Roxana Interim Groundwater Monitoring Well Locations FIG. NO. 2

NOTES:
1. CONTOUR LINES PRIMARILY GENERATED BY SURFER VERSION 14 MODELING OF GROUNDWATER ELEVATIONS. SOME INTERPRETATION WAS DONE UTILIZING PROFESSIONAL JUDGMENT AND CONTOUR LINES WERE MODIFIED BY HAND.
2. ELEVATIONS ARE RELATIVE TO NAVD 88.
3. COMPREHENSIVE GROUNDWATER ELEVATIONS WERE MEASURED JULY 5–7, 2023.
4. P–82A THROUGH D WERE MEASURED JULY 19, 2023 DUE TO ANOMALOUS RESULTS DURING THE COMPREHENSIVE GROUNDWATER GAUGING EVENT.

DRAFT



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
- VALUE EXCLUDED FROM CONTOURING

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

PROJECT NO. 60697537

AECOM

DRN. BY:gds October 2023
DSGN. BY:gds
CHKD. BY:mr/bh

Groundwater Contours
3Q23

FIG. NO. 3a

File: C:\USERS\LORENTE\AECOM\GDS GIS SERVICES - GIS CAD PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USFD0866-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 3Q23 GW RPT\WORKSPACE\FIGURE 3A ROX 3Q23 CONTOUR MAP (800 SCALE).DWG Last edited: Oct. 9, 23 @ 10:47 AM by: lorente

File: C:\USERS\HOREAM\AECOM\EC GIS SERVICES - GIS CAD PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USF00668-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 3Q23 GW RPT\WORKSPACE\FIGURE 3B GW CONTOURS 3Q23 WF.DWG Last edited: Sep. 27, 23 @ 10:21 AM by: hoream

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 JULY 5-7, 2023.

403
403.5
402.5
402
401.5
403
402.5

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
WEST PROPERTY
MAIN PROPERTY
BP
PUBLIC WORKS YARD

T-13 402.95
T-1 402.71
T-2 402.05
MW-9 402.85
MW-10 402.63
MW-28 403.73
ROST-4-PZ(A) 403.59
ROST-4-PZ(B) 403.25
P-55R 404.10
MW-27 403.28
ROST-4-PZ(D) 402.87
ROST-4-PZ(C) 402.87
ROST-4-PZ 403.05
ROST-3-MW 402.52
P-60 402.28
ROST-4-PZ(E) 403.02
ROST-4-PZ(F) 403.05
P-68 402.21
T-24 401.79
P-54 402.62
ROST-4-PZ(G) 402.38
MW-11 402.52
T-12 402.25
MW-17 402.26
P-62 401.00
P-69 400.90
MW-24 402.53
MW-22 402.34
P-70 402.03
MW-18 402.16
P-74 402.02
P-59 402.16
P-61 401.47
MW-19 402.24
MW-16 402.27
P-56 402.12
MW-20 402.14
MW-12 402.40
MW-2 402.22
MW-1 402.32
S-1 401.88
P-71 402.38
MW-26 402.35
T-6 402.17
MW-4 402.35
MW-21 402.10
P-57 402.23
MW-3 402.48
P-93A 402.27
P-93B
P-93C
P-93D
P-73 401.77
MW-25 402.42
MW-7 402.34
P-72 402.50
MW-23 402.57
MW-5 402.45
P-58 402.34
MW-8
P-66 402.38
P-75 402.03
MW-6A 402.69
MW-6B
MW-6C
MW-6D
MW-13 402.84
P-114R 402.98
MW-14 402.75
P-117 402.65
P-116 402.79
P-115 402.93
P-119 403.21
P-67 403.22
T-7 402.76
T-64 402.78
T-63 403.21
T-62 403.48

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-35 A-27 A-16 F-50 F-76 F-77 A-30 F-78 A-22 A-29 F-74 F-75 A-147

1986 APPROXIMATE BENZENE RELEASE SITE RAND AVENUE

2020 APPROXIMATE BUCKEYE PIPELINE GASOLINE RELEASE SITE

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 October 2023
DSGN. BY: gds
CHKD. BY: mr/bh

Groundwater Contours 3Q23- West Fenceline

FIG. NO. 3b

File: C:\USERS\LORENTE\AECOM\GDS GIS SERVICES - GIS CAD PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USF00668-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 3Q23 GW RPT\WORKSPACE\FIGURE 4A THICKNESS OF LNAPL (WEST FENCLINE) 3Q23.DWG Last edited: Jul. 5, 23 @ 4:59 PM by: lorente

LEGEND

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

NOTE:
1. THIS MAP DEPICTS THE ESTIMATED EXTENT AND THICKNESS OF LNAPL BENEATH THE WEST FENCELINE AREA. REFER TO TABLE 1 FOR GROUNDWATER GAUGING INFORMATION.
2. LNAPL THICKNESS WAS MEASURED DURING THE COMPREHENSIVE GROUNDWATER MONITORING GAUGING EVENT ON JULY 5-7, 2023.

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

P-84A P-84B P-84C P-84D
T-13 T-1 T-2 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 ROST-4-PZ(A) MW-28 ROST-4-PZ(B) ROST-4-PZ(D) MW-27 ROST-4-PZ(C) ROST-3-MW ROST-4-PZ ROST-4-PZ(E) ROST-4-PZ(F) MW-11 ROST-4-PZ(G) 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-13 MW-6A MW-6B MW-6C MW-6D MW-14
P-54 P-55R 0.01* P-60 0.01 P-68 0.02* P-69 P-62 0.10 P-70 0.40* P-74 P-61 P-59 P-56 P-57 P-93A P-93B P-93C P-93D P-58 P-66 0.50* 0.10 P-75 P-71 0.01 S-1 0.02 P-73 P-72 P-117 P-114R P-116 P-115 P-119 0.01 P-67 0.04*
R-77 W-77 R-78 W-78 R-79 W-79 R-80 W-80 R-89 W-89 R-81 W-81
W-85

0 300
SCALE FEET
N

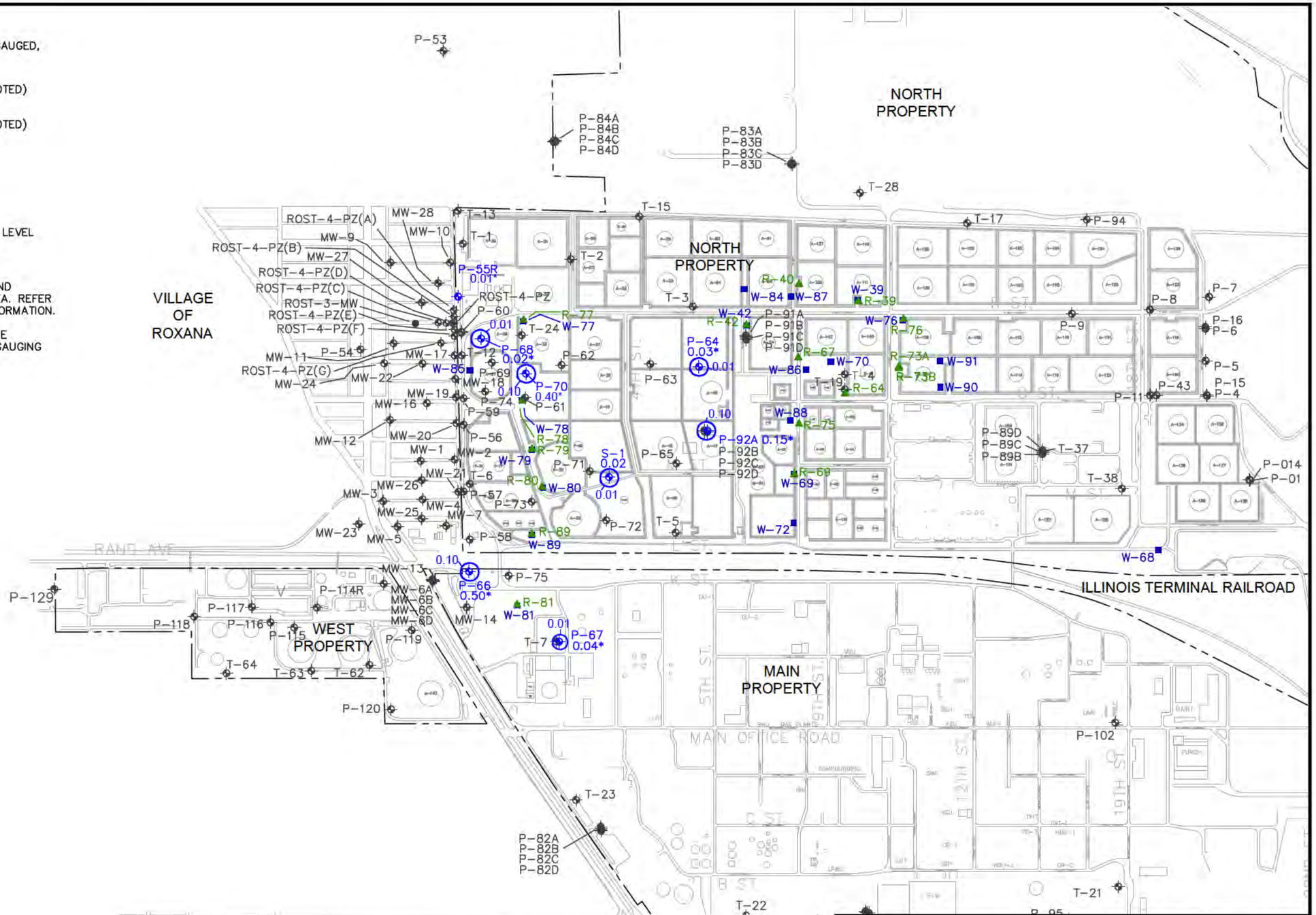
DRAFT

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60697537
AECOM	
DRN. BY:gds October 2023 DSGN. BY:mr CHKD. BY:bh	3Q23 Thickness of LNAPL – West Fenceline
	FIG. NO. 4a

LEGEND

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

NOTES:
1. THIS MAP DEPICTS THE ESTIMATED EXTENT AND THICKNESS OF LNAPL BENEATH THE WRR AREA. REFER TO TABLE 1 FOR GROUNDWATER GAUGING INFORMATION.
2. LNAPL THICKNESS WAS MEASURED DURING THE COMPREHENSIVE GROUNDWATER MONITORING GAUGING EVENT ON JULY 5-7, 2023.



DRAFT

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60697537
AECOM	
DRN. BY: gds October 2023 DSGN. BY: mr CHKD. BY: bh	3Q23 Thickness of LNAPL — FIG. NO. 4b

Plot: C:\USERS\HORSAA\ECOM\EC GIS SERVICES - GIS CAD PROJECTS\DGS AMERICAS\SHELL\ILLINOIS\IS60686-3003.5_CENTRAL_AVE-ROXANA-IL\ROXANA_3023 GW RPT\WORKSPACES\FIGURE 4B THICKNESS OF LNAPL (REFINERY) 3Q23.DWG Last edited: Aug. 24, 23 @ 8:15 AM by: horsaa

File: C:\USERS\POPESCUG\AECOM\GDS GIS SERVICES - DCS AMERICAS\SHELL\ILLINOIS\USF00666-900 S CENTRAL AVE-ROXANA-IL\ROXANA 2023 GW RPT\PART II\EDIT AUGUST 30 2023\2. WORKSPACE\FIGURE 5 2023 GROUNDWATER ANALYTICAL RESULTS SUMMARY.DWG Last edited: Aug, 30, 23 @ 11:31 AM by: popescug

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
Benzo(a)anthracene	0.00013
2-Methylnaphthalene	0.028
Phenol	0.1

3. J = THE RESULT IS ESTIMATED.
4. MULTIPLE RESULTS (e.g., 490 / 490) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
5. WELLS IDENTIFIED IN BLUE WITH NO DATA BOX INDICATE THE RESULTS DID NOT EXCEED SCREENING CRITERIA.
6. WELLS P-55R, P-66 AND P-68 WERE NOT SAMPLED DURING 3Q23 DUE TO THE PRESENCE OF LNAPL.

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 MW-11 ROST-4-PZ(G) P-54 T-12 MW-17 MW-24 FOURTH ST MW-22 MW-18 MW-19 P-59 FIFTH ST MW-16 MW-12 VILLAGE OF ROXANA MW-20 P-56 SIXTH ST MW-2 MW-1 SEVENTH ST MW-26 MW-21 T-6 P-57 MW-4 P-93A P-93B P-93C P-93D MW-3 EIGHTH ST MW-5 MW-25 MW-7 MW-23 MW-8 P-58 1986 APPROXIMATE BENZENE RELEASE SITE RAND AVENUE 2020 APPROXIMATE BUCKEYE PIPELINE GASOLINE RELEASE SITE P-66 P-75 MW-6A MW-6B MW-6C MW-6D WEST PROPERTY MW-13 MW-14 MAIN PROPERTY P-114R NORTH PROPERTY A-34 P-69 P-70 A-27 WOOD RIVER REFINERY P-74 P-61 P-73 A-22 F-78 F-76 F-77 F-73 F-74 F-75 HIGHWAY 111 (S. CENTRAL AVE) CHAFFER AVE 1ST STREET

Sample Location	T-12
Sampled 7/14/2023	Result (mg/L)
Benzene	1.5

Sample Location	MW-22
Sampled 7/13/2023	Result (mg/L)
Benzene	0.0076
1,2,4-Trimethylbenzene	0.071

Sample Location	P-74
Sampled 7/18/2023	Result (mg/L)
Benzene	0.42

Sample Location	P-59
Sampled 7/18/2023	Result (mg/L)
Benzene	0.97

Sample Location	P-93A	P-93B
Sampled 7/11, 7/18/23	Result (mg/L)	Result (mg/L)
Benzene	0.0053	1200
Phenol	< 0.01	0.24

Sample Location	MW-7
Sampled 7/13/2023	Result (mg/L)
Benzene	490 / 490
Phenol	0.12 J / 0.084 J

Sample Location	MW-25
Sampled 7/13/2023	Result (mg/L)
Benzene	0.027

Sample Location	P-57
Sampled 7/13/2023	Result (mg/L)
Benzene	0.21 J / 0.4 J

Sample Location	P-58
Sampled 7/18/2023	Result (mg/L)
Benzene	220 / 250
Benzo(a)anthracene	0.00014 J / 0.000065 J
2-Methylnaphthalene	0.034 / 0.027
Phenol	0.51 J / 0.25 J

DRAFT

0 200 SCALE FEET N

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

PROJECT NO. 60697537

AECOM

DRN. BY:gds October 2023
DSGN. BY:mr
CHKD. BY:bh

3Q23 Groundwater Monitoring Well Analytical Exceedances

FIG. NO. 5

File: C:\USERS\HOREAM\AECOM\EC GIS SERVICES - GIS CAD PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USFD0666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 3Q23 GW RPT\WORKSPACE\FIGURE 6 3Q23 DISSOLVED PHASE BENZENE CONCENTRATIONS IN GROUNDWATER.DWG Last edited: Sep. 29, 23 @ 3:27 PM by: horeac

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. 490 / 490) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
6. CONTOUR LINES IN AREA OF P-55R AND P-66 ADJUSTED BASED ON AVAILABLE 3Q23 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.

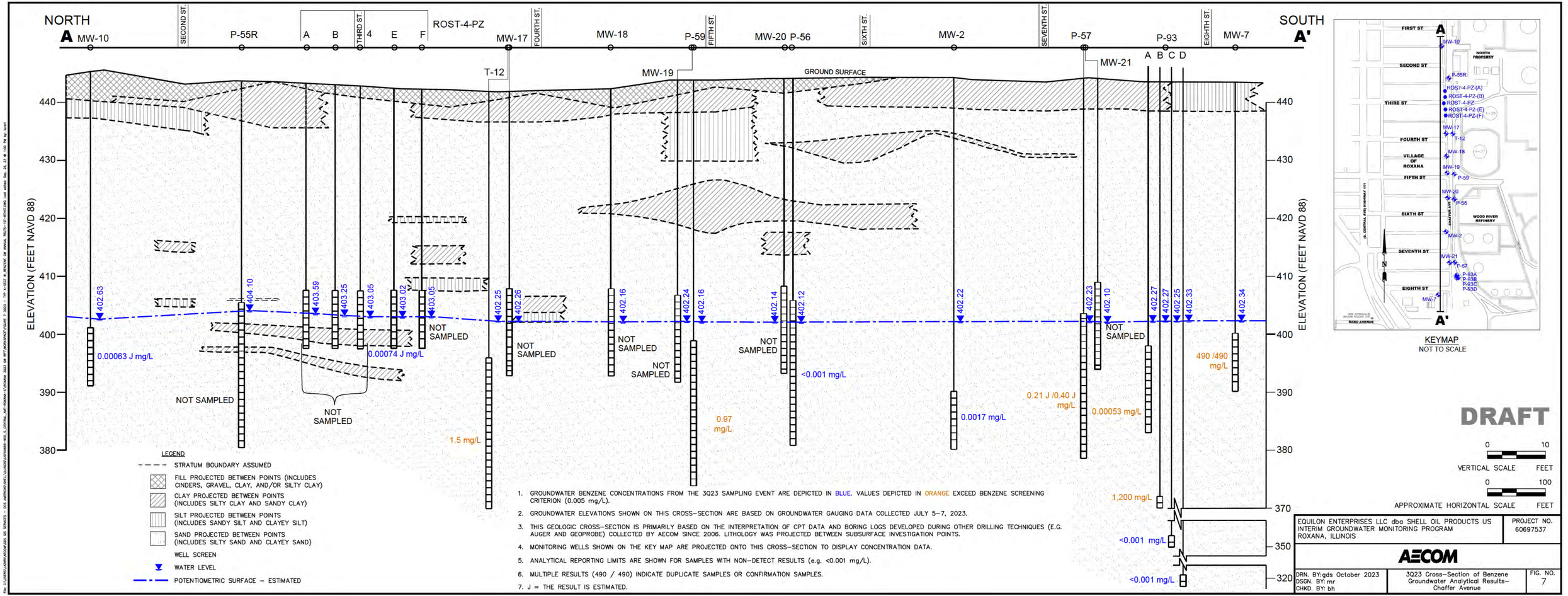
SECOND ST
THIRD ST
FOURTH ST
FIFTH ST
SIXTH ST
SEVENTH ST
EIGHTH ST
HIGHWAY 111 (S. CENTRAL AVE)
CHAFFER AVE
1ST STREET
2ND STREET
RAND AVENUE
VILLAGE OF ROXANA
NORTH PROPERTY
WOOD RIVER REFINERY
PUBLIC WORKS YARD
MAIN PROPERTY
WEST PROPERTY
BP

PZ-1(101)
PZ-1(85)
MW-9 0.0038
MW-10 0.00063 J
MW-28 <0.001
MW-27 <0.001
ROST-4-PZ(A)
ROST-4-PZ(B)
ROST-4-PZ(C) 0.0022
ROST-3-MW <0.001 / <0.001
ROST-4-PZ(D)
ROST-4-PZ(E) 0.00074 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 0.0076
MW-18
MW-17
MW-15
MW-16 <0.001
PZ-2(84)
PZ-2(70.5)
MW-12 <0.001
MW-20
P-56 <0.001
MW-2 0.0017
MW-01 <0.001
MW-26 <0.001
MW-4 <0.001
MW-3 <0.001
MW-25 0.027
MW-5 0.003
MW-7 490 /490
MW-8
MW-23 <0.001
MW-13 <0.001
MW-6A <0.001
MW-6B <0.001 / <0.001
MW-6C <0.001
MW-6D <0.001
P-114R <0.001
MW-14 <0.001
P-115
P-55R 0.01*
P-60-11
ROST-4-PZ
P-60-S
P-60
P-60-12
P-60-13
0.10
P-68 0.02*
T-12 1.5
R-85 W-85
P-69
P-74 0.42
P-59 0.97
P-70 0.40*
R-78 W-78
P-61
R-77 W-77
T-24
R-79 W-79
R-80 W-80
T-6
P-57 0.21 J / 0.40 J
P-73
P-93A 0.0053
P-93B 1,200
P-93C <0.001
P-93D <0.001
P-58 220 / 250
R-89 W-89
P-66 0.50* 0.10
P-75
R-81 W-81
A-34
A-28
A-33
A-27
A-22
F-77
F-78
F-73
F-74
F-75
0.005
0.05
0.5
5.0
50
500

DRAFT

0 200
SCALE FEET
N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60697537
AECOM	
DRN. BY:gds October 2023 DSGN. BY:mr CHKD. BY:bh	3Q23 Dissolved Phase Benzene Concentrations in Groundwater
	FIG. NO. 6



1. GROUNDWATER BENZENE CONCENTRATIONS FROM THE 3Q23 SAMPLING EVENT ARE DEPICTED IN BLUE. VALUES DEPICTED IN ORANGE EXCEED BENZENE SCREENING CRITERION (0.005 mg/L).
2. GROUNDWATER ELEVATIONS SHOWN ON THIS CROSS-SECTION ARE BASED ON GROUNDWATER GAUGING DATA COLLECTED JULY 5-7, 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 (490 / 490) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
7. J = THE RESULT IS ESTIMATED.

KEYMAP
NOT TO SCALE

DRAFT

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. 60697537
AECOM	
DRN. BY: gds October 2023 DSGN. BY: mr CHKD. BY: bh	3Q23 Cross-Section of Benzene Groundwater Analytical Results–Chaffer Avenue
	FIG. NO. 7

CROSS SECTION LINE - SOME FEATURES HAVE BEEN PROJECTED

WEST B — B' EAST

MW-6D MW-6C MW-6B MW-6A SVE-27 MW-7 P-93A P-93B P-93C P-93D T-6

(S. CENTARL AVE) HIGHWAY 111 — EIGHTH ST — SEVENTH ST

GROUND SURFACE

ELEVATION FEET NAVD 88

440 420 400 380 360 340 320 300

402.69 402.66 402.66 402.69 402.34 402.27 402.27 402.25 402.33 402.17

<0.001 mg/L

<0.001 / <0.001 mg/L

<0.001 mg/L

<0.001 mg/L

490 / 490 mg/L

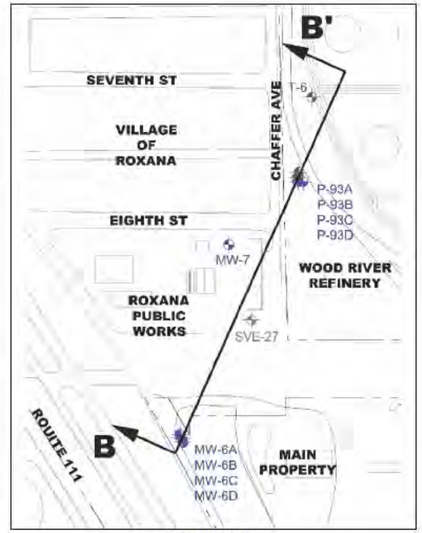
0.0053 mg/L

1,200 mg/L

<0.001 mg/L

<0.001 mg/L

NOT SAMPLED



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 3Q23 SAMPLING EVENT ARE DEPICTED IN BLUE. VALUES DEPICTED IN ORANGE EXCEED BENZENE SCREENING CRITERION (0.005 mg/L).
2. GROUNDWATER ELEVATIONS SHOWN ON THIS CROSS-SECTION ARE BASED ON GROUNDWATER GAUGING DATA COLLECTED JULY 5-7, 2023.
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 490 / 490) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
9. J = THE RESULT IS ESTIMATED.

DRAFT

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60697537
AECOM	
DRN. BY:gds October 2023 DSGN. BY:mr CHKD. BY:bh	3Q23 Cross-Section of Benzene Groundwater Analytical Results–Roxana Public Works Yard
	FIG. NO. 8

File: C:\USERS\LJORDYE\AECOM\GIS GIS SERVICES - GIS CAD PROJECTS\GIS AMERICAS\SHELL\ILLINOIS\GIS\60697537-#00_S_CENTRAL_AVE-ROXANA-IL\ROXANA 3Q23 CW PPT\WORKSPACE\FIGURE 8 3Q23 TYP X-SECT W_BENZENE.dwg Last edited Aug. 24, 23 @ 8:24 AM by: lordye

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.

Appendix B

Low Flow Groundwater Sampling Data Sheets

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q23 GW | PROJECT NUMBER: 60697537 - 3.3.1/2/3 | FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-10-2023 | WEATHER: 81°F Clear

MONITORING WELL ID: MW-1 | SAMPLE ID: MW1-ROX-071023

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): 40.58 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): 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): 18.55 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

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	1022	40.63	clear	none	20.0	0.83	0.886 mS/cm uS/cm	6.82	106.9	1.84
300	1023	40.63			19.4	0.62	0.879 mS/cm uS/cm	6.82	85.3	4.82
600	1024	40.63			19.8	0.55	0.882 mS/cm uS/cm	6.79	69.0	5.64
900	1025				19.5	0.55	0.881 mS/cm uS/cm	6.80	54.3	8.61
1200	1026				19.4	0.52	0.881 mS/cm uS/cm	6.79	43.0	10.52
1500	1027				19.4	0.50	0.888 mS/cm uS/cm	6.79	27.8	3.79
1800	1028				19.8	0.50	0.880 mS/cm uS/cm	6.82	19.4	4.60
2100	1029				19.8	0.53	0.885 mS/cm uS/cm	6.81	7.8	6.69
2400	1030				21.2	0.51	0.882 mS/cm uS/cm	6.82	2.4	2.25
2700	1031				21.5	0.54	0.890 mS/cm uS/cm	6.84	-2.1	3.05
3000	1032				20.8	0.54	0.903 mS/cm uS/cm	6.85	-6.3	4.07
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1022 | Elapsed Time (min): 10 | Water Quality Meter ID & SN: YSI ProDSS -- 7-10-23

Stop Time: 1032 | Average Purge Rate (mL/min): 300 | Date Calibrated: 49331 / 46388

SAMPLING DATA

Sample Date: 7-10-23 | Sample Time: 1040 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: JM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: MMossa EChalfant

DATE: 7/18/23 WEATHER: partly cloudy 80°

MONITORING WELL ID: MW-2 SAMPLE ID: MW2-ROX-071823

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): 41.87 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): ND ft		
Depth to Top of Screen (btoc): 49.87 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 180.6 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 18.33 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (STABLE: over 4 readings; Monitor Temp.)	DO (mg/L) (+/-0.2 mg/L or +/-10%)	Spec. Cond. (+/-5% or +/-2 uS/cm)	pH (+/-0.2 mg/L)	ORP (mV) (+/-20 mV)	Turb (NTU) (Monitor Turb Readings (<50))
0	1244	41.98	clear	Mod. HC	19.9	0.74	0.879 mS/cm uS/cm	7.16	-121.65	3.7
300	1250	41.94			20.1	0.69	0.880 mS/cm uS/cm	7.12	-127.27	2.8
600	1251	41.93			20.1	0.65	0.881 mS/cm uS/cm	7.11	-131.00	2.9
900	1252	41.94			20.2	0.61	0.880 mS/cm uS/cm	7.09	-133.77	2.9
1200	1253	41.94			20.3	0.58	0.881 mS/cm uS/cm	7.08	-136.02	2.9
							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			

MM 7/18/23

Start Time: 1249 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 51284/46388

Stop Time: 1253 Average Purge Rate (mL/min): 300 Date Calibrated: 7/18/23

SAMPLING DATA

Sample Date: 7/18/23 Sample Time: 1300 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: MM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: MMassa & Chalfant

DATE: 7/10/23 WEATHER: clear 81°

MONITORING WELL ID: MW-3 SAMPLE ID: MW3-RAX-070723

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): 27.86 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): ND 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): 17.14 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	1106	27.92	clear	none	22.0	3.71	1.162 mS/cm uS/cm	7.31	-152.42	31.14
300	1107	27.92			22.8	2.81	1.151 mS/cm uS/cm	6.98	-159.59	29.80
600	1108	27.92			22.3	2.35	1.172 mS/cm uS/cm	6.89	-160.47	29.99
900	1109				21.7	2.09	1.160 mS/cm uS/cm	6.89	-162.62	29.17
1200	1110				21.8	1.87	1.166 mS/cm uS/cm	6.85	-164.73	30.58
1500	1111				21.2	1.67	1.167 mS/cm uS/cm	6.84	-166.09	33.67
1800	1112				21.2	1.51	1.159 mS/cm uS/cm	6.83	-167.29	35.02
2100	1113				21.2	1.40	1.156 mS/cm uS/cm	6.82	-168.05	35.68
2400	1114				21.2	1.33	1.155 mS/cm uS/cm	6.81	-168.56	36.88
2700	1115				21.4	1.25	1.150 mS/cm uS/cm	6.81	-168.87	38.94
3000	1116				21.3	1.20	1.155 mS/cm uS/cm	6.81	-168.92	39.70
3300	1117				21.1	1.15	1.154 mS/cm uS/cm	6.81	-168.80	42.15
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MM 7/10/23

Start Time: 1106 (M) Elapsed Time (min): 8 (M) 11 Water Quality Meter ID & SN: YSI ProDSS -- 51284/19554

Stop Time: 1117 Average Purge Rate (mL/min): 300 Date Calibrated: 7/10/23

SAMPLING DATA

Sample Date: 7/10/23 Sample Time: 1120 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: MM

COMMENTS:

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

Estimated Total Purge Volume: 4400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: MMASSA TSENKENG

DATE: 7/13/23 WEATHER: partly cloudy 75° 4

MONITORING WELL ID: MW-4 SAMPLE ID: MW-4-BX-071323

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): 39.04 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): ND 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 (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 16.35 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	0918	39.06	clear	Slight H2S	19.9	0.68	0.977 mS/cm uS/cm	6.78	-114.23	14.9
300	0919	39.06			19.9	0.64	0.988 mS/cm uS/cm	6.76	-121.95	11.7
600	0920	39.06			19.9	0.60	0.992 mS/cm uS/cm	6.75	-127.20	9.3
900	0921	39.06			20.0	0.58	0.997 mS/cm uS/cm	6.75	-131.00	8.7
1200	0922				20.0	0.56	0.999 mS/cm uS/cm	6.74	-134.44	7.6
1500	0923				19.9	0.54	0.998 mS/cm uS/cm	6.75	-137.25	6.2
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MMASSA 7/13/23

Start Time: 0918 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS - 51284/46388

Stop Time: 0923 Average Purge Rate (mL/min): 300 Date Calibrated: 7-13-23

SAMPLING DATA

Sample Date: 7-13-23 Sample Time: 0925 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: MM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: Annessa Echelpaut Tenkins

DATE: 7/17/23 WEATHER: Partly cloudy 80

MONITORING WELL ID: MW-5 SAMPLE ID: MW5-ROX-071723

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): 27.62 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): ND 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): 16.68 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1136	27.65	clear	slight HC	21.0	1.21	1.101 mS/cm uS/cm	7.02	-114.31	16.47
300	1137	27.65	↓	↓	20.6	0.80	1.169 mS/cm uS/cm	6.93	-123.83	5.29
600	1138	27.65			20.4	0.69	1.170 mS/cm uS/cm	6.87	-130.15	5.39
900	1139	↓			20.4	0.63	1.167 mS/cm uS/cm	6.84	-134.74	7.78
1200	1140				20.5	0.59	1.164 mS/cm uS/cm	6.81	-138.40	7.13
1500	1141				20.8	0.58	1.159 mS/cm uS/cm	6.80	-140.50	6.30
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

7/17/23

Start Time: 1136 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -- 17284/460388

Stop Time: 1141 Average Purge Rate (mL/min): 300 Date Calibrated: 4/17/23

SAMPLING DATA

Sample Date: 7/17/23 Sample Time: 1145 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: AAA

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: MMasse ECnalfant

DATE: 7-11-23 WEATHER: clear 84°

MONITORING WELL ID: MW-6A SAMPLE ID: MW6A-20X-071123

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): 29.72 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): NL 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 (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 14.46 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	1145	29.78	slight brown	none	22.5	1.86	0.954 mS/cm uS/cm	6.99	-140.96	92.61
300	1146	29.78			22.5	1.60	0.954 mS/cm uS/cm	6.90	-143.71	84.36
600	1147	29.78			22.7	1.45	0.955 mS/cm uS/cm	6.83	-146.18	85.75
900	1148				22.5	1.34	0.958 mS/cm uS/cm	6.82	-148.23	73.27
1200	1149				22.4	1.25	0.962 mS/cm uS/cm	6.78	-149.97	65.67
1500	1150				22.6	1.18	0.962 mS/cm uS/cm	6.77	-151.42	56.54
1800	1151				22.7	1.12	0.961 mS/cm uS/cm	6.76	-152.44	50.37
2100	1152				22.4	1.06	0.965 mS/cm uS/cm	6.76	-153.69	41.63
2400	1153				22.5	1.02	0.965 mS/cm uS/cm	6.74	-154.44	37.02
							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			

MM 7/11/23

Start Time: 1145 Elapsed Time (min): 8 Water Quality Meter ID & SN: YSI ProDSS - 51284/49554

Stop Time: 1153 Average Purge Rate (mL/min): 300 Date Calibrated: 7/11/23

SAMPLING DATA

Sample Date: 7-11-23 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: none

VOA Vials, No Headspace [X] Initials: MM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: Mmassa Echalfant

DATE: 7/11/23 WEATHER: clear 88°

MONITORING WELL ID: MW-6B SAMPLE ID: MW6B - ROX - 071123

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 66.55 ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 69.38 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 29.80 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): ND ft		
Depth to Top of Screen (btoc): 64.05 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 5 ft		
Water Column Height (not including NAPL): 39.58 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 (STABLE: over 4 readings)	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	1248	29.78	cloudy black	Slight HC	21.7	1.78	0.709 mS/cm uS/cm	7.23	-125.38	92.2
300	1249	29.78			21.7	1.62	0.711 mS/cm uS/cm	7.17	-128.59	95.6
600	1250	29.79			21.6	1.47	0.716 mS/cm uS/cm	7.13	-131.67	100.6
900	1251	29.78			21.4	1.33	0.719 mS/cm uS/cm	7.12	-133.68	103.4
1200	1252	29.78			21.7	1.30	0.720 mS/cm uS/cm	7.10	-135.54	106.8
1500	1253	29.78			21.5	1.32	0.726 mS/cm uS/cm	7.10	-137.32	108.1
1800	1254				21.8	1.17	0.725 mS/cm uS/cm	7.08	-138.62	109.9
2100	1255				21.8	1.11	0.727 mS/cm uS/cm	7.05	-139.55	115.3
2400	1256				21.4	1.07	0.729 mS/cm uS/cm	7.07	-141.02	108.6
2700	1257				21.4	1.04	0.728 mS/cm uS/cm	7.07	-142.01	112.2
3000	1258				21.4	1.00	0.728 mS/cm uS/cm	7.05	-142.94	104.7
3300	1313				21.5	0.78	0.723 mS/cm uS/cm	7.05	-148.91	46.19
7800	1314				21.4	0.77	0.722 mS/cm uS/cm	7.05	-149.02	43.45
8100	1315				21.4	0.76	0.722 mS/cm uS/cm	7.05	-149.15	41.59
8400	1316	↓	MMA 7/11/23	↓	21.6	0.76	0.720 mS/cm uS/cm	7.05	-149.21	41.13
							mS/cm uS/cm			

Start Time: 1248 Elapsed Time (min): 28 Water Quality Meter ID & SN: YSI ProDSS - 51284/49554

Stop Time: 1316 Average Purge Rate (mL/min): 300 Date Calibrated: 7/11/23

SAMPLING DATA

Sample Date: 7/12/23 Sample Time: 1320 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: MM

COMMENTS:

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

Estimated Total Purge Volume: 8400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: MMassa EChalfant

DATE: 7/11/23 WEATHER: clear 80°

MONITORING WELL ID: MW-6C SAMPLE ID: MW6C-ROX-071123

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~~87.45~~ 92.78 (M) ft btoc
Total Well Depth (btoc): 90.28 ft	
Depth to Water (btoc): 29.58 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to LNAPL/DNAPL (btoc): NL 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
Screen Length: 5 ft	
Water Column Height (not including NAPL): 60.70 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

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to (M) Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1039	~~29.61~~	Slight black	none	20.6	1.98	0.823 mS/cm uS/cm	7.07	-147.80	38.27
300	1040	29.60			20.6	1.71	0.825 mS/cm uS/cm	7.05	-150.41	36.01
600	1041	29.60			20.7	1.56	0.826 mS/cm uS/cm	7.03	-152.46	32.49
900	1042	29.60			21.0	1.48	0.828 mS/cm uS/cm	7.02	-153.98	32.36
1200	1043	29.60			20.9	1.35	0.830 mS/cm uS/cm	7.02	-154.92	28.55
1500	1044				20.9	1.27	0.834 mS/cm uS/cm	7.02	-156.01	26.38
1800	1045				20.7	6.22	0.838 mS/cm uS/cm	7.02	-156.61	23.43
2100	1046				20.8	1.16	0.837 mS/cm uS/cm	7.02	-157.28	20.80
2400	1047				20.6	1.18	0.839 mS/cm uS/cm	7.02	-157.77	19.43
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MM 7/11/23

Start Time: 1039 Elapsed Time (min): 8 Water Quality Meter ID & SN: YSI ProDSS -- 51284/49554

Stop Time: 1047 Average Purge Rate (mL/min): 300 Date Calibrated: 7/11/23

SAMPLING DATA

Sample Date: 7/11/23 Sample Time: 1055 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: MM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: MMassa EChalfant

DATE: 7/12/23 WEATHER: clear 76°

MONITORING WELL ID: MW-6D SAMPLE ID: MW60-ROX-071223

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 107.22 ft btoc
Total Well Depth (btoc): 110.05 ft	
Depth to Water (btoc): 29.42 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to LNAPL/DNAPL (btoc): NL ft	
Depth to Top of Screen (btoc): 104.72 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 5 ft	
Water Column Height (not including NAPL): 80.63 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0916	29.46	clear	none	20.1	0.85	0.942 (mS/cm) uS/cm	6.91	-79.93	1.09
300	0917	29.45	↓	↓	20.0	0.77	0.946 (mS/cm) uS/cm	6.92	-93.94	1.16
600	0918	29.43			20.4	0.71	0.951 (mS/cm) uS/cm	6.93	-109.16	1.41
900	0919	29.44			20.5	0.67	0.962 (mS/cm) uS/cm	6.94	-116.60	1.22
1200	0920	29.44			20.3	0.64	0.969 (mS/cm) uS/cm	6.95	-123.69	1.01
1500	0921	29.44			20.3	0.61	0.975 (mS/cm) uS/cm	6.96	-129.19	0.57
1800	0922	↓	↓	↓	20.3	0.58	0.979 (mS/cm) uS/cm	6.97	-133.68	0.30
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MM 7/12/23

Start Time: 0916 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS - 51284/46388

Stop Time: 0922 Average Purge Rate (mL/min): 300 Date Calibrated: 7/12/23

SAMPLING DATA

Sample Date: 7/12/23 Sample Time: 0925 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: MM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: MMassa TJenkins

DATE: 7/13-23 WEATHER: Mostly cloudy 81°

MONITORING WELL ID: MW-7 SAMPLE ID: MW7-ROX-071323

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): 41.05 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): NR ft		
Depth to Top of Screen (btoc): 42.92 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 28.1 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 11.87 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1156	41.06	clear	Mod. HC	20.9	0.70	1.194 ~~mS/cm~~ uS/cm	6.91	-111.69	0.00
300	1157	41.06	↓	↓	20.8	0.63	1.190 ~~mS/cm~~ uS/cm	6.85	-112.06	0.52
600	1158	41.09			20.7	0.61	1.191 ~~mS/cm~~ uS/cm	6.82	-112.67	2.37
900	1159	41.09			20.6	0.58	1.190 ~~mS/cm~~ uS/cm	6.81	-113.11	3.986 (M)
1200	1200	41.09			20.6	0.56	1.187 ~~mS/cm~~ uS/cm	6.80	-113.44	2.98
							mS/cm uS/cm			
							mS/cm ~~uS/cm~~			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							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: 1156 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 51284/46388

Stop Time: 1200 Average Purge Rate (mL/min): 300 Date Calibrated: 7/13/23

SAMPLING DATA

Sample Date: 7/13/23 Sample Time: 1205 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: MM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: MMassa EChalfant

DATE: 7/18/23 WEATHER: cloudy 74°

MONITORING WELL ID: MW-9 SAMPLE ID: MW9-ROX-071823

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 51.04 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 56.37 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 42.57 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): ND 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 (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 14.80 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	1007	42.70	slightly cloudy	none	19.5	1.01	0.968 mS/cm uS/cm	6.89	-57.06	38.12
300	1008	42.70			19.5	0.81	0.967 mS/cm uS/cm	6.85	-71.76	28.01
600	1009	42.70			19.5	0.70	0.966 mS/cm uS/cm	6.81	-80.60	28.73
900	1010				19.6	0.65	0.966 mS/cm uS/cm	6.79	-85.66	28.31
1200	1011				19.7	0.64	0.966 mS/cm uS/cm	6.78	-89.71	27.39
1500	1012				19.7	0.57	0.967 mS/cm uS/cm	6.77	-92.74	28.91
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

JMA 7/18/23

Start Time: 1007 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -- 51284/46388

Stop Time: 1012 Average Purge Rate (mL/min): 300 Date Calibrated: 7/18/23

SAMPLING DATA

Sample Date: 7-18-23 Sample Time: 1015 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: MM

COMMENTS:

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

Estimated Total Purge Volume: 1900 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: MMassa EChalfant

DATE: 7/18/23 WEATHER: cloudy 76°

MONITORING WELL ID: MW-10 SAMPLE ID: MW10-ROX-071823

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	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): 42.55 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	Ambient PID/FID Reading: 0.0 ppm
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	Wellbore PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 44.43 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	
Screen Length: 10 ft		
Water Column Height (not including NAPL): 12.18 ft		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1108	42.55	cloudy red	slight HC	20.1	0.58	1.344 mS/cm uS/cm	6.89	-125.28	84.52
300	1109	42.55	↓	↓	20.1	0.57	1.345 mS/cm uS/cm	6.89	-126.99	77.25
600	1110	42.55	↓	↓	20.1	0.56	1.348 mS/cm uS/cm	6.89	-128.89	61.59
900	1111	↓	↓	↓	20.1	0.55	1.349 mS/cm uS/cm	6.89	-130.90	48.55
1200	1112	↓	↓	↓	20.1	0.53	1.351 mS/cm uS/cm	6.89	-132.65	40.74
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1108 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 5284/46388

Stop Time: 1112 Average Purge Rate (mL/min): 300 Date Calibrated: 7/18/23

SAMPLING DATA

Sample Date: 7/18/23 Sample Time: 1115 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: MM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: MMassi, EChalfant

DATE: 7-12-23 WEATHER: Partly cloudy 81°

MONITORING WELL ID: MW-11 SAMPLE ID: MW11-ROX-071223

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 46.66 ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 51.99 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 41.18 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NA ft		
Depth to Top of Screen (btoc): 41.66 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 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

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	1020	41.19	slight brown	none	19.3	0.92	1.402 mS/cm uS/cm	6.88	-57.38	75.75
300	1021	41.20	↓	↓	19.4	0.75	1.398 mS/cm uS/cm	6.81	-75.18	61.37
600	1022	41.20			19.7	0.67	1.393 mS/cm uS/cm	6.79	-81.80	48.83
900	1023	41.21			20.1	0.66	1.386 mS/cm uS/cm	6.77	-86.54	43.65
1200	1024	41.20			18.9	0.60	1.387 mS/cm uS/cm	6.77	-91.09	30.16
1500	1025	41.20			19.4	0.54	1.370 mS/cm uS/cm	6.77	-93.02	27.42
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MM 7/12/23

Start Time: 1020 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS - 51284/46388

Stop Time: 1025 Average Purge Rate (mL/min): 300 Date Calibrated: 7-12-23

SAMPLING DATA

Sample Date: 7-12-23 Sample Time: 1030 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: MM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-12-2023 WEATHER: 85°F Partly Cloudy

MONITORING WELL ID: MW-12 SAMPLE ID: MW12-ROX-071223

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 46.92 ft btoc
Total Well Depth (btoc): 52.25 ft	
Depth to Water (btoc): 40.30 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): 41.92 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 11.95 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1037	40.35	clear	none	20.1	1.09	0.973 mS/cm uS/cm	6.98	139.1	5.64
300	1038	↓	↓	↓	20.1	0.92	0.973 mS/cm uS/cm	6.97	139.5	5.00
600	1039				20.0	0.80	0.972 mS/cm uS/cm	6.89	139.7	4.82
900	1040				20.0	0.69	0.970 mS/cm uS/cm	6.87	139.9	4.91
1200	1041				20.0	0.64	0.968 mS/cm uS/cm	6.85	140.0	5.19
1500	1042				20.1	0.60	0.967 mS/cm uS/cm	6.84	140.1	5.43
1800	1043				20.1	0.57	0.967 mS/cm uS/cm	6.83	140.1	5.42
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

JM 7-12-23

Start Time: 1037 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS - 45608/49391

Stop Time: 1043 Average Purge Rate (mL/min): 300 Date Calibrated: 7-12-2023

SAMPLING DATA

Sample Date: 7-12-2023 Sample Time: 1050 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: JM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: MMassa EChalfant

DATE: 7/14/23 WEATHER: partly cloudy 93°

MONITORING WELL ID: MW-13 SAMPLE ID: MW13-ROX-071423

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): 27.56 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 31.0 @ 31 ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): ND ft			
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 (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 7.49 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1316	27.60	cloudy brown	slight HC	23.8	0.69	1.223 mS/cm uS/cm	6.91	-98.56	131.00
300	1317	27.61			23.8	0.58	1.220 mS/cm uS/cm	6.79	-107.79	113.94
600	1318	27.61			23.6	0.54	1.221 mS/cm uS/cm	6.77	-113.78	99.87
900	1319	27.61			23.2	0.51	1.219 mS/cm uS/cm	6.68	-117.76	81.26
1200	1320				23.2	0.48	1.212 mS/cm uS/cm	6.67	-120.55	71.47
1500	1321				23.2	0.48	1.210 mS/cm uS/cm	6.65	-122.76	62.70
1800	1322				23.4	0.47	1.201 mS/cm uS/cm	6.65	-124.35	54.71
2100	1323				23.3	0.46	1.205 mS/cm uS/cm	6.64	-125.55	46.91
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

7/14/23

Start Time: 1316 Elapsed Time (min): 7 Water Quality Meter ID & SN: YSI ProDSS - 51284/16388

Stop Time: 1323 Average Purge Rate (mL/min): 300 Date Calibrated: 7/14/23

SAMPLING DATA

Sample Date: 7/14/23 Sample Time: 1325 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: MM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: MMassa & Chalfant Tomkins

DATE: 7/17/23 WEATHER: partly cloudy 74°

MONITORING WELL ID: MW-14 SAMPLE ID: MW14-ROX-071723

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 38.42 ft btoc	Volume of Flow Through Cell : 320* mL	
Total Well Depth (btoc): 44.00 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 32.08 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): NO 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: 50.4 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 11.93 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	0940	32.08	clear	Mod. HC.	20.2	0.82	1.074 mS/cm uS/cm	6.57	-72.16	0.0
200	0941	32.08			20.4	0.75	1.072 mS/cm uS/cm	6.57	-85.45	0.0
400	0942	32.08			20.5	0.70	1.071 mS/cm uS/cm	6.57	-92.04	0.0
600	0943				20.6	0.64	1.069 mS/cm uS/cm	6.57	-97.32	0.0
1200	0944				20.6	0.59	1.067 mS/cm uS/cm	6.58	-100.78	0.5
1500	0945	↓	↓	↓	20.6	0.55	1.066 mS/cm uS/cm	6.58	-103.45	0.0
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 0940 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS 51284/16388

Stop Time: 0945 Average Purge Rate (mL/min): 400 Date Calibrated: 7/17/23

SAMPLING DATA

Sample Date: 7/17/23 Sample Time: 0950 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 400 QA/QCSamples: FB

VOA Vials, No Headspace ☒ Initials: MM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: MMassa EChalfant

DATE: 7/11/23 WEATHER: clear 76°

MONITORING WELL ID: MW-16 SAMPLE ID: MW16-ROX-071123

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	
Depth to Water (btoc): 41.38 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 44.57 ft btoc
Depth to LNAPL/DNAPL (btoc): NR ft	
Depth to Top of Screen (btoc): 37.50 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	
Water Column Height (not including NAPL): 6.37 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: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0910	41.42	clear	none	19.5	2.13	0.762 (mS/cm) uS/cm	6.65	-75.23	53.55
300	0911	41.41			19.4	1.96	0.763 (mS/cm) uS/cm	6.64	-78.04	48.27
600	0912	41.42			19.4	1.84	0.765 (mS/cm) uS/cm	6.63	-80.93	45.80
900	0913	41.42			19.3	1.72	0.764 (mS/cm) uS/cm	6.63	-84.15	37.04
1200	0914	41.42			19.4	1.61	0.765 (mS/cm) uS/cm	6.61	-87.10	29.67
1500	0915				19.4	1.51	0.765 (mS/cm) uS/cm	6.61	-89.89	24.32
1800	0916				19.3	1.43	0.766 (mS/cm) uS/cm	6.61	-91.55	22.10
2100	0917				19.2	1.36	0.767 (mS/cm) uS/cm	6.61	-93.60	18.58
2400	0918				19.3	1.31	0.769 (mS/cm) uS/cm	6.60	-95.57	15.12
2700	0919				19.2	1.26	0.769 (mS/cm) uS/cm	6.61	-97.39	12.64
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

7/11/23

Start Time: 0910 Elapsed Time (min): 9 Water Quality Meter ID & SN: YSI ProDSS -- 51284/19554

Stop Time: 0919 Average Purge Rate (mL/min): 300 Date Calibrated: 7/11/23

SAMPLING DATA

Sample Date: 7/11/23 Sample Time: 0925 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: MM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: J Mayer E. Chalfant

DATE: 7-13-23 WEATHER: 80° Mostly Cloudy

MONITORING WELL ID: MW-22 SAMPLE ID: MW22-Rox-071323

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): 40.05 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 44.37 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 38.43 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 8.63 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0922	40.06	Clear	Slight	20.8	0.86	1.252 mS/cm uS/cm	7.04	93.2	19.20
300	0923	↓	↓	↓	20.9	0.76	1.246 mS/cm uS/cm	7.01	89.2	17.95
600	0924				20.8	0.68	1.244 mS/cm uS/cm	6.99	84.8	17.54
900	0925				20.9	0.59	1.232 mS/cm uS/cm	6.98	77.5	17.93
1200	0926				20.9	0.58	1.232 mS/cm uS/cm	6.98	76.7	17.48
1500	0927				20.8	0.56	1.229 mS/cm uS/cm	6.97	73.3	17.42
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Joe Mayer 7-13-23

Start Time: 0922 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS - 45608/49391

Stop Time: 0927 Average Purge Rate (mL/min): 300 Date Calibrated: 7-13-2023

SAMPLING DATA

Sample Date: 7-13-23 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: None

VOA Vials, No Headspace [X] Initials: JM

COMMENTS:

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

Estimated Total Purge Volume: 500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: MMassa & Chalfant

DATE: 7/14/23 WEATHER: Clear 79°

MONITORING WELL ID: MW-23 SAMPLE ID: MW23-ROX-071423

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): 29.08 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 34.18 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): ND 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): 10.19 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	0900	29.08	↑	Slight HC	21.2	0.71	0.969 mS/cm uS/cm	6.49	-58.2	505.76
9000 300	0930	29.08	Cloudy brown		21.2	0.67	0.950 mS/cm uS/cm	6.77	-102.20	238.34
9300 ~~600~~	0931	29.08			21.3	0.58	0.948 mS/cm uS/cm	6.70	-107.19	231.34
9600 ~~900~~	0932	29.08			21.5	0.54	0.947 mS/cm uS/cm	6.66	-110.00	225.96
9900 ~~1200~~	0933				21.5	0.51	0.948 mS/cm uS/cm	6.64	-112.36	225.03
17,400	0958				22.0	0.39	0.946 mS/cm uS/cm	6.61	-130.16	59.92
17,700	0959				22.1	0.39	0.947 mS/cm uS/cm	6.61	-130.26	56.36
18,000	1000				22.2	0.39	0.943 mS/cm uS/cm	6.60	-130.42	51.98
18,300	1001				22.2	0.39	0.944 mS/cm uS/cm	6.60	-130.65	50.34
18,600	1002				22.0	0.39	0.945 mS/cm uS/cm	6.60	-130.85	45.15
18,900	1003	↓	↓	↓	21.8	0.38	0.945 mS/cm uS/cm	6.60	-130.90	45.04
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 0900 Elapsed Time (min): 63 Water Quality Meter ID & SN: YSI ProDSS -- 5128H/46388

Stop Time: 1003 Average Purge Rate (mL/min): 300 Date Calibrated: 7/14/23

SAMPLING DATA

Sample Date: 7-14-23 Sample Time: 1005 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: MM

COMMENTS:

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

Estimated Total Purge Volume: 18,900 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: MMassa EChalfant

DATE: 7/10/23 WEATHER: clear 75°

MONITORING WELL ID: MW-24 SAMPLE ID: MW24-ROX-071023

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): 49.86 ft	
Depth to Water (btoc): 41.24 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 45.55 ft btoc
Depth to LNAPL/DNAPL (btoc): NP 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 (WHIEVER IS DEEPER): ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 8.62 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc

Volume of Flow Through Cell: 320* mL

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

Ambient PID/FID Reading: 0.0 ppm

Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (STABLE: over 4 readings)	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)
0	1009	41.24	Slightly Cloudy	none	20.3	1.58	1.573 mS/cm uS/cm	6.67	171.09	73.97
300	1010	41.24			20.3	1.50	1.570 mS/cm uS/cm	6.67	171.21	64.08
600	1011	41.24			20.3	1.44	1.571 mS/cm uS/cm	6.67	171.64	57.57
900	1012				20.3	1.38	1.572 mS/cm uS/cm	6.68	171.87	53.34
1200	1013				20.3	1.33	1.569 mS/cm uS/cm	6.68	171.43	48.90
1500	1014				20.3	1.27	1.572 mS/cm uS/cm	6.68	170.93	44.93
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MM 7/10/23

Start Time: 1009 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS - 51284/49554

Stop Time: 1014 Average Purge Rate (mL/min): 300 Date Calibrated: 7/10/23

SAMPLING DATA

Sample Date: 7/10/23 Sample Time: 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: MM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: MMassa TJenkins

DATE: 7-13-23 WEATHER: OVERCAST 79°

MONITORING WELL ID: MW-25 SAMPLE ID: MW25-ROX-071323

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): 36.19 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 41.02 ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): ND 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: 91.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 9.65 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): — 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	1042	36.23	clear	mod. HC	21.1	0.64	0.891 mS/cm uS/cm	6.95	-110.37	3.75
300	1043	36.23			21.4	0.61	0.889 mS/cm uS/cm	6.92	-114.09	3.59
600	1044	36.23			21.7	0.60	0.892 mS/cm uS/cm	6.91	-116.51	4.51
900	1045				22.1	0.58	0.897 mS/cm uS/cm	6.90	-118.00	5.37
1200	1046				22.5	0.55	0.898 mS/cm uS/cm	6.90	-118.47	5.94
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

7/13/23

Start Time: 1042 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 5284/16388

Stop Time: 1046 Average Purge Rate (mL/min): 300 Date Calibrated: 7-13-23

SAMPLING DATA

Sample Date: 7-13-23 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: none

VOA Vials, No Headspace ☒ Initials: MM

COMMENTS:

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

Estimated Total Purge Volume: 1000 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: MMassa EChalfant

DATE: 7/10/23 WEATHER: partly cloudy 85°

MONITORING WELL ID: MW-26 SAMPLE ID: MW26-ROX-071023

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): 33.95 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 43.68 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): N.L. ft		
Depth to Top of Screen (btoc): 38.15 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 9.45 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	1330	39.20	← clear	← none	21.8	2.78	1.138 mS/cm uS/cm	7.89	47.54	21.51
300	1331	39.10			21.2	2.39	1.134 mS/cm uS/cm	7.31	51.84	19.28
600	1332	39.02			21.2	2.06	1.131 mS/cm uS/cm	7.09	54.92	19.33
900	1333	39.01			21.0	1.88	1.131 mS/cm uS/cm	6.98	57.16	18.50
1200	1334	39.01			20.8	1.74	1.131 mS/cm uS/cm	6.92	59.08	17.13
1500	1335	39.01			20.9	1.64	1.131 mS/cm uS/cm	6.87	60.82	15.72
1800	1336				20.8	1.56	1.133 mS/cm uS/cm	6.85	62.27	14.83
2100	1337				20.9	1.50	1.131 mS/cm uS/cm	6.83	63.42	14.21
2400	1338				20.7	1.45	1.133 mS/cm uS/cm	6.82	64.39	13.17
2700	1339	↓	↓	↓	20.7	1.40	1.133 mS/cm uS/cm	6.81	65.36	12.35
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MM 7/10/23

Start Time: 1330 Elapsed Time (min): 91 Water Quality Meter ID & SN: YSI ProDSS -- 51284/49554

Stop Time: 1339 Average Purge Rate (mL/min): 300 Date Calibrated: 7/10/23

SAMPLING DATA

Sample Date: 7/10/23 Sample Time: 1345 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: MM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: MMasse, Echalfant

DATE: 7/18/23 WEATHER: cloudy 72°

MONITORING WELL ID: MW-27 SAMPLE ID: MW27-ROX-071823

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): 50.04 ft	
Depth to Water (btoc): 40.40 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 45.22 ft btoc
Depth to LNAPL/DNAPL (btoc): NL 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
Screen Length: 10 ft	
Water Column Height (not including NAPL): 9.64 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

Volume of Flow Through Cell : 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 0-0 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0910	40.50	Slight cloudy	none	19.4	1.78	0.796 (mS/cm) uS/cm	6.52	149.95	10.30
300	0911	40.60	↓	↓	19.1	1.14	0.786 (mS/cm) uS/cm	6.63	147.45	6.78
600	0912	40.60			19.0	1.03	0.784 (mS/cm) uS/cm	6.64	145.58	5.27
900	0913	40.60			19.1	0.95	0.782 (mS/cm) uS/cm	6.63	142.76	3.27
1200	0914	↓			19.1	0.88	0.784 (mS/cm) uS/cm	6.62	138.50	1.79
1500	0915				19.1	0.86	0.781 (mS/cm) uS/cm	6.61	135.89	1.14
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MM 7/18/23

Start Time: 0910 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS - 51284/463882

Stop Time: 0915 Average Purge Rate (mL/min): 300 Date Calibrated: 7/18/23

SAMPLING DATA

Sample Date: 7/18/23 Sample Time: 0920 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: MM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: MMassa Echelpant

DATE: 7-12-23 WEATHER: partly cloudy 86°

MONITORING WELL ID: MW-28 SAMPLE ID: MW28-ROX-071223

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): 39.68 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 41.77 ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NL 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 (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 4.18 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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	1205	39.77	clear	none	21.0	0.98	1.170 mS/cm uS/cm	7.05	4.93	3.14
300	1206	39.77			21.5	0.85	1.177 mS/cm uS/cm	6.88	-14.55	1.34
600	1207	39.77			21.8	0.79	1.192 mS/cm uS/cm	6.81	-30.94	0.34
900	1208				21.9	0.71	1.217 mS/cm uS/cm	6.77	-42.52	0.00
1200	1209				22.0	0.67	1.215 mS/cm uS/cm	6.75	-49.54	0.00
1500	1210				21.6	0.62	1.231 mS/cm uS/cm	6.75	-56.13	0.00
1800	1211				21.6	0.59	1.235 mS/cm uS/cm	6.75	-61.06	0.00
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MMA 7/18/23

Start Time: 1205 Elapsed Time (min): 18 Water Quality Meter ID & SN: YSI ProDSS -- 51284/4688

Stop Time: 1211 Average Purge Rate (mL/min): 300 Date Calibrated: 7-12-23

SAMPLING DATA

Sample Date: 7-12-23 Sample Time: 1215 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: MM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: Mmassa Echalfant

DATE: 7/12/23 WEATHER: partly cloudy 88°

MONITORING WELL ID: P-54 SAMPLE ID: P54-ROX-071223

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): 39.80 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): NA 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 (WHIEVER IS DEEPER): 44.80 ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 23.70 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	1316	39.97	clear	none	23.5	2.47	1.038 mS/cm uS/cm	7.40	20.06	17.45
300	1317	39.97			22.7	2.10	1.027 mS/cm uS/cm	7.12	26.04	16.93
600	1318	39.97			22.8	1.94	1.024 mS/cm uS/cm	6.99	29.89	16.02
900	1319	↓			22.6	1.88	1.025 mS/cm uS/cm	6.93	33.96	13.77
1200	1320				22.7	1.86	1.028 mS/cm uS/cm	6.88	36.22	13.42
1500	1321				22.6	1.85	1.022 mS/cm uS/cm	6.86	38.49	12.82
1800	1322				22.8	1.84	1.029 mS/cm uS/cm	6.85	40.10	12.27
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MM 7/12/23

Start Time: 1316 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS - 51284/46388

Stop Time: 1322 Average Purge Rate (mL/min): 300 Date Calibrated: 7/12/23

SAMPLING DATA

Sample Date: 7/12/23 Sample Time: 1325 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: MM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: J. Mayer E. Chalfant

DATE: 7-19-23 WEATHER: 85° Partly Cloudy

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): 40.01 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): 39.97 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: 146.2 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 10.67 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			
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							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

7/19/23

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-10-23 WEATHER: 90°F Clear

MONITORING WELL ID: P56 SAMPLE ID: P56-Rox-07|023

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): 49.25 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): 40.82 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): 49.25 ft btoc	Wellbore PID/FID Reading: 0.3 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 21.57 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	1355	44.31	Clear	Moderate	24.3	0.69	1.251 mS/cm uS/cm	7.74	-143.7	17.90
300	1356				24.3	0.64	1.253 mS/cm uS/cm	7.49	+148 ~~77.2~~	16.77
600	1357				25.0	0.59	1.244 mS/cm uS/cm	~~7.38~~	-152 ~~71.3~~	19.82
900	1358				25.4	0.55	1.248 mS/cm uS/cm	7.32	-155.2	20.86
1200	1359				25.7	0.51	1.267 mS/cm uS/cm	7.29	-158.2	28.97
1500	1400				25.7	0.48	1.270 mS/cm uS/cm	7.27	-160.2	26.93
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

7-10-23

Start Time: 1355 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS .. 4933 / 4 6388

Stop Time: 1400 Average Purge Rate (mL/min): 300 Date Calibrated: 7-10-2023

SAMPLING DATA

Sample Date: 7-10-2023 Sample Time: 1405 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: JM

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 3Q23 GW | PROJECT NUMBER: 60697537 - 3.3.1/2/3 | FIELD PERSONNEL: S. Mayer E. Chalfant

DATE: 7-13-2023 | WEATHER: 85°F Overcast

MONITORING WELL ID: P-57 | SAMPLE ID: P57-ROX-071323

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): 45.02 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 49.61 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): 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 (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 9.2 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 9.17 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1245	45.50	clear	moderate	21.0	2.76	1.014 mS/cm uS/cm	7.04	13.6	3.62
300	1246	45.55	↓	↓	21.0	2.66	1.013 mS/cm uS/cm	6.98	13.2	3.57
600	1247	45.53			21.0	0.60	1.012 mS/cm uS/cm	6.94	13.1	3.78
900	1248	45.53			21.0	0.54	1.011 mS/cm uS/cm	6.91	13.0	4.40
1200	1249	45.54			21.0	0.50	1.010 mS/cm uS/cm	6.90	12.8	4.98
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Jal Mayer 7-13-23

Start Time: 1245 | Elapsed Time (min): 4 | Water Quality Meter ID & SN: YSI ProDSS -- 45608/49391

Stop Time: 1249 | Average Purge Rate (mL/min): 300 | Date Calibrated: 7-13-23

SAMPLING DATA

Sample Date: 7-13-23 | Sample Time: 1300 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ | Initials: JM

COMMENTS:

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

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q23 GW | PROJECT NUMBER: 60697537 - 3.3.1/2/3 | FIELD PERSONNEL: J. Mayr T. Jenkins

DATE: 7-18-23 | WEATHER: 80°F Overcast

MONITORING WELL ID: P-58 | SAMPLE ID: PS8-ROX-071823

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): 43.03 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): 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): 48.03 ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 22.18 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1147	43.22	clear	Strong	21.6	1.24	1.383 mS/cm uS/cm	6.76	75.4	9.11
600	1149	43.16	↓	↓	22.2	0.74	1.379 mS/cm uS/cm	6.70	72.4	4.21
900	1150	43.15			22.6	0.70	1.372 mS/cm uS/cm	6.69	71.5	3.74
1200	1151	43.15			22.8	0.66	1.382 mS/cm uS/cm	6.69	70.4	2.17
1500	1152	43.15	↓	↓	22.8	0.65	1.393 mS/cm uS/cm	6.69	70.2	1.36
							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			

7-18-23

Start Time: 1147 | Elapsed Time (min): 5 | Water Quality Meter ID & SN: YSI ProDSS -- 15608/49391

Stop Time: 1152 | Average Purge Rate (mL/min): 300 | Date Calibrated: 7-18-23

SAMPLING DATA

Sample Date: 7-18-2023 | Sample Time: 1200 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: JM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-18-2023 WEATHER: 80°F Overcast

MONITORING WELL ID: P-59 SAMPLE ID: P59-Rox-071823

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): 45.02 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 47.91 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): 52.91 ft btoc	Wellbore PID/FID Reading: 140.2 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 27.89 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color (STABLE: over 4 readings)	Odor	Temp (°C) (Monitor Temp.)	DO (mg/L) (+/-0.2 mg/L or +/-10%)	Spec. Cond. (+/-5% or +/-2 uS/cm)	pH (+/-0.2 mg/L)	ORP (mV) (+/-20 mV)	Turb (NTU) (Monitor Turb Readings (<50))
0	0953	45.06	clear	slight	23.8	0.94	1.422 mS/cm uS/cm	6.42	137.3	2.30
300	0954				23.8	0.82	1.420 mS/cm uS/cm	6.47	133.0	2.66
900	0956				23.6	0.65	1.416 mS/cm uS/cm	6.52	125.9	4.20
1200	0957				23.6	0.60	1.416 mS/cm uS/cm	6.53	122.2	6.86
1500	0958				23.6	0.56	1.414 mS/cm uS/cm	6.54	119.4	6.95
1800	0959				23.8	0.51	1.413 mS/cm uS/cm	6.55	115.4	7.83
							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			
							mS/cm uS/cm			

JM 7-18-23

Start Time: 0953 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS - 45608/49391

Stop Time: 0959 Average Purge Rate (mL/min): 300 Date Calibrated: 7-18-23

SAMPLING DATA

Sample Date: 7-18-23 Sample Time: 1005 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: JM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: Minassa E Chalfant T Perkins

DATE: 9/17/23 WEATHER: partly cloudy 77°

MONITORING WELL ID: P-66 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): 59.72 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 35.32 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): 34.61 ft		
Depth to Top of Screen (btoc): 34.72 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 22.3 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 24.40 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			

JMA 7/18/23

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: J. Meyer E. Chalfant

DATE: 7-19-23 WEATHER: 89° Partly Cloudy

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): 43.15 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): 43.10 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: 157.6 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 25.61 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			

7-19-23

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 LEL OVR Not sampled due to Presence of LNAPL

Estimated Total Purge Volume: — mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-12-2023 WEATHER: 95°F Partly Cloudy

MONITORING WELL ID: P-74 SAMPLE ID: P74-ROX-071223

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): 41.03 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): NF ft			
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 (WHICHEVER IS DEEPER): 48.83 ft btoc	Wellbore PID/FID Reading: 7.0 ppm	
Screen Length: 25 ft			
Water Column Height (not including NAPL): 27.80 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	1255	41.24	Clear	Moderate	24.6	0.81	0.341 mS/cm uS/cm	6.47	79.8	7.31
600	1257	↓	↓	↓	24.6	0.68	0.358 mS/cm uS/cm	6.40	76.7	8.03
900	1258				24.5	0.62	0.364 mS/cm uS/cm	6.38	75.0	9.09
1200	1259				24.4	0.58	0.368 mS/cm uS/cm	6.38	73.8	9.55
1500	1300				24.4	0.54	0.370 mS/cm uS/cm	6.39	72.5	10.51
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

J. Mayer 7-12-23

Start Time: 1255 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS - 45608/19391

Stop Time: 1300 Average Purge Rate (mL/min): 300 Date Calibrated: 7-12-23

SAMPLING DATA

Sample Date: 7-12-23 Sample Time: 1305 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: JM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-11-2023 WEATHER: 85°F Partly Cloudy

MONITORING WELL ID: P-93A SAMPLE ID: P93A-ROX-071123

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): 43.26 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 48.16 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NS ft		
Depth to Top of Screen (btoc): 43.07 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): ___ ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 9.81 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)
0	1004	43.40	Clear	None	21.2	1.43	1.320 mS/cm uS/cm	6.87	156.0	0.00
600	1006	↓	↓	↓	21.2	0.80	1.305 mS/cm uS/cm	6.69	153.4	↓
900	1007				21.3	0.69	1.303 mS/cm uS/cm	6.66	151.9	
1200	1008				20.8	0.66	1.302 mS/cm uS/cm	6.65	151.2	
1500	1009				21.0	0.60	1.299 mS/cm uS/cm	6.64	150.2	
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Joe Mayer 7-11-23

Start Time: 1004 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -- 45605/49391

Stop Time: 1009 Average Purge Rate (mL/min): 300 Date Calibrated: 7-11-2023

SAMPLING DATA

Sample Date: 7-11-2023 Sample Time: 1015 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: JM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-18-2023 WEATHER: 85°F Overcast

MONITORING WELL ID: P-93B SAMPLE ID: P93B-ROX-071823

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): 44.62 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): 74.78 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 2 ft		
Water Column Height (not including NAPL): 32.16 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	1310	44.65	clear	moderate	20.1	1.20	1.324 mS/cm uS/cm	6.94	136.5	0.00
600	1312				20.1	0.83	1.331 mS/cm uS/cm	6.80	132.5	0.00
900	1313				20.1	0.72	1.332 mS/cm uS/cm	6.78	130.5	2.02
1200	1314				20.0	0.62	1.332 mS/cm uS/cm	6.77	128.2	5.69
1500	1315				20.0	0.58	1.331 mS/cm uS/cm	6.76	126.8	13.58
1800	1316				19.9	0.53	1.332 mS/cm uS/cm	6.75	125.9	17.00
							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			
							mS/cm uS/cm			
							mS/cm uS/cm			

Joe Mayer 7.18.23

Start Time: 1310 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS - 45608/49391

Stop Time: 1316 Average Purge Rate (mL/min): 300 Date Calibrated: 7-18-23

SAMPLING DATA

Sample Date: 7-18-23 Sample Time: 1320 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: JM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-14-23 WEATHER: 95°F Partly Cloudy

MONITORING WELL ID: P-93C SAMPLE ID: P93C-ROX-071423

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 95.38 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
4.45 Depth to Water (btoc): ~~44.35~~ ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 92.88 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~~ 5 ft		
Water Column Height (not including NAPL): 53.43 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ~~93.88~~ JM 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	1129	44.45	Clear	Slight	21.6	0.81	1.082 mS/cm uS/cm	6.93	40.2	~~43~~ 39.4
300	1130	↓	↓	↓	21.5	0.74	1.082 mS/cm uS/cm	6.90	40.5	39.03
600	1131				21.2	0.69	1.081 mS/cm uS/cm	6.89	40.3	35.71
900	1132				20.9	0.63	1.078 mS/cm uS/cm	6.89	40.3	33.63
1200	1133				21.1	0.58	1.072 mS/cm uS/cm	6.88	40.1	29.84
							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			
							mS/cm uS/cm			

JM 7-14-23

Start Time: 1129 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS --

Stop Time: 1133 Average Purge Rate (mL/min): 300 Date Calibrated:

SAMPLING DATA

Sample Date: 7-14-23 Sample Time: 1140 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: ~~Dup~~ MS none

VOA Vials, No Headspace ☒ Initials: JM

COMMENTS:

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

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-11-2023 WEATHER: 85°F Partly Cloudy

MONITORING WELL ID: P-93D SAMPLE ID: P93D-ROX-071123

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): 44.76 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 125.66 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: 2 ft		
Water Column Height (not including NAPL): 83.15 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: 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	1105	44.76	Clear	None	19.5	0.75	1.058 mS/cm uS/cm	6.99	143.9	1.41
300	1106	↓	↓	↓	19.6	0.75	1.058 mS/cm uS/cm	6.99	142.1	1.06
600	1107				19.5	0.74	1.059 mS/cm uS/cm	6.99	140.3	0.18
900	1108				19.5	0.75	1.060 mS/cm uS/cm	6.99	138.3	0.51
1200	1109				19.5	0.73	1.062 mS/cm uS/cm	6.99	135.8	0.00
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Tor AMW 7-11-23

Start Time: 1105 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 45608/49391

Stop Time: 1109 Average Purge Rate (mL/min): 300 Date Calibrated: 7-11-23

SAMPLING DATA

Sample Date: 7-11-2023 Sample Time: 1113 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: JM

COMMENTS:

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

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: MMassa Echelfant

DATE: 7/14/23 WEATHER: partly cloudy 81°

MONITORING WELL ID: P-114R SAMPLE ID: P114R-ROX-071423

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): 26.67 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 29.99 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NA ft		
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 (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 6.64 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1212	26.83	cloudy brown	slight	24.5	0.72	0.844 ~~mS/cm~~ uS/cm	6.82	-125.94	186.42
300	1213	26.83			24.6	0.60	0.844 ~~mS/cm~~ uS/cm	6.80	-134.02	168.60
600	1214	26.80			24.9	0.55	0.845 ~~mS/cm~~ uS/cm	6.75	-143.27	162.36
900	1215	26.83			24.9	0.52	0.847 ~~mS/cm~~ uS/cm	6.73	-148.77	143.35
1200	1216	26.83			24.7	0.49	0.849 ~~mS/cm~~ uS/cm	6.73	-151.52	129.13
1500	1217				24.5	0.46	0.848 ~~mS/cm~~ uS/cm	6.72	-154.20	108.99
1800	1222				24.3	0.41	0.845 ~~mS/cm~~ uS/cm	6.71	-160.99	53.47
3300	1223				24.1	0.40	0.8416 ~~mS/cm~~ uS/cm	6.71	-161.85	45.79
3600	1224				23.8	0.39	0.842 ~~mS/cm~~ uS/cm	6.72	-162.46	38.70
3900	1225				23.9	0.39	0.841 ~~mS/cm~~ uS/cm	6.71	-162.86	34.72
							~~mS/cm~~ uS/cm			
							~~mS/cm~~ uS/cm			
							~~mS/cm~~ uS/cm			
							~~mS/cm~~ uS/cm			
							~~mS/cm~~ uS/cm			
							~~mS/cm~~ uS/cm			

7/14/23

Start Time: 1212 Elapsed Time (min): 13 Water Quality Meter ID & SN: YSI ProDSS -- 51284/46388

Stop Time: 1225 Average Purge Rate (mL/min): 300 Date Calibrated: 7/14/23

SAMPLING DATA

Sample Date: 7/14/23 Sample Time: 1230 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: MM

COMMENTS:

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

Estimated Total Purge Volume: 3900 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q23 GW | PROJECT NUMBER: 60697537 - 3.3.1/2/3 | FIELD PERSONNEL: T. Jenkins, E Chalfant

DATE: 7/17/23 | WEATHER: 80°, PARTLY CLOUDY

MONITORING WELL ID: ROST-3-MW | SAMPLE ID: ROST-3-MW-071723 ①

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): 40.06 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 44.06 ft btoc	
Depth to LNAPL/DNAPL (btoc): — ft		Ambient PID/FID Reading: 0.0 ppm
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): 8.00 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	1250	40.15	NONE	very slight	19.49	0.714	1.143 mS/cm uS/cm	6.915	-111.80	2.385
300	1251	40.15	↓	↓	19.63	0.669	1.143 mS/cm uS/cm	6.858	-115.74	1.379
600	1252	40.15	↓	↓	19.7	0.634	1.143 mS/cm uS/cm	6.838	-117.60	0.930
900	1253	↓	↓	↓	19.74	0.597	1.143 mS/cm uS/cm	6.814	-120.70	0.981
1200	1254				19.79	0.565	1.143 mS/cm uS/cm	6.801	-123.12	0.807
1500	1256				19.78	0.549	1.143 mS/cm uS/cm	6.795	-124.48	0.268
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							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 7/17/23

Start Time: 1250 | Elapsed Time (min): 6 | Water Quality Meter ID & SN: YSI ProDSS -- 51284/16388

Stop Time: 1256 | Average Purge Rate (mL/min): 300 | Date Calibrated: 7/17/23

SAMPLING DATA

Sample Date: 7/17/23 | Sample Time: | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace [X] Initials: EOC

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-11-2023 WEATHER: 85°F Clear

MONITORING WELL ID: ROST-4-PZ(C) SAMPLE ID: ROST4PZC-ROX-071123

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc
Total Well Depth (btoc): 45.20 ft	
Depth to Water (btoc): 40.15 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 42.68 ft btoc
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
Screen Length: 10 ft	
Water Column Height (not including NAPL): 5.05 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc

Volume of Flow Through Cell: 320* mL

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

Ambient PID/FID Reading: 0.0 ppm

Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1254	40.55	Clear	Slight	19.8	1.08	1.202 mS/cm uS/cm	7.18	85.6	7.41
300	1255	40.50	↓	↓	20.8	0.84	1.193 mS/cm uS/cm	7.05	83.5	7.53
600	1256	↓			20.7	0.73	1.195 mS/cm uS/cm	7.00	81.8	6.22
900	1257				20.7	0.65	1.192 mS/cm uS/cm	6.98	80.3	5.42
1200	1258				20.9	0.60	1.189 mS/cm uS/cm	6.97	79.1	5.20
1800	1259				20.8	0.56	1.190 mS/cm uS/cm	6.96	77.9	4.80
							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			
							mS/cm uS/cm			

J. Mayer 7-11-23

Start Time: 1254 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -- 45608/49391

Stop Time: 1259 Average Purge Rate (mL/min): 300 Date Calibrated: 7-11-23

SAMPLING DATA

Sample Date: 7-11-23 Sample Time: 1305 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: JM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-12-2023 WEATHER: 80°F Partly Cloudy

MONITORING WELL ID: ROST-4-PZ(E) SAMPLE ID: ROST4PZE-ROX-071223

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): 38.95 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ~~3.7~~ 41.98 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): 6.05 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	0923	39.31	cloudy	Moderate	20.8	1.17	2.153 mS/cm uS/cm	6.97	131.2	71.01
600	0925	39.27	↓	↓	21.2	0.80	2.181 mS/cm uS/cm	6.82	117.5	37.27
900	0926	↓			21.3	0.71	2.193 mS/cm uS/cm	6.79	110.9	36.30
1200	0927				21.3	0.66	2.205 mS/cm uS/cm	6.78	104.0	61.01
1500	0928				21.4	0.62	2.215 mS/cm uS/cm	6.77	99.5	25.47
1800	0929				21.4	0.59	2.224 mS/cm uS/cm	6.76	95.3	20.45
							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			

Joe Mayer 7-12-23

Start Time: 0923 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 45608 / 49391

Stop Time: 0929 Average Purge Rate (mL/min): 300 Date Calibrated: 7-12-2023

SAMPLING DATA

Sample Date: 7-12-23 Sample Time: 0935 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: JM

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 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: T. Jenkins J. Mayer

DATE: 7-10-2023 WEATHER: 80°F Clear

MONITORING WELL ID: ROST-4-PZ(G) SAMPLE ID: ROST4PZG-ROX-071023

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): 39.99 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 42.22 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): ft		
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: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 4.62 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1158	39.99	Black	Moderate	20.5	0.48	1.345 mS/cm uS/cm	7.04	-155.6	37.94
300	1154	39.99	↓	↓	20.7	0.46	1.344 mS/cm uS/cm	7.03	-157.8	36.30
600	1200	39.99	↓	↓	20.3	0.45	1.354 mS/cm uS/cm	7.03	-159.0	36.31
900	1201	↓	↓	↓	20.3	0.44	1.338 mS/cm uS/cm	7.02	-160.2	34.05
1200	1202	↓	↓	↓	20.5	0.44	1.340 mS/cm uS/cm	7.02	-161.4	29.57
							mS/cm uS/cm			
							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			

Joe Mayer 7-10-23

Start Time: 1158 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 49331/46388

Stop Time: 1202 Average Purge Rate (mL/min): 300 Date Calibrated: 7-10-2023

SAMPLING DATA

Sample Date: 7-10-23 Sample Time: 1205 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: JM

COMMENTS:

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

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q23 GW PROJECT NUMBER: 60697537 - 3.3.1/2/3 FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-14-23 WEATHER: 98°F Partly Cloudy

MONITORING WELL ID: T-12 SAMPLE ID: T12-ROX-071423

INITIAL DATA

Well Diameter: 6 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): 72.83 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 42.80 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): NS ft		
Depth to Top of Screen (btoc): 46.83 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 51.83 ft btoc	Wellbore PID/FID Reading: 0.3 ppm
Screen Length: 26 ft		
Water Column Height (not including NAPL): 30.03 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	~~pH~~ ORP (mV)	~~ORP (mV)~~ pH	Turb (NTU)
0	1311	42.88	Clear	Moderate	23.1	0.91	1.773 mS/cm uS/cm	99.1	7.27	12.00
300	1312				23.3	0.70	1.765 mS/cm uS/cm	91.2	7.01	17.53
600	1313				23.3	0.62	1.764 mS/cm uS/cm	92.4	6.95	21.34
900	1314				23.2	0.56	1.760 mS/cm uS/cm	89.5	6.92	25.96
1200	1315				22.8	0.49	1.763 mS/cm uS/cm	86.8	6.91	12.52
1500	1316				22.4	0.45	1.760 mS/cm uS/cm	84.3	6.90	8.75
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

7-14-23

Start Time: 1311 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -- 456O8/49391

Stop Time: 1316 Average Purge Rate (mL/min): 300 Date Calibrated: 7-14-2023

SAMPLING DATA

Sample Date: 7-14-2023 Sample Time: 1325 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: SM

COMMENTS:

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

Estimated Total Purge Volume: 1500 mL

Appendix C

Data Review Forms and Laboratory Analytical Reports

Roxana Groundwater Quarterly – 3rd Quarter 2023 Data Review

Laboratory SDG: 400-240307-1-Rev.1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 8/17/2023

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

Sample Identification	Sample Identification
TB-ROX-071023-8260-A	TB-ROX-071023-8011-A
MW24-ROX-071023-EB	MW24-ROX-071023
MW3-ROX-071023	MW26-ROX-071023
TB-ROX-071023-8260-B	TB-ROX-071023-8011-B
MW1-ROX-071023-EB	MW1-ROX-071023
ROST4PZG-ROX-071023	P56-ROX-071023

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, although not indicated in the laboratory case narrative, diethyl phthalate was detected in equipment blank MW24-ROX-071023-EB. SVOC LCS/LCSD recoveries, and/or SVOC LCS/LCSD RPDs, were outside evaluation criteria. Surrogate recoveries for SVOC 2-fluorophenol in several investigative and quality control samples were outside criteria. Several VOC and PAH MS/MSD recoveries, and/or MS/MSD RPDs, were outside evaluation criteria in sample MW3-ROX-071023. The continuing calibration verification for n-butylbenzene was outside evaluation criteria, biased high. The continuing calibration verification for several analytes 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 August 17, 2023, to include missing ICV data associated with SVOCs.

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.

Although the cooler receipt form indicated headspace larger than ¼" in one or more voas, sufficient voas were available without headspace for the analyses. No qualification of data based on headspace was required.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration/Amount
MW24-ROX-071023-EB	SVOCs	Diethyl phthalate	1 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
MW24-ROX-071023	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 400-632824/13-A/14-A	SVOCs	Benzenethiol	**4/4**	8	10-120/30
LCS 400-633166/4-A/5-A	SVOCs	Benzenethiol	**3/4**	19	10-120/30
LCS 400-633166/2-A/3-A	SVOCs	2-Chlorophenol	66/**39**	**51**	40-120/30
LCS 400-633166/2-A/3-A	SVOCs	Phenol	64/46	**34**	11-120/30

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
MW24-ROX-071023	SVOCs	Benzenethiol	**UJ**
MW3-ROX-071023	SVOCs	Benzenethiol	**UJ**
MW26-ROX-071023	SVOCs	Benzenethiol	**UJ**
MW1-ROX-071023	SVOCs	Benzenethiol	**UJ**
ROST4PZG-ROX-071023	SVOCs	Benzenethiol	**UJ**
P56-ROX-071023	SVOCs	Benzenethiol	**UJ**
ROST4PZG-ROX-071023	SVOCs	2-Chlorophenol	**UJ**
P56-ROX-071023	SVOCs	2-Chlorophenol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
ROST4PZG-ROX-071023	SVOCs	2-Fluorophenol	**8**	13-113
LCS 400-632824/13-A	SVOCs	2-Fluorophenol	**9**	13-113
MB 400-633166/1-A	SVOCs	2-Fluorophenol	**4**	13-113

Qualifications due to surrogate recoveries were not required if only one of three base/neutral and/or acid SVOC surrogate recoveries were outside evaluation criteria. LCS and method blanks are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, sample MW3-ROX-071023 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
MW3-ROX-071023-MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/30
MW3-ROX-071023-MS/MSD	PAHs	1-Methylnaphthalene	**45/45**	0	50-150/40
MW3-ROX-071023-MS/MSD	PAHs	2-Methylnaphthalene	**44/46**	4	50-150/40
MW3-ROX-071023-MS/MSD	VOCs	Hexachlorobutadiene	90/59	**41**	31-149/36
MW3-ROX-071023-MS/MSD	VOCs	Isopropylbenzene	98/71	**31**	56-133/30
MW3-ROX-071023-MS/MSD	VOCs	n-Butylbenzene	87/61	**35**	41-142/31
MW3-ROX-071023-MS/MSD	VOCs	N-Propylbenzene	91/67	**31**	51-138/30
MW3-ROX-071023-MS/MSD	VOCs	p-Isopropyltoluene	91/64	**35**	48-139/30
MW3-ROX-071023-MS/MSD	VOCs	sec-Butylbenzene	92/66	**34**	50-138/30
MW3-ROX-071023-MS/MSD	VOCs	1,2,4-Trimethylbenzene	95/70	**31**	50-139/30

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
MW3-ROX-071023	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW3-ROX-071023	PAHs	1-Methylnaphthalene	**UJ**
MW3-ROX-071023	PAHs	2-Methylnaphthalene	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for n-butylbenzene was outside evaluation criteria, biased high. The continuing calibration verification for several analytes was outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
P56-ROX-071023	VOCs	n-Butylbenzene	**J**
MW3-ROX-071023	SVOCs	Benzyl alcohol	**UJ**
MW24-ROX-071023	SVOCs	Benzyl alcohol	**UJ**
MW26-ROX-071023	SVOCs	Benzyl alcohol	**UJ**
MW1-ROX-071023	SVOCs	Benzyl alcohol	**UJ**
ROST4PZG-ROX-071023	SVOCs	N-Nitrosodimethylamine	**UJ**
ROST4PZG-ROX-071023	SVOCs	Aniline	**UJ**
ROST4PZG-ROX-071023	SVOCs	Benzyl alcohol	**UJ**
P56-ROX-071023	SVOCs	N-Nitrosodimethylamine	**UJ**
P56-ROX-071023	SVOCs	Aniline	**UJ**
P56-ROX-071023	SVOCs	Benzyl alcohol	**UJ**
MW24-ROX-071023	PAHs	Pyrene	**UJ**
MW26-ROX-071023	PAHs	Pyrene	**UJ**
MW1-ROX-071023	PAHs	Pyrene	**UJ**
ROST4PZG-ROX-071023	PAHs	Pyrene	**UJ**

Sample ID	Parameter	Analyte	Qualification
P56-ROX-071023	PAHs	Pyrene	**UJ**
MW3-ROX-071023	PAHs	Pyrene	**UJ**

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ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
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100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 7/24/2023 7:59:37 AM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-240307-1

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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Job ID: 400-240307-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-240307-1

Receipt
The samples were received on 7/11/2023 9:47 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.8°C and 1.7°C

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-634057 recovered above the upper control limit for Methylene Chloride and n-Buty benzene. The samples associated with this CCV were below the reporting limit (RL) for the affected analytes; therefore, the data have been reported.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-633878 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 400-633878 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 400-633878 was outside control limits. Sample matrix interference is suspected.

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-071023-8260-A (400-240307-1), MW24-ROX-071023-EB (400-240307-3), MW24-ROX-071023 (400-240307-4), MW3-ROX-071023 (400-240307-5), MW26-ROX-071023 (400-240307-6), TB-ROX-071023-8260-B (400-240307-7), MW1-ROX-071023-EB (400-240307-9) and MW1-ROX-071023 (400-240307-10). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

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: ROST4PZG-ROX-071023 (400-240307-11) and P56-ROX-071023 (400-240307-12). 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
Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-632824 and analytical batch 400-633026 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 400-633026 recovered above the upper control limit for 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dinitrotoluene, 2-Methylphenol, 2-Nitrophenol, 4,6-Dinitro-ortho-cresol, 4-Bromophenyl phenyl ether, 4-Chlorophenyl phenyl ether, Hexachlorobenzene and Hexachlorocyclopentadiene. 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 400-633026 recovered outside acceptance criteria, low biased, for Benzyl alcohol. 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 sample contained an allowable number of surrogate compounds outside limits: (LCS 400-632824/13-A). These results have been reported and qualified.

Job ID: 400-240307-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

Method 8270E: The following analyte(s) recovered outside control limits for the LCSD associated with preparation batch 400-633166 and analytical batch 400-633421: 2-Chlorophenol. 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 400-633166 and analytical batch 400-633421 recovered outside control limits for the following analytes: 2-Chlorophenol and Phenol.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-633421 recovered outside acceptance criteria, low biased, for Benzyl alcohol, Aniline and 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: 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: ROST4PZG-ROX-071023 (400-240307-11) and (MB 400-633166/1-A). 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 400-633166 and analytical batch 400-633421 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 400-633421 recovered above the upper control limit for 4,6-Dinitro-2-methylphenol. 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 400-633421 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_SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-632824 and analytical batch 400-633116 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_SIM: <EXPLANATION_REQUIRED>P56-ROX-071023 (400-240307-12)

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 400-633182 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 QUARTERLY GW

Job ID: 400-240307-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-240307-1	TB-ROX-071023-8260-A	Water	07/10/23 12:00	07/11/23 09:47
400-240307-2	TB-ROX-071023-8011-A	Water	07/10/23 12:00	07/11/23 09:47
400-240307-3	MW24-ROX-071023-EB	Water	07/10/23 08:30	07/11/23 09:47
400-240307-4	MW24-ROX-071023	Water	07/10/23 10:20	07/11/23 09:47
400-240307-5	MW3-ROX-071023	Water	07/10/23 11:20	07/11/23 09:47
400-240307-6	MW26-ROX-071023	Water	07/10/23 13:45	07/11/23 09:47
400-240307-7	TB-ROX-071023-8260-B	Water	07/10/23 12:00	07/11/23 09:47
400-240307-8	TB-ROX-071023-8011-B	Water	07/10/23 12:00	07/11/23 09:47
400-240307-9	MW1-ROX-071023-EB	Water	07/10/23 08:30	07/11/23 09:47
400-240307-10	MW1-ROX-071023	Water	07/10/23 10:40	07/11/23 09:47
400-240307-11	ROST4PZG-ROX-071023	Water	07/10/23 12:05	07/11/23 09:47
400-240307-12	P56-ROX-071023	Water	07/10/23 14:05	07/11/23 09:47

Detection Summary

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

Job ID: 400-240307-1

Client Sample ID: TB-ROX-071023-8260-A — Lab Sample ID: 400-240307-1

No Detections.

Client Sample ID: TB-ROX-071023-8011-A — Lab Sample ID: 400-240307-2

No Detections.

Client Sample ID: MW24-ROX-071023-EB — Lab Sample ID: 400-240307-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	1.0	J	10	0.24	ug/L	1		8270E	Total/NA

Client Sample ID: MW24-ROX-071023 — Lab Sample ID: 400-240307-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	0.45	J	9.8	0.24	ug/L	1		8270E	Total/NA

Client Sample ID: MW3-ROX-071023 — Lab Sample ID: 400-240307-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.0		1.0	0.22	ug/L	1		8260D	Total/NA
Diethyl phthalate	0.65	J	10	0.24	ug/L	1		8270E	Total/NA

Client Sample ID: MW26-ROX-071023 — Lab Sample ID: 400-240307-6

No Detections.

Client Sample ID: TB-ROX-071023-8260-B — Lab Sample ID: 400-240307-7

No Detections.

Client Sample ID: TB-ROX-071023-8011-B — Lab Sample ID: 400-240307-8

No Detections.

Client Sample ID: MW1-ROX-071023-EB — Lab Sample ID: 400-240307-9

No Detections.

Client Sample ID: MW1-ROX-071023 — Lab Sample ID: 400-240307-10

No Detections.

Client Sample ID: ROST4PZG-ROX-071023 — Lab Sample ID: 400-240307-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11	J	25	10	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	3.0	J	25	2.6	ug/L	1		8260D	Total/NA
Diethyl phthalate	0.29	J	10	0.24	ug/L	1		8270E	Total/NA

Client Sample ID: P56-ROX-071023 — Lab Sample ID: 400-240307-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	31		25	10	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	5.7	J	25	2.6	ug/L	1		8260D	Total/NA
Ethylbenzene	0.83	J	1.0	0.50	ug/L	1		8260D	Total/NA
Isopropylbenzene	16		1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	39		5.0	0.63	ug/L	1		8260D	Total/NA
n-Butylbenzene	0.98	J	1.0	0.76	ug/L	1		8260D	Total/NA
N-Propylbenzene	19		1.0	0.69	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: P56-ROX-071023 (Continued)

Lab Sample ID: 400-240307-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Xylene	1.1	J	5.0	0.60	ug/L	1		8260D	Total/NA
p-Isopropyltoluene	1.0		1.0	0.71	ug/L	1		8260D	Total/NA
sec-Butylbenzene	2.0		1.0	0.70	ug/L	1		8260D	Total/NA
Toluene	1.4		1.0	0.90	ug/L	1		8260D	Total/NA
1,2,4-Trimethylbenzene	21		1.0	0.82	ug/L	1		8260D	Total/NA
1,3,5-Trimethylbenzene	6.8		1.0	0.56	ug/L	1		8260D	Total/NA
Xylenes, Total	40		10	1.6	ug/L	1		8260D	Total/NA
Acenaphthene	0.44		0.20	0.098	ug/L	1		8270E S M	Total/NA
Anthracene	0.091	J	0.20	0.046	ug/L	1		8270E S M	Total/NA
Fluorene	0.22		0.20	0.088	ug/L	1		8270E S M	Total/NA
Phenanthrene	0.63		0.20	0.089	ug/L	1		8270E S M	Total/NA
1-Methylnaphthalene	8.8		0.20	0.079	ug/L	1		8270E S M	Total/NA
2-Methylnaphthalene	7.4		0.20	0.065	ug/L	1		8270E S M	Total/NA
Dibenzofuran	0.49	J	10	0.17	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: 400-240307-1

Client Sample ID: TB-ROX-071023-8260-A
Date Collected: 07/10/23 12:00
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-1
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			07/20/23 16:21	1
Acrolein	ND		20	3.3	ug/L			07/20/23 16:21	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/23 16:21	1
Benzene	ND		1.0	0.50	ug/L			07/20/23 16:21	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/23 16:21	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/20/23 16:21	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/23 16:21	1
Bromoform	ND		5.0	0.25	ug/L			07/20/23 16:21	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/23 16:21	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/20/23 16:21	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/23 16:21	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/20/23 16:21	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/20/23 16:21	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/23 16:21	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/23 16:21	1
Chloroform	ND		1.0	0.90	ug/L			07/20/23 16:21	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/20/23 16:21	1
Chloromethane	ND		1.0	0.90	ug/L			07/20/23 16:21	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/20/23 16:21	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/23 16:21	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/20/23 16:21	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/23 16:21	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/23 16:21	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/23 16:21	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/23 16:21	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/23 16:21	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/20/23 16:21	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/23 16:21	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 16:21	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 16:21	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 16:21	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/23 16:21	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/23 16:21	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/23 16:21	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/20/23 16:21	1
2-Hexanone	ND		25	1.4	ug/L			07/20/23 16:21	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/23 16:21	1
Methylene bromide	ND		5.0	0.22	ug/L			07/20/23 16:21	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/23 16:21	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/23 16:21	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/20/23 16:21	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/20/23 16:21	1
Naphthalene	ND		5.0	3.0	ug/L			07/20/23 16:21	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/23 16:21	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/23 16:21	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/23 16:21	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/23 16:21	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/23 16:21	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/23 16:21	1

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

Job ID: 400-240307-1

Client Sample ID: TB-ROX-071023-8260-A
Date Collected: 07/10/23 12:00
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-1
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			07/20/23 16:21	1
Styrene	ND		1.0	1.0	ug/L			07/20/23 16:21	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/23 16:21	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/20/23 16:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/23 16:21	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/20/23 16:21	1
Toluene	ND		1.0	0.90	ug/L			07/20/23 16:21	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/23 16:21	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/20/23 16:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/20/23 16:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/23 16:21	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/20/23 16:21	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/20/23 16:21	1
Trichloroethene	ND		1.0	0.15	ug/L			07/20/23 16:21	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/23 16:21	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/23 16:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/23 16:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/23 16:21	1
Vinyl acetate	ND		25	0.93	ug/L			07/20/23 16:21	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/23 16:21	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/23 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*07/20/23 16:21*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/20/23 16:21*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*07/20/23 16:21*	*1*

Client: AECOM Technical Services Inc.
Job ID: 400-240307-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-071023-8011-A
Lab Sample ID: 400-240307-2
Date Collected: 07/10/23 12:00
Matrix: Water
Date Received: 07/11/23 09:47

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		07/13/23 14:23	07/14/23 20:22	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		07/13/23 14:23	07/14/23 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*51 - 149*	*07/13/23 14:23*	*07/14/23 20:22*	*1*

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

Job ID: 400-240307-1

Client Sample ID: MW24-ROX-071023-EB
Date Collected: 07/10/23 08:30
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-3
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			07/20/23 16:48	1
Acrolein	ND		20	3.3	ug/L			07/20/23 16:48	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/23 16:48	1
Benzene	ND		1.0	0.50	ug/L			07/20/23 16:48	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/23 16:48	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/20/23 16:48	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/23 16:48	1
Bromoform	ND		5.0	0.25	ug/L			07/20/23 16:48	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/23 16:48	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/20/23 16:48	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/23 16:48	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/20/23 16:48	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/20/23 16:48	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/23 16:48	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/23 16:48	1
Chloroform	ND		1.0	0.90	ug/L			07/20/23 16:48	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/20/23 16:48	1
Chloromethane	ND		1.0	0.90	ug/L			07/20/23 16:48	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/20/23 16:48	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/23 16:48	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/20/23 16:48	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/23 16:48	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/23 16:48	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/23 16:48	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/23 16:48	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/23 16:48	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/20/23 16:48	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/23 16:48	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 16:48	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 16:48	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 16:48	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/23 16:48	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/23 16:48	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/23 16:48	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/20/23 16:48	1
2-Hexanone	ND		25	1.4	ug/L			07/20/23 16:48	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/23 16:48	1
Methylene bromide	ND		5.0	0.22	ug/L			07/20/23 16:48	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/23 16:48	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/23 16:48	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/20/23 16:48	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/20/23 16:48	1
Naphthalene	ND		5.0	3.0	ug/L			07/20/23 16:48	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/23 16:48	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/23 16:48	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/23 16:48	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/23 16:48	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/23 16:48	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/23 16:48	1

Client Sample ID: MW24-ROX-071023-EB
Date Collected: 07/10/23 08:30
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-3
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			07/20/23 16:48	1
Styrene	ND		1.0	1.0	ug/L			07/20/23 16:48	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/23 16:48	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/20/23 16:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/23 16:48	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/20/23 16:48	1
Toluene	ND		1.0	0.90	ug/L			07/20/23 16:48	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/23 16:48	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/20/23 16:48	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/20/23 16:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/23 16:48	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/20/23 16:48	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/20/23 16:48	1
Trichloroethene	ND		1.0	0.15	ug/L			07/20/23 16:48	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/23 16:48	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/23 16:48	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/23 16:48	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/23 16:48	1
Vinyl acetate	ND		25	0.93	ug/L			07/20/23 16:48	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/23 16:48	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/23 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*72 - 130*		*07/20/23 16:48*	*1*
Dibromofluoromethane	*97*		*75 - 126*		*07/20/23 16:48*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*07/20/23 16:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		07/12/23 09:20	07/14/23 12:51	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/12/23 09:20	07/14/23 12:51	1
Anthracene	ND		0.20	0.048	ug/L		07/12/23 09:20	07/14/23 12:51	1
Benzo[a]anthracene	ND		0.20	0.035	ug/L		07/12/23 09:20	07/14/23 12:51	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		07/12/23 09:20	07/14/23 12:51	1
Benzo[b]fluoranthene	ND		0.20	0.038	ug/L		07/12/23 09:20	07/14/23 12:51	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/12/23 09:20	07/14/23 12:51	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		07/12/23 09:20	07/14/23 12:51	1
Chrysene	ND		0.20	0.034	ug/L		07/12/23 09:20	07/14/23 12:51	1
Dibenz(a,h)an hracene	ND		0.20	0.049	ug/L		07/12/23 09:20	07/14/23 12:51	1
Fluoranthene	ND		0.20	0.035	ug/L		07/12/23 09:20	07/14/23 12:51	1
Fluorene	ND		0.20	0.090	ug/L		07/12/23 09:20	07/14/23 12:51	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.035	ug/L		07/12/23 09:20	07/14/23 12:51	1
Phenanthrene	ND		0.20	0.091	ug/L		07/12/23 09:20	07/14/23 12:51	1
Pyrene	ND		0.20	0.040	ug/L		07/12/23 09:20	07/14/23 12:51	1
1-Methylnaphthalene	ND		0.20	0.081	ug/L		07/12/23 09:20	07/14/23 12:51	1
2-Methylnaphthalene	ND		0.20	0.067	ug/L		07/12/23 09:20	07/14/23 12:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*121*		*18 - 147*	*07/12/23 09:20*	*07/14/23 12:51*	*1*
2-Fluorobiphenyl	*106*		*15 - 128*	*07/12/23 09:20*	*07/14/23 12:51*	*1*

Client Sample ID: MW24-ROX-071023-EB
Lab Sample ID: 400-240307-3
Date Collected: 07/10/23 08:30
Matrix: Water
Date Received: 07/11/23 09:47

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*99*		*10 - 144*	*07/12/23 09:20*	*07/14/23 12:51*	*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		07/12/23 09:20	07/13/23 17:56	1
Benzenethiol	ND	*-	10	1.7	ug/L		07/12/23 09:20	07/13/23 17:56	1
Benzoic acid	ND		30	7.4	ug/L		07/12/23 09:20	07/13/23 17:56	1
Benzyl alcohol	ND		10	2.0	ug/L		07/12/23 09:20	07/13/23 17:56	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/12/23 09:20	07/13/23 17:56	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/12/23 09:20	07/13/23 17:56	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/12/23 09:20	07/13/23 17:56	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/12/23 09:20	07/13/23 17:56	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/12/23 09:20	07/13/23 17:56	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/12/23 09:20	07/13/23 17:56	1
4-Chloroaniline	ND		10	3.5	ug/L		07/12/23 09:20	07/13/23 17:56	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/12/23 09:20	07/13/23 17:56	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/12/23 09:20	07/13/23 17:56	1
2-Chlorophenol	ND		10	2.2	ug/L		07/12/23 09:20	07/13/23 17:56	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/12/23 09:20	07/13/23 17:56	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/12/23 09:20	07/13/23 17:56	1
Dibenzofuran	ND		10	0.17	ug/L		07/12/23 09:20	07/13/23 17:56	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/12/23 09:20	07/13/23 17:56	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/12/23 09:20	07/13/23 17:56	1
Diethyl phthalate	**1.0**	**J**	10	0.24	ug/L		07/12/23 09:20	07/13/23 17:56	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/12/23 09:20	07/13/23 17:56	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/12/23 09:20	07/13/23 17:56	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/12/23 09:20	07/13/23 17:56	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/12/23 09:20	07/13/23 17:56	1
2,4-Dinitrophenol	ND		30	3.5	ug/L		07/12/23 09:20	07/13/23 17:56	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/12/23 09:20	07/13/23 17:56	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/12/23 09:20	07/13/23 17:56	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/12/23 09:20	07/13/23 17:56	1
1,4-Dioxane	ND		10	1.0	ug/L		07/12/23 09:20	07/13/23 17:56	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/12/23 09:20	07/13/23 17:56	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/12/23 09:20	07/13/23 17:56	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/12/23 09:20	07/13/23 17:56	1
Hexachloroethane	ND		10	4.3	ug/L		07/12/23 09:20	07/13/23 17:56	1
Indene	ND		10	1.0	ug/L		07/12/23 09:20	07/13/23 17:56	1
Isophorone	ND		10	0.14	ug/L		07/12/23 09:20	07/13/23 17:56	1
2-Methylphenol	ND		10	1.8	ug/L		07/12/23 09:20	07/13/23 17:56	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		07/12/23 09:20	07/13/23 17:56	1
2-Nitroaniline	ND		10	2.2	ug/L		07/12/23 09:20	07/13/23 17:56	1
3-Nitroaniline	ND		10	1.8	ug/L		07/12/23 09:20	07/13/23 17:56	1
4-Nitroaniline	ND		10	1.5	ug/L		07/12/23 09:20	07/13/23 17:56	1
Nitrobenzene	ND		10	0.13	ug/L		07/12/23 09:20	07/13/23 17:56	1
2-Nitrophenol	ND		10	5.3	ug/L		07/12/23 09:20	07/13/23 17:56	1
4-Nitrophenol	ND		10	2.1	ug/L		07/12/23 09:20	07/13/23 17:56	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/12/23 09:20	07/13/23 17:56	1

Client: AECOM Technical Services Inc.
Job ID: 400-240307-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: MW24-ROX-071023-EB
Lab Sample ID: 400-240307-3
Date Collected: 07/10/23 08:30
Matrix: Water
Date Received: 07/11/23 09:47

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		07/12/23 09:20	07/13/23 17:56	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/12/23 09:20	07/13/23 17:56	1
Pentachlorophenol	ND		20	1.4	ug/L		07/12/23 09:20	07/13/23 17:56	1
Phenol	ND		10	2.6	ug/L		07/12/23 09:20	07/13/23 17:56	1
Pyridine	ND		10	3.3	ug/L		07/12/23 09:20	07/13/23 17:56	1
Quinoline	ND		10	4.6	ug/L		07/12/23 09:20	07/13/23 17:56	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/12/23 09:20	07/13/23 17:56	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/12/23 09:20	07/13/23 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*92*		*46 - 124*	*07/12/23 09:20*	*07/13/23 17:56*	*1*
2-Fluorophenol	*15*		*13 - 113*	*07/12/23 09:20*	*07/13/23 17:56*	*1*
Nitrobenzene-d5	*81*		*36 - 126*	*07/12/23 09:20*	*07/13/23 17:56*	*1*
Phenol-d5	*47*		*17 - 127*	*07/12/23 09:20*	*07/13/23 17:56*	*1*
Terphenyl-d14	*119*		*44 - 149*	*07/12/23 09:20*	*07/13/23 17:56*	*1*
2,4,6-Tribromophenol	*85*		*26 - 150*	*07/12/23 09:20*	*07/13/23 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		0.030	0.017	ug/L		07/13/23 14:23	07/14/23 20:43	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/13/23 14:23	07/14/23 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*51 - 149*	*07/13/23 14:23*	*07/14/23 20:43*	*1*

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

Job ID: 400-240307-1

Client Sample ID: MW24-ROX-071023
Date Collected: 07/10/23 10:20
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-4
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			07/20/23 19:04	1
Acrolein	ND		20	3.3	ug/L			07/20/23 19:04	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/23 19:04	1
Benzene	ND		1.0	0.50	ug/L			07/20/23 19:04	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/23 19:04	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/20/23 19:04	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/23 19:04	1
Bromoform	ND		5.0	0.25	ug/L			07/20/23 19:04	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/23 19:04	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/20/23 19:04	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/23 19:04	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/20/23 19:04	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/20/23 19:04	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/23 19:04	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/23 19:04	1
Chloroform	ND		1.0	0.90	ug/L			07/20/23 19:04	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/20/23 19:04	1
Chloromethane	ND		1.0	0.90	ug/L			07/20/23 19:04	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/20/23 19:04	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/23 19:04	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/20/23 19:04	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/23 19:04	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/23 19:04	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/23 19:04	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/23 19:04	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/23 19:04	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/20/23 19:04	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/23 19:04	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 19:04	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 19:04	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 19:04	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/23 19:04	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/23 19:04	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/23 19:04	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/20/23 19:04	1
2-Hexanone	ND		25	1.4	ug/L			07/20/23 19:04	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/23 19:04	1
Methylene bromide	ND		5.0	0.22	ug/L			07/20/23 19:04	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/23 19:04	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/23 19:04	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/20/23 19:04	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/20/23 19:04	1
Naphthalene	ND		5.0	3.0	ug/L			07/20/23 19:04	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/23 19:04	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/23 19:04	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/23 19:04	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/23 19:04	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/23 19:04	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/23 19:04	1

Client Sample ID: MW24-ROX-071023
Date Collected: 07/10/23 10:20
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-4
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			07/20/23 19:04	1
Styrene	ND		1.0	1.0	ug/L			07/20/23 19:04	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/23 19:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/20/23 19:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/23 19:04	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/20/23 19:04	1
Toluene	ND		1.0	0.90	ug/L			07/20/23 19:04	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/23 19:04	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/20/23 19:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/20/23 19:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/23 19:04	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/20/23 19:04	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/20/23 19:04	1
Trichloroethene	ND		1.0	0.15	ug/L			07/20/23 19:04	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/23 19:04	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/23 19:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/23 19:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/23 19:04	1
Vinyl acetate	ND		25	0.93	ug/L			07/20/23 19:04	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/23 19:04	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/23 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*07/20/23 19:04*	*1*
Dibromofluoromethane	*99*		*75 - 126*		*07/20/23 19:04*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/20/23 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	ND		0.20	0.097	ug/L		07/12/23 09:20	07/14/23 13:12	1
Acenaphthylene	ND		0.20	0.043	ug/L		07/12/23 09:20	07/14/23 13:12	1
Anthracene	ND		0.20	0.046	ug/L		07/12/23 09:20	07/14/23 13:12	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		07/12/23 09:20	07/14/23 13:12	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/12/23 09:20	07/14/23 13:12	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		07/12/23 09:20	07/14/23 13:12	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/12/23 09:20	07/14/23 13:12	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		07/12/23 09:20	07/14/23 13:12	1
Chrysene	ND		0.20	0.032	ug/L		07/12/23 09:20	07/14/23 13:12	1
Dibenz(a,h)an hracene	ND		0.20	0.047	ug/L		07/12/23 09:20	07/14/23 13:12	1
Fluoranthene	ND		0.20	0.033	ug/L		07/12/23 09:20	07/14/23 13:12	1
Fluorene	ND		0.20	0.088	ug/L		07/12/23 09:20	07/14/23 13:12	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		07/12/23 09:20	07/14/23 13:12	1
Phenanthrene	ND		0.20	0.089	ug/L		07/12/23 09:20	07/14/23 13:12	1
Pyrene	ND		0.20	0.038	ug/L		07/12/23 09:20	07/14/23 13:12	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		07/12/23 09:20	07/14/23 13:12	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		07/12/23 09:20	07/14/23 13:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*108*		*18 - 147*	*07/12/23 09:20*	*07/14/23 13:12*	*1*
2-Fluorobiphenyl	*95*		*15 - 128*	*07/12/23 09:20*	*07/14/23 13:12*	*1*

Client Sample ID: MW24-ROX-071023
Date Collected: 07/10/23 10:20
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-4
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*	*07/12/23 09:20*	*07/14/23 13:12*	*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		07/12/23 09:20	07/13/23 18:23	1
Benzenethiol	ND	*-	9.8	1.7	ug/L		07/12/23 09:20	07/13/23 18:23	1
Benzoic acid	ND		30	7.2	ug/L		07/12/23 09:20	07/13/23 18:23	1
Benzyl alcohol	ND		9.8	2.0	ug/L		07/12/23 09:20	07/13/23 18:23	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		07/12/23 09:20	07/13/23 18:23	1
Bis(2-chloroethyl)ether	ND		9.8	2.7	ug/L		07/12/23 09:20	07/13/23 18:23	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		07/12/23 09:20	07/13/23 18:23	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		07/12/23 09:20	07/13/23 18:23	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		07/12/23 09:20	07/13/23 18:23	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		07/12/23 09:20	07/13/23 18:23	1
4-Chloroaniline	ND		9.8	3.3	ug/L		07/12/23 09:20	07/13/23 18:23	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		07/12/23 09:20	07/13/23 18:23	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		07/12/23 09:20	07/13/23 18:23	1
2-Chlorophenol	ND		9.8	2.2	ug/L		07/12/23 09:20	07/13/23 18:23	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		07/12/23 09:20	07/13/23 18:23	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		07/12/23 09:20	07/13/23 18:23	1
Dibenzofuran	ND		9.8	0.17	ug/L		07/12/23 09:20	07/13/23 18:23	1
3,3'-Dichlorobenzidine	ND		9.8	2.6	ug/L		07/12/23 09:20	07/13/23 18:23	1
2,4-Dichlorophenol	ND		9.8	3.0	ug/L		07/12/23 09:20	07/13/23 18:23	1
Diethyl phthalate	**0.45**	**J**	9.8	0.24	ug/L		07/12/23 09:20	07/13/23 18:23	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		07/12/23 09:20	07/13/23 18:23	1
Dimethyl phthalate	ND		9.8	0.17	ug/L		07/12/23 09:20	07/13/23 18:23	1
Di-n-butyl phthalate	ND		9.8	2.7	ug/L		07/12/23 09:20	07/13/23 18:23	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		07/12/23 09:20	07/13/23 18:23	1
2,4-Dinitrophenol	ND		30	3.3	ug/L		07/12/23 09:20	07/13/23 18:23	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		07/12/23 09:20	07/13/23 18:23	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		07/12/23 09:20	07/13/23 18:23	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		07/12/23 09:20	07/13/23 18:23	1
1,4-Dioxane	ND		9.8	0.98	ug/L		07/12/23 09:20	07/13/23 18:23	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		07/12/23 09:20	07/13/23 18:23	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		07/12/23 09:20	07/13/23 18:23	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/12/23 09:20	07/13/23 18:23	1
Hexachloroethane	ND		9.8	4.1	ug/L		07/12/23 09:20	07/13/23 18:23	1
Indene	ND		9.8	0.98	ug/L		07/12/23 09:20	07/13/23 18:23	1
Isophorone	ND		9.8	0.14	ug/L		07/12/23 09:20	07/13/23 18:23	1
2-Methylphenol	ND		9.8	1.8	ug/L		07/12/23 09:20	07/13/23 18:23	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		07/12/23 09:20	07/13/23 18:23	1
2-Nitroaniline	ND		9.8	2.2	ug/L		07/12/23 09:20	07/13/23 18:23	1
3-Nitroaniline	ND		9.8	1.8	ug/L		07/12/23 09:20	07/13/23 18:23	1
4-Nitroaniline	ND		9.8	1.5	ug/L		07/12/23 09:20	07/13/23 18:23	1
Nitrobenzene	ND		9.8	0.13	ug/L		07/12/23 09:20	07/13/23 18:23	1
2-Nitrophenol	ND		9.8	5.1	ug/L		07/12/23 09:20	07/13/23 18:23	1
4-Nitrophenol	ND		9.8	2.1	ug/L		07/12/23 09:20	07/13/23 18:23	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		07/12/23 09:20	07/13/23 18:23	1

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

Job ID: 400-240307-1

Client Sample ID: MW24-ROX-071023
Date Collected: 07/10/23 10:20
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-4
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	3.2	ug/L		07/12/23 09:20	07/13/23 18:23	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		07/12/23 09:20	07/13/23 18:23	1
Pentachlorophenol	ND		20	1.4	ug/L		07/12/23 09:20	07/13/23 18:23	1
Phenol	ND		9.8	2.6	ug/L		07/12/23 09:20	07/13/23 18:23	1
Pyridine	ND		9.8	3.1	ug/L		07/12/23 09:20	07/13/23 18:23	1
Quinoline	ND		9.8	4.4	ug/L		07/12/23 09:20	07/13/23 18:23	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		07/12/23 09:20	07/13/23 18:23	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		07/12/23 09:20	07/13/23 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*87*		*46 - 124*	*07/12/23 09:20*	*07/13/23 18:23*	*1*
2-Fluorophenol	*25*		*13 - 113*	*07/12/23 09:20*	*07/13/23 18:23*	*1*
Nitrobenzene-d5	*77*		*36 - 126*	*07/12/23 09:20*	*07/13/23 18:23*	*1*
Phenol-d5	*51*		*17 - 127*	*07/12/23 09:20*	*07/13/23 18:23*	*1*
Terphenyl-d14	*115*		*44 - 149*	*07/12/23 09:20*	*07/13/23 18:23*	*1*
2,4,6-Tribromophenol	*69*		*26 - 150*	*07/12/23 09:20*	*07/13/23 18:23*	*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		07/13/23 14:23	07/14/23 21:04	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		07/13/23 14:23	07/14/23 21:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*51 - 149*	*07/13/23 14:23*	*07/14/23 21:04*	*1*

Client Sample ID: MW3-ROX-071023
Date Collected: 07/10/23 11:20
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-5
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			07/20/23 12:43	1
Acrolein	ND		20	3.3	ug/L			07/20/23 12:43	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/23 12:43	1
Benzene	ND		1.0	0.50	ug/L			07/20/23 12:43	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/23 12:43	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/20/23 12:43	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/23 12:43	1
Bromoform	ND		5.0	0.25	ug/L			07/20/23 12:43	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/23 12:43	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/20/23 12:43	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/23 12:43	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/20/23 12:43	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/20/23 12:43	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/23 12:43	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			07/20/23 12:43	1
Chloroform	ND		1.0	0.90	ug/L			07/20/23 12:43	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/20/23 12:43	1
Chloromethane	ND		1.0	0.90	ug/L			07/20/23 12:43	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/20/23 12:43	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/23 12:43	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/20/23 12:43	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/23 12:43	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/23 12:43	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/23 12:43	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/23 12:43	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/23 12:43	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/20/23 12:43	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/23 12:43	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 12:43	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 12:43	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 12:43	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/23 12:43	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/23 12:43	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/23 12:43	1
Hexachlorobutadiene	ND	F2	5.0	0.90	ug/L			07/20/23 12:43	1
2-Hexanone	ND		25	1.4	ug/L			07/20/23 12:43	1
Isopropylbenzene	ND	F2	1.0	0.53	ug/L			07/20/23 12:43	1
Methylene bromide	ND		5.0	0.22	ug/L			07/20/23 12:43	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/23 12:43	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/23 12:43	1
Methyl tert-butyl ether	**1.0**		1.0	0.22	ug/L			07/20/23 12:43	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/20/23 12:43	1
Naphthalene	ND		5.0	3.0	ug/L			07/20/23 12:43	1
n-Butylbenzene	ND	F2	1.0	0.76	ug/L			07/20/23 12:43	1
N-Propylbenzene	ND	F2	1.0	0.69	ug/L			07/20/23 12:43	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/23 12:43	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/23 12:43	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/23 12:43	1
p-Isopropyltoluene	ND	F2	1.0	0.71	ug/L			07/20/23 12:43	1

Client Sample ID: MW3-ROX-071023
Date Collected: 07/10/23 11:20
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-5
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	F2	1.0	0.70	ug/L			07/20/23 12:43	1
Styrene	ND		1.0	1.0	ug/L			07/20/23 12:43	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/23 12:43	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/20/23 12:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/23 12:43	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/20/23 12:43	1
Toluene	ND		1.0	0.90	ug/L			07/20/23 12:43	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/23 12:43	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/20/23 12:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/20/23 12:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/23 12:43	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/20/23 12:43	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/20/23 12:43	1
Trichloroethene	ND		1.0	0.15	ug/L			07/20/23 12:43	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/23 12:43	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/23 12:43	1
1,2,4-Trimethylbenzene	ND	F2	1.0	0.82	ug/L			07/20/23 12:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/23 12:43	1
Vinyl acetate	ND		25	0.93	ug/L			07/20/23 12:43	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/23 12:43	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/23 12:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*07/20/23 12:43*	*1*
Dibromofluoromethane	*99*		*75 - 126*		*07/20/23 12:43*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/20/23 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	0.10	ug/L		07/12/23 09:20	07/14/23 15:17	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/12/23 09:20	07/14/23 15:17	1
Anthracene	ND		0.20	0.048	ug/L		07/12/23 09:20	07/14/23 15:17	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/12/23 09:20	07/14/23 15:17	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		07/12/23 09:20	07/14/23 15:17	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/12/23 09:20	07/14/23 15:17	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/12/23 09:20	07/14/23 15:17	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		07/12/23 09:20	07/14/23 15:17	1
Chrysene	ND		0.20	0.033	ug/L		07/12/23 09:20	07/14/23 15:17	1
Dibenz(a,h)an hracene	ND		0.20	0.049	ug/L		07/12/23 09:20	07/14/23 15:17	1
Fluoranthene	ND		0.20	0.034	ug/L		07/12/23 09:20	07/14/23 15:17	1
Fluorene	ND		0.20	0.090	ug/L		07/12/23 09:20	07/14/23 15:17	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/12/23 09:20	07/14/23 15:17	1
Phenanthrene	ND		0.20	0.091	ug/L		07/12/23 09:20	07/14/23 15:17	1
Pyrene	ND		0.20	0.039	ug/L		07/12/23 09:20	07/14/23 15:17	1
1-Methylnaphthalene	ND	F1	0.20	0.081	ug/L		07/12/23 09:20	07/14/23 15:17	1
2-Methylnaphthalene	ND	F1	0.20	0.067	ug/L		07/12/23 09:20	07/14/23 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*62*		*18 - 147*	*07/12/23 09:20*	*07/14/23 15:17*	*1*
2-Fluorobiphenyl	*96*		*15 - 128*	*07/12/23 09:20*	*07/14/23 15:17*	*1*

Client Sample ID: MW3-ROX-071023
Date Collected: 07/10/23 11:20
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-5
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*	*07/12/23 09:20*	*07/14/23 15:17*	*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		07/12/23 09:20	07/13/23 17:30	1
Benzenethiol	ND	*-	10	1.7	ug/L		07/12/23 09:20	07/13/23 17:30	1
Benzoic acid	ND		30	7.4	ug/L		07/12/23 09:20	07/13/23 17:30	1
Benzyl alcohol	ND		10	2.0	ug/L		07/12/23 09:20	07/13/23 17:30	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/12/23 09:20	07/13/23 17:30	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/12/23 09:20	07/13/23 17:30	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/12/23 09:20	07/13/23 17:30	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/12/23 09:20	07/13/23 17:30	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/12/23 09:20	07/13/23 17:30	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/12/23 09:20	07/13/23 17:30	1
4-Chloroaniline	ND		10	3.4	ug/L		07/12/23 09:20	07/13/23 17:30	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/12/23 09:20	07/13/23 17:30	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/12/23 09:20	07/13/23 17:30	1
2-Chlorophenol	ND		10	2.2	ug/L		07/12/23 09:20	07/13/23 17:30	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/12/23 09:20	07/13/23 17:30	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/12/23 09:20	07/13/23 17:30	1
Dibenzofuran	ND		10	0.17	ug/L		07/12/23 09:20	07/13/23 17:30	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/12/23 09:20	07/13/23 17:30	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/12/23 09:20	07/13/23 17:30	1
Diethyl phthalate	**0.65**	**J**	10	0.24	ug/L		07/12/23 09:20	07/13/23 17:30	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/12/23 09:20	07/13/23 17:30	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/12/23 09:20	07/13/23 17:30	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/12/23 09:20	07/13/23 17:30	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/12/23 09:20	07/13/23 17:30	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/12/23 09:20	07/13/23 17:30	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/12/23 09:20	07/13/23 17:30	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/12/23 09:20	07/13/23 17:30	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/12/23 09:20	07/13/23 17:30	1
1,4-Dioxane	ND		10	1.0	ug/L		07/12/23 09:20	07/13/23 17:30	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/12/23 09:20	07/13/23 17:30	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/12/23 09:20	07/13/23 17:30	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/12/23 09:20	07/13/23 17:30	1
Hexachloroethane	ND		10	4.3	ug/L		07/12/23 09:20	07/13/23 17:30	1
Indene	ND		10	1.0	ug/L		07/12/23 09:20	07/13/23 17:30	1
Isophorone	ND		10	0.14	ug/L		07/12/23 09:20	07/13/23 17:30	1
2-Methylphenol	ND		10	1.8	ug/L		07/12/23 09:20	07/13/23 17:30	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/12/23 09:20	07/13/23 17:30	1
2-Nitroaniline	ND		10	2.2	ug/L		07/12/23 09:20	07/13/23 17:30	1
3-Nitroaniline	ND		10	1.8	ug/L		07/12/23 09:20	07/13/23 17:30	1
4-Nitroaniline	ND		10	1.5	ug/L		07/12/23 09:20	07/13/23 17:30	1
Nitrobenzene	ND		10	0.13	ug/L		07/12/23 09:20	07/13/23 17:30	1
2-Nitrophenol	ND		10	5.3	ug/L		07/12/23 09:20	07/13/23 17:30	1
4-Nitrophenol	ND		10	2.1	ug/L		07/12/23 09:20	07/13/23 17:30	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/12/23 09:20	07/13/23 17:30	1

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

Job ID: 400-240307-1

Client Sample ID: MW3-ROX-071023
Date Collected: 07/10/23 11:20
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-5
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	3.3	ug/L		07/12/23 09:20	07/13/23 17:30	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/12/23 09:20	07/13/23 17:30	1
Pentachlorophenol	ND		20	1.4	ug/L		07/12/23 09:20	07/13/23 17:30	1
Phenol	ND		10	2.6	ug/L		07/12/23 09:20	07/13/23 17:30	1
Pyridine	ND		10	3.2	ug/L		07/12/23 09:20	07/13/23 17:30	1
Quinoline	ND		10	4.6	ug/L		07/12/23 09:20	07/13/23 17:30	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/12/23 09:20	07/13/23 17:30	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/12/23 09:20	07/13/23 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*87*		*46 - 124*	*07/12/23 09:20*	*07/13/23 17:30*	*1*
2-Fluorophenol	*16*		*13 - 113*	*07/12/23 09:20*	*07/13/23 17:30*	*1*
Nitrobenzene-d5	*79*		*36 - 126*	*07/12/23 09:20*	*07/13/23 17:30*	*1*
Phenol-d5	*42*		*17 - 127*	*07/12/23 09:20*	*07/13/23 17:30*	*1*
Terphenyl-d14	*77*		*44 - 149*	*07/12/23 09:20*	*07/13/23 17:30*	*1*
2,4,6-Tribromophenol	*94*		*26 - 150*	*07/12/23 09:20*	*07/13/23 17:30*	*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		0.028	0.016	ug/L		07/13/23 14:23	07/14/23 21:25	1
1,2-Dibromoethane	ND		0.019	0.014	ug/L		07/13/23 14:23	07/14/23 21:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*51 - 149*	*07/13/23 14:23*	*07/14/23 21:25*	*1*

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

Job ID: 400-240307-1

Client Sample ID: MW26-ROX-071023
Date Collected: 07/10/23 13:45
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-6
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			07/20/23 19:31	1
Acrolein	ND		20	3.3	ug/L			07/20/23 19:31	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/23 19:31	1
Benzene	ND		1.0	0.50	ug/L			07/20/23 19:31	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/23 19:31	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/20/23 19:31	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/23 19:31	1
Bromoform	ND		5.0	0.25	ug/L			07/20/23 19:31	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/23 19:31	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/20/23 19:31	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/23 19:31	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/20/23 19:31	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/20/23 19:31	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/23 19:31	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/23 19:31	1
Chloroform	ND		1.0	0.90	ug/L			07/20/23 19:31	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/20/23 19:31	1
Chloromethane	ND		1.0	0.90	ug/L			07/20/23 19:31	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/20/23 19:31	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/23 19:31	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/20/23 19:31	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/23 19:31	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/23 19:31	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/23 19:31	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/23 19:31	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/23 19:31	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/20/23 19:31	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/23 19:31	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 19:31	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 19:31	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 19:31	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/23 19:31	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/23 19:31	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/23 19:31	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/20/23 19:31	1
2-Hexanone	ND		25	1.4	ug/L			07/20/23 19:31	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/23 19:31	1
Methylene bromide	ND		5.0	0.22	ug/L			07/20/23 19:31	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/23 19:31	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/23 19:31	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/20/23 19:31	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/20/23 19:31	1
Naphthalene	ND		5.0	3.0	ug/L			07/20/23 19:31	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/23 19:31	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/23 19:31	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/23 19:31	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/23 19:31	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/23 19:31	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/23 19:31	1

Client Sample ID: MW26-ROX-071023
Date Collected: 07/10/23 13:45
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-6
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			07/20/23 19:31	1
Styrene	ND		1.0	1.0	ug/L			07/20/23 19:31	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/23 19:31	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/20/23 19:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/23 19:31	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/20/23 19:31	1
Toluene	ND		1.0	0.90	ug/L			07/20/23 19:31	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/23 19:31	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/20/23 19:31	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/20/23 19:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/23 19:31	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/20/23 19:31	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/20/23 19:31	1
Trichloroethene	ND		1.0	0.15	ug/L			07/20/23 19:31	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/23 19:31	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/23 19:31	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/23 19:31	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/23 19:31	1
Vinyl acetate	ND		25	0.93	ug/L			07/20/23 19:31	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/23 19:31	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/23 19:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*07/20/23 19:31*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/20/23 19:31*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/20/23 19:31*	*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		07/12/23 09:20	07/14/23 13:33	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/12/23 09:20	07/14/23 13:33	1
Anthracene	ND		0.19	0.046	ug/L		07/12/23 09:20	07/14/23 13:33	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		07/12/23 09:20	07/14/23 13:33	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		07/12/23 09:20	07/14/23 13:33	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		07/12/23 09:20	07/14/23 13:33	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		07/12/23 09:20	07/14/23 13:33	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		07/12/23 09:20	07/14/23 13:33	1
Chrysene	ND		0.19	0.032	ug/L		07/12/23 09:20	07/14/23 13:33	1
Dibenz(a,h)an hracene	ND		0.19	0.047	ug/L		07/12/23 09:20	07/14/23 13:33	1
Fluoranthene	ND		0.19	0.033	ug/L		07/12/23 09:20	07/14/23 13:33	1
Fluorene	ND		0.19	0.086	ug/L		07/12/23 09:20	07/14/23 13:33	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		07/12/23 09:20	07/14/23 13:33	1
Phenanthrene	ND		0.19	0.087	ug/L		07/12/23 09:20	07/14/23 13:33	1
Pyrene	ND		0.19	0.038	ug/L		07/12/23 09:20	07/14/23 13:33	1
1-Methylnaphthalene	ND		0.19	0.078	ug/L		07/12/23 09:20	07/14/23 13:33	1
2-Methylnaphthalene	ND		0.19	0.064	ug/L		07/12/23 09:20	07/14/23 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*100*		*18 - 147*	*07/12/23 09:20*	*07/14/23 13:33*	*1*
2-Fluorobiphenyl	*96*		*15 - 128*	*07/12/23 09:20*	*07/14/23 13:33*	*1*

Client Sample ID: MW26-ROX-071023
Date Collected: 07/10/23 13:45
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-6
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*	*07/12/23 09:20*	*07/14/23 13:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	3.7	ug/L		07/12/23 09:20	07/13/23 18:50	1
Benzenethiol	ND	*-	9.7	1.6	ug/L		07/12/23 09:20	07/13/23 18:50	1
Benzoic acid	ND		29	7.1	ug/L		07/12/23 09:20	07/13/23 18:50	1
Benzyl alcohol	ND		9.7	1.9	ug/L		07/12/23 09:20	07/13/23 18:50	1
Bis(2-chloroethoxy)methane	ND		9.7	0.16	ug/L		07/12/23 09:20	07/13/23 18:50	1
Bis(2-chloroethyl)ether	ND		9.7	2.6	ug/L		07/12/23 09:20	07/13/23 18:50	1
bis (2-chloroisopropyl) ether	ND		9.7	0.16	ug/L		07/12/23 09:20	07/13/23 18:50	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.8	ug/L		07/12/23 09:20	07/13/23 18:50	1
4-Bromophenyl phenyl ether	ND		9.7	0.19	ug/L		07/12/23 09:20	07/13/23 18:50	1
Butyl benzyl phthalate	ND		9.7	0.18	ug/L		07/12/23 09:20	07/13/23 18:50	1
4-Chloroaniline	ND		9.7	3.3	ug/L		07/12/23 09:20	07/13/23 18:50	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		07/12/23 09:20	07/13/23 18:50	1
2-Chloronaphthalene	ND		9.7	0.14	ug/L		07/12/23 09:20	07/13/23 18:50	1
2-Chlorophenol	ND		9.7	2.1	ug/L		07/12/23 09:20	07/13/23 18:50	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		07/12/23 09:20	07/13/23 18:50	1
Dibenz[a,h]acridine	ND		9.7	0.97	ug/L		07/12/23 09:20	07/13/23 18:50	1
Dibenzofuran	ND		9.7	0.16	ug/L		07/12/23 09:20	07/13/23 18:50	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		07/12/23 09:20	07/13/23 18:50	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		07/12/23 09:20	07/13/23 18:50	1
Diethyl phthalate	ND		9.7	0.23	ug/L		07/12/23 09:20	07/13/23 18:50	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		07/12/23 09:20	07/13/23 18:50	1
Dimethyl phthalate	ND		9.7	0.16	ug/L		07/12/23 09:20	07/13/23 18:50	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		07/12/23 09:20	07/13/23 18:50	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.6	ug/L		07/12/23 09:20	07/13/23 18:50	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/12/23 09:20	07/13/23 18:50	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		07/12/23 09:20	07/13/23 18:50	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		07/12/23 09:20	07/13/23 18:50	1
Di-n-octyl phthalate	ND		9.7	0.16	ug/L		07/12/23 09:20	07/13/23 18:50	1
1,4-Dioxane	ND		9.7	0.97	ug/L		07/12/23 09:20	07/13/23 18:50	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		07/12/23 09:20	07/13/23 18:50	1
Hexachlorobenzene	ND		9.7	0.16	ug/L		07/12/23 09:20	07/13/23 18:50	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/12/23 09:20	07/13/23 18:50	1
Hexachloroethane	ND		9.7	4.1	ug/L		07/12/23 09:20	07/13/23 18:50	1
Indene	ND		9.7	0.97	ug/L		07/12/23 09:20	07/13/23 18:50	1
Isophorone	ND		9.7	0.14	ug/L		07/12/23 09:20	07/13/23 18:50	1
2-Methylphenol	ND		9.7	1.7	ug/L		07/12/23 09:20	07/13/23 18:50	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		07/12/23 09:20	07/13/23 18:50	1
2-Nitroaniline	ND		9.7	2.1	ug/L		07/12/23 09:20	07/13/23 18:50	1
3-Nitroaniline	ND		9.7	1.7	ug/L		07/12/23 09:20	07/13/23 18:50	1
4-Nitroaniline	ND		9.7	1.5	ug/L		07/12/23 09:20	07/13/23 18:50	1
Nitrobenzene	ND		9.7	0.13	ug/L		07/12/23 09:20	07/13/23 18:50	1
2-Nitrophenol	ND		9.7	5.0	ug/L		07/12/23 09:20	07/13/23 18:50	1
4-Nitrophenol	ND		9.7	2.0	ug/L		07/12/23 09:20	07/13/23 18:50	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		07/12/23 09:20	07/13/23 18:50	1

Client: AECOM Technical Services Inc.
Job ID: 400-240307-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: MW26-ROX-071023
Lab Sample ID: 400-240307-6
Date Collected: 07/10/23 13:45
Matrix: Water
Date Received: 07/11/23 09:47

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	3.2	ug/L		07/12/23 09:20	07/13/23 18:50	1
N-Nitrosodiphenylamine	ND		9.7	0.17	ug/L		07/12/23 09:20	07/13/23 18:50	1
Pentachlorophenol	ND		19	1.4	ug/L		07/12/23 09:20	07/13/23 18:50	1
Phenol	ND		9.7	2.5	ug/L		07/12/23 09:20	07/13/23 18:50	1
Pyridine	ND		9.7	3.1	ug/L		07/12/23 09:20	07/13/23 18:50	1
Quinoline	ND		9.7	4.4	ug/L		07/12/23 09:20	07/13/23 18:50	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		07/12/23 09:20	07/13/23 18:50	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		07/12/23 09:20	07/13/23 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*46 - 124*	*07/12/23 09:20*	*07/13/23 18:50*	*1*
2-Fluorophenol	*18*		*13 - 113*	*07/12/23 09:20*	*07/13/23 18:50*	*1*
Nitrobenzene-d5	*78*		*36 - 126*	*07/12/23 09:20*	*07/13/23 18:50*	*1*
Phenol-d5	*40*		*17 - 127*	*07/12/23 09:20*	*07/13/23 18:50*	*1*
Terphenyl-d14	*110*		*44 - 149*	*07/12/23 09:20*	*07/13/23 18:50*	*1*
2,4,6-Tribromophenol	*65*		*26 - 150*	*07/12/23 09:20*	*07/13/23 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		0.029	0.016	ug/L		07/13/23 14:23	07/14/23 22:28	1
1,2-Dibromoethane	ND		0.019	0.014	ug/L		07/13/23 14:23	07/14/23 22:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*120*		*51 - 149*	*07/13/23 14:23*	*07/14/23 22:28*	*1*

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

Job ID: 400-240307-1

Client Sample ID: TB-ROX-071023-8260-B
Date Collected: 07/10/23 12:00
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-7
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			07/20/23 17:15	1
Acrolein	ND		20	3.3	ug/L			07/20/23 17:15	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/23 17:15	1
Benzene	ND		1.0	0.50	ug/L			07/20/23 17:15	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/23 17:15	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/20/23 17:15	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/23 17:15	1
Bromoform	ND		5.0	0.25	ug/L			07/20/23 17:15	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/23 17:15	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/20/23 17:15	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/23 17:15	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/20/23 17:15	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/20/23 17:15	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/23 17:15	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/23 17:15	1
Chloroform	ND		1.0	0.90	ug/L			07/20/23 17:15	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/20/23 17:15	1
Chloromethane	ND		1.0	0.90	ug/L			07/20/23 17:15	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/20/23 17:15	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/23 17:15	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/20/23 17:15	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/23 17:15	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/23 17:15	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/23 17:15	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/23 17:15	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/23 17:15	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/20/23 17:15	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/23 17:15	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 17:15	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 17:15	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 17:15	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/23 17:15	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/23 17:15	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/23 17:15	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/20/23 17:15	1
2-Hexanone	ND		25	1.4	ug/L			07/20/23 17:15	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/23 17:15	1
Methylene bromide	ND		5.0	0.22	ug/L			07/20/23 17:15	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/23 17:15	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/23 17:15	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/20/23 17:15	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/20/23 17:15	1
Naphthalene	ND		5.0	3.0	ug/L			07/20/23 17:15	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/23 17:15	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/23 17:15	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/23 17:15	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/23 17:15	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/23 17:15	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/23 17:15	1

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

Job ID: 400-240307-1

Client Sample ID: TB-ROX-071023-8260-B
Date Collected: 07/10/23 12:00
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-7
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			07/20/23 17:15	1
Styrene	ND		1.0	1.0	ug/L			07/20/23 17:15	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/23 17:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/20/23 17:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/23 17:15	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/20/23 17:15	1
Toluene	ND		1.0	0.90	ug/L			07/20/23 17:15	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/23 17:15	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/20/23 17:15	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/20/23 17:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/23 17:15	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/20/23 17:15	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/20/23 17:15	1
Trichloroethene	ND		1.0	0.15	ug/L			07/20/23 17:15	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/23 17:15	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/23 17:15	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/23 17:15	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/23 17:15	1
Vinyl acetate	ND		25	0.93	ug/L			07/20/23 17:15	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/23 17:15	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/23 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*07/20/23 17:15*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*07/20/23 17:15*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/20/23 17:15*	*1*

Client: AECOM Technical Services Inc.
Job ID: 400-240307-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-071023-8011-B
Lab Sample ID: 400-240307-8
Date Collected: 07/10/23 12:00
Matrix: Water
Date Received: 07/11/23 09:47

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		07/13/23 14:23	07/14/23 23:10	1
1,2-Dibromoethane	ND		0.019	0.014	ug/L		07/13/23 14:23	07/14/23 23:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*51 - 149*	*07/13/23 14:23*	*07/14/23 23:10*	*1*

Client Sample ID: MW1-ROX-071023-EB
Date Collected: 07/10/23 08:30
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-9
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			07/20/23 17:43	1
Acrolein	ND		20	3.3	ug/L			07/20/23 17:43	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/23 17:43	1
Benzene	ND		1.0	0.50	ug/L			07/20/23 17:43	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/23 17:43	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/20/23 17:43	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/23 17:43	1
Bromoform	ND		5.0	0.25	ug/L			07/20/23 17:43	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/23 17:43	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/20/23 17:43	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/23 17:43	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/20/23 17:43	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/20/23 17:43	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/23 17:43	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/23 17:43	1
Chloroform	ND		1.0	0.90	ug/L			07/20/23 17:43	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/20/23 17:43	1
Chloromethane	ND		1.0	0.90	ug/L			07/20/23 17:43	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/20/23 17:43	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/23 17:43	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/20/23 17:43	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/23 17:43	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/23 17:43	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/23 17:43	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/23 17:43	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/23 17:43	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/20/23 17:43	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/23 17:43	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 17:43	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 17:43	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 17:43	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/23 17:43	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/23 17:43	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/23 17:43	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/20/23 17:43	1
2-Hexanone	ND		25	1.4	ug/L			07/20/23 17:43	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/23 17:43	1
Methylene bromide	ND		5.0	0.22	ug/L			07/20/23 17:43	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/23 17:43	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/23 17:43	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/20/23 17:43	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/20/23 17:43	1
Naphthalene	ND		5.0	3.0	ug/L			07/20/23 17:43	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/23 17:43	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/23 17:43	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/23 17:43	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/23 17:43	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/23 17:43	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/23 17:43	1

Client Sample ID: MW1-ROX-071023-EB
Date Collected: 07/10/23 08:30
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-9
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			07/20/23 17:43	1
Styrene	ND		1.0	1.0	ug/L			07/20/23 17:43	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/23 17:43	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/20/23 17:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/23 17:43	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/20/23 17:43	1
Toluene	ND		1.0	0.90	ug/L			07/20/23 17:43	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/23 17:43	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/20/23 17:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/20/23 17:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/23 17:43	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/20/23 17:43	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/20/23 17:43	1
Trichloroethene	ND		1.0	0.15	ug/L			07/20/23 17:43	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/23 17:43	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/23 17:43	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/23 17:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/23 17:43	1
Vinyl acetate	ND		25	0.93	ug/L			07/20/23 17:43	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/23 17:43	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/23 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*07/20/23 17:43*	*1*
Dibromofluoromethane	*99*		*75 - 126*		*07/20/23 17:43*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/20/23 17:43*	*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		07/12/23 09:20	07/14/23 13:54	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/12/23 09:20	07/14/23 13:54	1
Anthracene	ND		0.20	0.047	ug/L		07/12/23 09:20	07/14/23 13:54	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/12/23 09:20	07/14/23 13:54	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/12/23 09:20	07/14/23 13:54	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/12/23 09:20	07/14/23 13:54	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/12/23 09:20	07/14/23 13:54	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/12/23 09:20	07/14/23 13:54	1
Chrysene	ND		0.20	0.033	ug/L		07/12/23 09:20	07/14/23 13:54	1
Dibenz(a,h)an hracene	ND		0.20	0.048	ug/L		07/12/23 09:20	07/14/23 13:54	1
Fluoranthene	ND		0.20	0.034	ug/L		07/12/23 09:20	07/14/23 13:54	1
Fluorene	ND		0.20	0.089	ug/L		07/12/23 09:20	07/14/23 13:54	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/12/23 09:20	07/14/23 13:54	1
Phenanthrene	ND		0.20	0.090	ug/L		07/12/23 09:20	07/14/23 13:54	1
Pyrene	ND		0.20	0.039	ug/L		07/12/23 09:20	07/14/23 13:54	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/12/23 09:20	07/14/23 13:54	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/12/23 09:20	07/14/23 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*103*		*18 - 147*	*07/12/23 09:20*	*07/14/23 13:54*	*1*
2-Fluorobiphenyl	*94*		*15 - 128*	*07/12/23 09:20*	*07/14/23 13:54*	*1*

Client Sample ID: MW1-ROX-071023-EB
Date Collected: 07/10/23 08:30
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-9
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*89*		*10 - 144*	*07/12/23 09:20*	*07/14/23 13:54*	*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		07/12/23 09:20	07/13/23 19:16	1
Benzenethiol	ND	*-	10	1.7	ug/L		07/12/23 09:20	07/13/23 19:16	1
Benzoic acid	ND		30	7.3	ug/L		07/12/23 09:20	07/13/23 19:16	1
Benzyl alcohol	ND		10	2.0	ug/L		07/12/23 09:20	07/13/23 19:16	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/12/23 09:20	07/13/23 19:16	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/12/23 09:20	07/13/23 19:16	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/12/23 09:20	07/13/23 19:16	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/12/23 09:20	07/13/23 19:16	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/12/23 09:20	07/13/23 19:16	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/12/23 09:20	07/13/23 19:16	1
4-Chloroaniline	ND		10	3.4	ug/L		07/12/23 09:20	07/13/23 19:16	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/12/23 09:20	07/13/23 19:16	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/12/23 09:20	07/13/23 19:16	1
2-Chlorophenol	ND		10	2.2	ug/L		07/12/23 09:20	07/13/23 19:16	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/12/23 09:20	07/13/23 19:16	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/12/23 09:20	07/13/23 19:16	1
Dibenzofuran	ND		10	0.17	ug/L		07/12/23 09:20	07/13/23 19:16	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/12/23 09:20	07/13/23 19:16	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/12/23 09:20	07/13/23 19:16	1
Diethyl phthalate	ND		10	0.24	ug/L		07/12/23 09:20	07/13/23 19:16	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/12/23 09:20	07/13/23 19:16	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/12/23 09:20	07/13/23 19:16	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/12/23 09:20	07/13/23 19:16	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/12/23 09:20	07/13/23 19:16	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/12/23 09:20	07/13/23 19:16	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/12/23 09:20	07/13/23 19:16	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/12/23 09:20	07/13/23 19:16	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/12/23 09:20	07/13/23 19:16	1
1,4-Dioxane	ND		10	1.0	ug/L		07/12/23 09:20	07/13/23 19:16	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/12/23 09:20	07/13/23 19:16	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/12/23 09:20	07/13/23 19:16	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/12/23 09:20	07/13/23 19:16	1
Hexachloroethane	ND		10	4.2	ug/L		07/12/23 09:20	07/13/23 19:16	1
Indene	ND		10	1.0	ug/L		07/12/23 09:20	07/13/23 19:16	1
Isophorone	ND		10	0.14	ug/L		07/12/23 09:20	07/13/23 19:16	1
2-Methylphenol	ND		10	1.8	ug/L		07/12/23 09:20	07/13/23 19:16	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/12/23 09:20	07/13/23 19:16	1
2-Nitroaniline	ND		10	2.2	ug/L		07/12/23 09:20	07/13/23 19:16	1
3-Nitroaniline	ND		10	1.8	ug/L		07/12/23 09:20	07/13/23 19:16	1
4-Nitroaniline	ND		10	1.5	ug/L		07/12/23 09:20	07/13/23 19:16	1
Nitrobenzene	ND		10	0.13	ug/L		07/12/23 09:20	07/13/23 19:16	1
2-Nitrophenol	ND		10	5.2	ug/L		07/12/23 09:20	07/13/23 19:16	1
4-Nitrophenol	ND		10	2.1	ug/L		07/12/23 09:20	07/13/23 19:16	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/12/23 09:20	07/13/23 19:16	1

Client Sample ID: MW1-ROX-071023-EB
Lab Sample ID: 400-240307-9
Date Collected: 07/10/23 08:30
Matrix: Water
Date Received: 07/11/23 09:47

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		07/12/23 09:20	07/13/23 19:16	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/12/23 09:20	07/13/23 19:16	1
Pentachlorophenol	ND		20	1.4	ug/L		07/12/23 09:20	07/13/23 19:16	1
Phenol	ND		10	2.6	ug/L		07/12/23 09:20	07/13/23 19:16	1
Pyridine	ND		10	3.2	ug/L		07/12/23 09:20	07/13/23 19:16	1
Quinoline	ND		10	4.5	ug/L		07/12/23 09:20	07/13/23 19:16	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/12/23 09:20	07/13/23 19:16	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/12/23 09:20	07/13/23 19:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*46 - 124*	*07/12/23 09:20*	*07/13/23 19:16*	*1*
2-Fluorophenol	*35*		*13 - 113*	*07/12/23 09:20*	*07/13/23 19:16*	*1*
Nitrobenzene-d5	*75*		*36 - 126*	*07/12/23 09:20*	*07/13/23 19:16*	*1*
Phenol-d5	*58*		*17 - 127*	*07/12/23 09:20*	*07/13/23 19:16*	*1*
Terphenyl-d14	*113*		*44 - 149*	*07/12/23 09:20*	*07/13/23 19:16*	*1*
2,4,6-Tribromophenol	*91*		*26 - 150*	*07/12/23 09:20*	*07/13/23 19:16*	*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		0.029	0.016	ug/L		07/13/23 14:23	07/14/23 23:31	1
1,2-Dibromoethane	ND		0.019	0.014	ug/L		07/13/23 14:23	07/14/23 23:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*51 - 149*	*07/13/23 14:23*	*07/14/23 23:31*	*1*

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

Job ID: 400-240307-1

Client Sample ID: MW1-ROX-071023
Date Collected: 07/10/23 10:40
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-10
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			07/20/23 19:58	1
Acrolein	ND		20	3.3	ug/L			07/20/23 19:58	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/23 19:58	1
Benzene	ND		1.0	0.50	ug/L			07/20/23 19:58	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/23 19:58	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/20/23 19:58	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/23 19:58	1
Bromoform	ND		5.0	0.25	ug/L			07/20/23 19:58	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/23 19:58	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/20/23 19:58	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/23 19:58	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/20/23 19:58	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/20/23 19:58	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/23 19:58	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/23 19:58	1
Chloroform	ND		1.0	0.90	ug/L			07/20/23 19:58	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/20/23 19:58	1
Chloromethane	ND		1.0	0.90	ug/L			07/20/23 19:58	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/20/23 19:58	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/23 19:58	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/20/23 19:58	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/23 19:58	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/23 19:58	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/23 19:58	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/23 19:58	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/23 19:58	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/20/23 19:58	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/23 19:58	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 19:58	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 19:58	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 19:58	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/23 19:58	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/23 19:58	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/23 19:58	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/20/23 19:58	1
2-Hexanone	ND		25	1.4	ug/L			07/20/23 19:58	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/23 19:58	1
Methylene bromide	ND		5.0	0.22	ug/L			07/20/23 19:58	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/23 19:58	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/23 19:58	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/20/23 19:58	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/20/23 19:58	1
Naphthalene	ND		5.0	3.0	ug/L			07/20/23 19:58	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/23 19:58	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/23 19:58	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/23 19:58	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/23 19:58	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/23 19:58	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/23 19:58	1

Client Sample ID: MW1-ROX-071023
Date Collected: 07/10/23 10:40
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-10
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			07/20/23 19:58	1
Styrene	ND		1.0	1.0	ug/L			07/20/23 19:58	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/23 19:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/20/23 19:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/23 19:58	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/20/23 19:58	1
Toluene	ND		1.0	0.90	ug/L			07/20/23 19:58	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/23 19:58	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/20/23 19:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/20/23 19:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/23 19:58	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/20/23 19:58	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/20/23 19:58	1
Trichloroethene	ND		1.0	0.15	ug/L			07/20/23 19:58	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/23 19:58	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/23 19:58	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/23 19:58	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/23 19:58	1
Vinyl acetate	ND		25	0.93	ug/L			07/20/23 19:58	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/23 19:58	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/23 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*07/20/23 19:58*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*07/20/23 19:58*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*07/20/23 19:58*	*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		07/12/23 09:20	07/14/23 14:15	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/12/23 09:20	07/14/23 14:15	1
Anthracene	ND		0.20	0.047	ug/L		07/12/23 09:20	07/14/23 14:15	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/12/23 09:20	07/14/23 14:15	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/12/23 09:20	07/14/23 14:15	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/12/23 09:20	07/14/23 14:15	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/12/23 09:20	07/14/23 14:15	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		07/12/23 09:20	07/14/23 14:15	1
Chrysene	ND		0.20	0.033	ug/L		07/12/23 09:20	07/14/23 14:15	1
Dibenz(a,h)an hracene	ND		0.20	0.048	ug/L		07/12/23 09:20	07/14/23 14:15	1
Fluoranthene	ND		0.20	0.034	ug/L		07/12/23 09:20	07/14/23 14:15	1
Fluorene	ND		0.20	0.088	ug/L		07/12/23 09:20	07/14/23 14:15	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/12/23 09:20	07/14/23 14:15	1
Phenanthrene	ND		0.20	0.089	ug/L		07/12/23 09:20	07/14/23 14:15	1
Pyrene	ND		0.20	0.039	ug/L		07/12/23 09:20	07/14/23 14:15	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		07/12/23 09:20	07/14/23 14:15	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		07/12/23 09:20	07/14/23 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*97*		*18 - 147*	*07/12/23 09:20*	*07/14/23 14:15*	*1*
2-Fluorobiphenyl	*96*		*15 - 128*	*07/12/23 09:20*	*07/14/23 14:15*	*1*

Client Sample ID: MW1-ROX-071023
Date Collected: 07/10/23 10:40
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-10
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*87*		*10 - 144*	*07/12/23 09:20*	*07/14/23 14:15*	*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		07/12/23 09:20	07/13/23 19:43	1
Benzenethiol	ND	*-	9.9	1.7	ug/L		07/12/23 09:20	07/13/23 19:43	1
Benzoic acid	ND		30	7.2	ug/L		07/12/23 09:20	07/13/23 19:43	1
Benzyl alcohol	ND		9.9	2.0	ug/L		07/12/23 09:20	07/13/23 19:43	1
Bis(2-chloroethoxy)methane	ND		9.9	0.16	ug/L		07/12/23 09:20	07/13/23 19:43	1
Bis(2-chloroethyl)ether	ND		9.9	2.7	ug/L		07/12/23 09:20	07/13/23 19:43	1
bis (2-chloroisopropyl) ether	ND		9.9	0.16	ug/L		07/12/23 09:20	07/13/23 19:43	1
Bis(2-ethylhexyl) phthalate	ND		9.9	5.0	ug/L		07/12/23 09:20	07/13/23 19:43	1
4-Bromophenyl phenyl ether	ND		9.9	0.20	ug/L		07/12/23 09:20	07/13/23 19:43	1
Butyl benzyl phthalate	ND		9.9	0.19	ug/L		07/12/23 09:20	07/13/23 19:43	1
4-Chloroaniline	ND		9.9	3.4	ug/L		07/12/23 09:20	07/13/23 19:43	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		07/12/23 09:20	07/13/23 19:43	1
2-Chloronaphthalene	ND		9.9	0.14	ug/L		07/12/23 09:20	07/13/23 19:43	1
2-Chlorophenol	ND		9.9	2.2	ug/L		07/12/23 09:20	07/13/23 19:43	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		07/12/23 09:20	07/13/23 19:43	1
Dibenz[a,h]acridine	ND		9.9	0.99	ug/L		07/12/23 09:20	07/13/23 19:43	1
Dibenzofuran	ND		9.9	0.17	ug/L		07/12/23 09:20	07/13/23 19:43	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		07/12/23 09:20	07/13/23 19:43	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		07/12/23 09:20	07/13/23 19:43	1
Diethyl phthalate	ND		9.9	0.24	ug/L		07/12/23 09:20	07/13/23 19:43	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		07/12/23 09:20	07/13/23 19:43	1
Dimethyl phthalate	ND		9.9	0.17	ug/L		07/12/23 09:20	07/13/23 19:43	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		07/12/23 09:20	07/13/23 19:43	1
4,6-Dinitro-ortho-cresol	ND		9.9	1.6	ug/L		07/12/23 09:20	07/13/23 19:43	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/12/23 09:20	07/13/23 19:43	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		07/12/23 09:20	07/13/23 19:43	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		07/12/23 09:20	07/13/23 19:43	1
Di-n-octyl phthalate	ND		9.9	0.17	ug/L		07/12/23 09:20	07/13/23 19:43	1
1,4-Dioxane	ND		9.9	0.99	ug/L		07/12/23 09:20	07/13/23 19:43	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		07/12/23 09:20	07/13/23 19:43	1
Hexachlorobenzene	ND		9.9	0.17	ug/L		07/12/23 09:20	07/13/23 19:43	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/12/23 09:20	07/13/23 19:43	1
Hexachloroethane	ND		9.9	4.2	ug/L		07/12/23 09:20	07/13/23 19:43	1
Indene	ND		9.9	0.99	ug/L		07/12/23 09:20	07/13/23 19:43	1
Isophorone	ND		9.9	0.14	ug/L		07/12/23 09:20	07/13/23 19:43	1
2-Methylphenol	ND		9.9	1.8	ug/L		07/12/23 09:20	07/13/23 19:43	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/12/23 09:20	07/13/23 19:43	1
2-Nitroaniline	ND		9.9	2.2	ug/L		07/12/23 09:20	07/13/23 19:43	1
3-Nitroaniline	ND		9.9	1.8	ug/L		07/12/23 09:20	07/13/23 19:43	1
4-Nitroaniline	ND		9.9	1.5	ug/L		07/12/23 09:20	07/13/23 19:43	1
Nitrobenzene	ND		9.9	0.13	ug/L		07/12/23 09:20	07/13/23 19:43	1
2-Nitrophenol	ND		9.9	5.2	ug/L		07/12/23 09:20	07/13/23 19:43	1
4-Nitrophenol	ND		9.9	2.1	ug/L		07/12/23 09:20	07/13/23 19:43	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		07/12/23 09:20	07/13/23 19:43	1

Client Sample ID: MW1-ROX-071023
Date Collected: 07/10/23 10:40
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-10
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	3.3	ug/L		07/12/23 09:20	07/13/23 19:43	1
N-Nitrosodiphenylamine	ND		9.9	0.18	ug/L		07/12/23 09:20	07/13/23 19:43	1
Pentachlorophenol	ND		20	1.4	ug/L		07/12/23 09:20	07/13/23 19:43	1
Phenol	ND		9.9	2.6	ug/L		07/12/23 09:20	07/13/23 19:43	1
Pyridine	ND		9.9	3.2	ug/L		07/12/23 09:20	07/13/23 19:43	1
Quinoline	ND		9.9	4.5	ug/L		07/12/23 09:20	07/13/23 19:43	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		07/12/23 09:20	07/13/23 19:43	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		07/12/23 09:20	07/13/23 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*89*		*46 - 124*	*07/12/23 09:20*	*07/13/23 19:43*	*1*
2-Fluorophenol	*13*		*13 - 113*	*07/12/23 09:20*	*07/13/23 19:43*	*1*
Nitrobenzene-d5	*77*		*36 - 126*	*07/12/23 09:20*	*07/13/23 19:43*	*1*
Phenol-d5	*42*		*17 - 127*	*07/12/23 09:20*	*07/13/23 19:43*	*1*
Terphenyl-d14	*104*		*44 - 149*	*07/12/23 09:20*	*07/13/23 19:43*	*1*
2,4,6-Tribromophenol	*82*		*26 - 150*	*07/12/23 09:20*	*07/13/23 19:43*	*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	0.016	ug/L		07/13/23 14:23	07/14/23 23:52	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		07/13/23 14:23	07/14/23 23:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*51 - 149*	*07/13/23 14:23*	*07/14/23 23:52*	*1*

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

Job ID: 400-240307-1

Client Sample ID: ROST4PZG-ROX-071023
Date Collected: 07/10/23 12:05
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**11**	**J**	25	10	ug/L			07/21/23 16:16	1
Acrolein	ND		20	3.3	ug/L			07/21/23 16:16	1
Acrylonitrile	ND		10	2.8	ug/L			07/21/23 16:16	1
Benzene	ND		1.0	0.50	ug/L			07/21/23 16:16	1
Bromobenzene	ND		1.0	0.54	ug/L			07/21/23 16:16	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/21/23 16:16	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/21/23 16:16	1
Bromoform	ND		5.0	0.25	ug/L			07/21/23 16:16	1
Bromomethane	ND		1.0	0.98	ug/L			07/21/23 16:16	1
2-Butanone (MEK)	**3.0**	**J**	25	2.6	ug/L			07/21/23 16:16	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/21/23 16:16	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/21/23 16:16	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/21/23 16:16	1
Chloroethane	ND		1.0	0.76	ug/L			07/21/23 16:16	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/21/23 16:16	1
Chloroform	ND		1.0	0.90	ug/L			07/21/23 16:16	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/21/23 16:16	1
Chloromethane	ND		1.0	0.90	ug/L			07/21/23 16:16	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/21/23 16:16	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/21/23 16:16	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/21/23 16:16	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/21/23 16:16	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/21/23 16:16	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/21/23 16:16	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/21/23 16:16	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/21/23 16:16	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/21/23 16:16	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/21/23 16:16	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/21/23 16:16	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/21/23 16:16	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/21/23 16:16	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/21/23 16:16	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/21/23 16:16	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/21/23 16:16	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/21/23 16:16	1
2-Hexanone	ND		25	1.4	ug/L			07/21/23 16:16	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/21/23 16:16	1
Methylene bromide	ND		5.0	0.22	ug/L			07/21/23 16:16	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/21/23 16:16	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/21/23 16:16	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/21/23 16:16	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/21/23 16:16	1
Naphthalene	ND		5.0	3.0	ug/L			07/21/23 16:16	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/21/23 16:16	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/21/23 16:16	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/21/23 16:16	1
o-Xylene	ND		5.0	0.60	ug/L			07/21/23 16:16	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/21/23 16:16	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/21/23 16:16	1

Client Sample ID: ROST4PZG-ROX-071023
Date Collected: 07/10/23 12:05
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-11
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			07/21/23 16:16	1
Styrene	ND		1.0	1.0	ug/L			07/21/23 16:16	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/21/23 16:16	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/21/23 16:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/21/23 16:16	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/21/23 16:16	1
Toluene	ND		1.0	0.90	ug/L			07/21/23 16:16	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/21/23 16:16	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/21/23 16:16	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/21/23 16:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/21/23 16:16	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/21/23 16:16	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/21/23 16:16	1
Trichloroethene	ND		1.0	0.15	ug/L			07/21/23 16:16	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/21/23 16:16	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/21/23 16:16	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/21/23 16:16	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/21/23 16:16	1
Vinyl acetate	ND		25	0.93	ug/L			07/21/23 16:16	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/21/23 16:16	1
Xylenes, Total	ND		10	1.6	ug/L			07/21/23 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*07/21/23 16:16*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/21/23 16:16*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*07/21/23 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		07/12/23 09:20	07/14/23 14:36	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/12/23 09:20	07/14/23 14:36	1
Anthracene	ND		0.20	0.048	ug/L		07/12/23 09:20	07/14/23 14:36	1
Benzo[a]anthracene	ND		0.20	0.035	ug/L		07/12/23 09:20	07/14/23 14:36	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		07/12/23 09:20	07/14/23 14:36	1
Benzo[b]fluoranthene	ND		0.20	0.038	ug/L		07/12/23 09:20	07/14/23 14:36	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/12/23 09:20	07/14/23 14:36	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		07/12/23 09:20	07/14/23 14:36	1
Chrysene	ND		0.20	0.034	ug/L		07/12/23 09:20	07/14/23 14:36	1
Dibenz(a,h)an hracene	ND		0.20	0.049	ug/L		07/12/23 09:20	07/14/23 14:36	1
Fluoranthene	ND		0.20	0.035	ug/L		07/12/23 09:20	07/14/23 14:36	1
Fluorene	ND		0.20	0.091	ug/L		07/12/23 09:20	07/14/23 14:36	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.035	ug/L		07/12/23 09:20	07/14/23 14:36	1
Phenanthrene	ND		0.20	0.092	ug/L		07/12/23 09:20	07/14/23 14:36	1
Pyrene	ND		0.20	0.040	ug/L		07/12/23 09:20	07/14/23 14:36	1
1-Methylnaphthalene	ND		0.20	0.081	ug/L		07/12/23 09:20	07/14/23 14:36	1
2-Methylnaphthalene	ND		0.20	0.067	ug/L		07/12/23 09:20	07/14/23 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*99*		*18 - 147*	*07/12/23 09:20*	*07/14/23 14:36*	*1*
2-Fluorobiphenyl	*91*		*15 - 128*	*07/12/23 09:20*	*07/14/23 14:36*	*1*

Client Sample ID: ROST4PZG-ROX-071023
Date Collected: 07/10/23 12:05
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-11
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*	*07/12/23 09:20*	*07/14/23 14:36*	*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		07/14/23 10:19	07/17/23 19:21	1
Benzenethiol	ND	*-	10	1.7	ug/L		07/14/23 10:19	07/17/23 19:21	1
Benzoic acid	ND		30	7.3	ug/L		07/14/23 10:19	07/17/23 19:21	1
Benzyl alcohol	ND		10	2.0	ug/L		07/14/23 10:19	07/17/23 19:21	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/14/23 10:19	07/17/23 19:21	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/14/23 10:19	07/17/23 19:21	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/14/23 10:19	07/17/23 19:21	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/14/23 10:19	07/17/23 19:21	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/14/23 10:19	07/17/23 19:21	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/14/23 10:19	07/17/23 19:21	1
4-Chloroaniline	ND		10	3.4	ug/L		07/14/23 10:19	07/17/23 19:21	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/14/23 10:19	07/17/23 19:21	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/14/23 10:19	07/17/23 19:21	1
2-Chlorophenol	ND	*- *1	10	2.2	ug/L		07/14/23 10:19	07/17/23 19:21	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/14/23 10:19	07/17/23 19:21	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/14/23 10:19	07/17/23 19:21	1
Dibenzofuran	ND		10	0.17	ug/L		07/14/23 10:19	07/17/23 19:21	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/14/23 10:19	07/17/23 19:21	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/14/23 10:19	07/17/23 19:21	1
Diethyl phthalate	**0.29**	**J**	10	0.24	ug/L		07/14/23 10:19	07/17/23 19:21	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/14/23 10:19	07/17/23 19:21	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/14/23 10:19	07/17/23 19:21	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/14/23 10:19	07/17/23 19:21	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/14/23 10:19	07/17/23 19:21	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/14/23 10:19	07/17/23 19:21	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/14/23 10:19	07/17/23 19:21	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/14/23 10:19	07/17/23 19:21	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/14/23 10:19	07/17/23 19:21	1
1,4-Dioxane	ND		10	1.0	ug/L		07/14/23 10:19	07/17/23 19:21	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/14/23 10:19	07/17/23 19:21	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/14/23 10:19	07/17/23 19:21	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/14/23 10:19	07/17/23 19:21	1
Hexachloroethane	ND		10	4.2	ug/L		07/14/23 10:19	07/17/23 19:21	1
Indene	ND		10	1.0	ug/L		07/14/23 10:19	07/17/23 19:21	1
Isophorone	ND		10	0.14	ug/L		07/14/23 10:19	07/17/23 19:21	1
2-Methylphenol	ND		10	1.8	ug/L		07/14/23 10:19	07/17/23 19:21	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/14/23 10:19	07/17/23 19:21	1
2-Nitroaniline	ND		10	2.2	ug/L		07/14/23 10:19	07/17/23 19:21	1
3-Nitroaniline	ND		10	1.8	ug/L		07/14/23 10:19	07/17/23 19:21	1
4-Nitroaniline	ND		10	1.5	ug/L		07/14/23 10:19	07/17/23 19:21	1
Nitrobenzene	ND		10	0.13	ug/L		07/14/23 10:19	07/17/23 19:21	1
2-Nitrophenol	ND		10	5.2	ug/L		07/14/23 10:19	07/17/23 19:21	1
4-Nitrophenol	ND		10	2.1	ug/L		07/14/23 10:19	07/17/23 19:21	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/14/23 10:19	07/17/23 19:21	1

Client Sample ID: ROST4PZG-ROX-071023
Lab Sample ID: 400-240307-11
Date Collected: 07/10/23 12:05
Matrix: Water
Date Received: 07/11/23 09:47

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		07/14/23 10:19	07/17/23 19:21	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/14/23 10:19	07/17/23 19:21	1
Pentachlorophenol	ND		20	1.4	ug/L		07/14/23 10:19	07/17/23 19:21	1
Phenol	ND	*1	10	2.6	ug/L		07/14/23 10:19	07/17/23 19:21	1
Pyridine	ND		10	3.2	ug/L		07/14/23 10:19	07/17/23 19:21	1
Quinoline	ND		10	4.5	ug/L		07/14/23 10:19	07/17/23 19:21	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/14/23 10:19	07/17/23 19:21	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/14/23 10:19	07/17/23 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*46 - 124*	*07/14/23 10:19*	*07/17/23 19:21*	*1*
2-Fluorophenol	*8*	*S1-*	*13 - 113*	*07/14/23 10:19*	*07/17/23 19:21*	*1*
Nitrobenzene-d5	*67*		*36 - 126*	*07/14/23 10:19*	*07/17/23 19:21*	*1*
Phenol-d5	*32*		*17 - 127*	*07/14/23 10:19*	*07/17/23 19:21*	*1*
Terphenyl-d14	*93*		*44 - 149*	*07/14/23 10:19*	*07/17/23 19:21*	*1*
2,4,6-Tribromophenol	*86*		*26 - 150*	*07/14/23 10:19*	*07/17/23 19:21*	*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		07/13/23 14:23	07/15/23 00:13	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/13/23 14:23	07/15/23 00:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*51 - 149*	*07/13/23 14:23*	*07/15/23 00:13*	*1*

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

Job ID: 400-240307-1

Client Sample ID: P56-ROX-071023
Date Collected: 07/10/23 14:05
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**31**		25	10	ug/L			07/21/23 16:43	1
Acrolein	ND		20	3.3	ug/L			07/21/23 16:43	1
Acrylonitrile	ND		10	2.8	ug/L			07/21/23 16:43	1
Benzene	ND		1.0	0.50	ug/L			07/21/23 16:43	1
Bromobenzene	ND		1.0	0.54	ug/L			07/21/23 16:43	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/21/23 16:43	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/21/23 16:43	1
Bromoform	ND		5.0	0.25	ug/L			07/21/23 16:43	1
Bromomethane	ND		1.0	0.98	ug/L			07/21/23 16:43	1
2-Butanone (MEK)	**5.7**	**J**	25	2.6	ug/L			07/21/23 16:43	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/21/23 16:43	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/21/23 16:43	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/21/23 16:43	1
Chloroethane	ND		1.0	0.76	ug/L			07/21/23 16:43	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/21/23 16:43	1
Chloroform	ND		1.0	0.90	ug/L			07/21/23 16:43	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/21/23 16:43	1
Chloromethane	ND		1.0	0.90	ug/L			07/21/23 16:43	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/21/23 16:43	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/21/23 16:43	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/21/23 16:43	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/21/23 16:43	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/21/23 16:43	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/21/23 16:43	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/21/23 16:43	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/21/23 16:43	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/21/23 16:43	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/21/23 16:43	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/21/23 16:43	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/21/23 16:43	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/21/23 16:43	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/21/23 16:43	1
Ethylbenzene	**0.83**	**J**	1.0	0.50	ug/L			07/21/23 16:43	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/21/23 16:43	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/21/23 16:43	1
2-Hexanone	ND		25	1.4	ug/L			07/21/23 16:43	1
Isopropylbenzene	**16**		1.0	0.53	ug/L			07/21/23 16:43	1
Methylene bromide	ND		5.0	0.22	ug/L			07/21/23 16:43	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/21/23 16:43	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/21/23 16:43	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/21/23 16:43	1
m-Xylene & p-Xylene	**39**		5.0	0.63	ug/L			07/21/23 16:43	1
Naphthalene	ND		5.0	3.0	ug/L			07/21/23 16:43	1
n-Butylbenzene	**0.98**	**J**	1.0	0.76	ug/L			07/21/23 16:43	1
N-Propylbenzene	**19**		1.0	0.69	ug/L			07/21/23 16:43	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/21/23 16:43	1
o-Xylene	**1.1**	**J**	5.0	0.60	ug/L			07/21/23 16:43	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/21/23 16:43	1
p-Isopropyltoluene	**1.0**		1.0	0.71	ug/L			07/21/23 16:43	1

Client Sample ID: P56-ROX-071023
Date Collected: 07/10/23 14:05
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-12
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	**2.0**		1.0	0.70	ug/L			07/21/23 16:43	1
Styrene	ND		1.0	1.0	ug/L			07/21/23 16:43	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/21/23 16:43	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/21/23 16:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/21/23 16:43	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/21/23 16:43	1
Toluene	**1.4**		1.0	0.90	ug/L			07/21/23 16:43	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/21/23 16:43	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/21/23 16:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/21/23 16:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/21/23 16:43	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/21/23 16:43	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/21/23 16:43	1
Trichloroethene	ND		1.0	0.15	ug/L			07/21/23 16:43	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/21/23 16:43	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/21/23 16:43	1
1,2,4-Trimethylbenzene	**21**		1.0	0.82	ug/L			07/21/23 16:43	1
1,3,5-Trimethylbenzene	**6.8**		1.0	0.56	ug/L			07/21/23 16:43	1
Vinyl acetate	ND		25	0.93	ug/L			07/21/23 16:43	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/21/23 16:43	1
Xylenes, Total	**40**		10	1.6	ug/L			07/21/23 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*07/21/23 16:43*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*07/21/23 16:43*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*07/21/23 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	**0.44**		0.20	0.098	ug/L		07/12/23 09:20	07/14/23 14:57	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/12/23 09:20	07/14/23 14:57	1
Anthracene	**0.091**	**J**	0.20	0.046	ug/L		07/12/23 09:20	07/14/23 14:57	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/12/23 09:20	07/14/23 14:57	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/12/23 09:20	07/14/23 14:57	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/12/23 09:20	07/14/23 14:57	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/12/23 09:20	07/14/23 14:57	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		07/12/23 09:20	07/14/23 14:57	1
Chrysene	ND		0.20	0.033	ug/L		07/12/23 09:20	07/14/23 14:57	1
Dibenz(a,h)an hracene	ND		0.20	0.047	ug/L		07/12/23 09:20	07/14/23 14:57	1
Fluoranthene	ND		0.20	0.034	ug/L		07/12/23 09:20	07/14/23 14:57	1
Fluorene	**0.22**		0.20	0.088	ug/L		07/12/23 09:20	07/14/23 14:57	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/12/23 09:20	07/14/23 14:57	1
Phenanthrene	**0.63**		0.20	0.089	ug/L		07/12/23 09:20	07/14/23 14:57	1
Pyrene	ND		0.20	0.039	ug/L		07/12/23 09:20	07/14/23 14:57	1
1-Methylnaphthalene	**8.8**		0.20	0.079	ug/L		07/12/23 09:20	07/14/23 14:57	1
2-Methylnaphthalene	**7.4**		0.20	0.065	ug/L		07/12/23 09:20	07/14/23 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*18 - 147*	*07/12/23 09:20*	*07/14/23 14:57*	*1*
2-Fluorobiphenyl	*79*		*15 - 128*	*07/12/23 09:20*	*07/14/23 14:57*	*1*

Client Sample ID: P56-ROX-071023
Date Collected: 07/10/23 14:05
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-12
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*96*		*10 - 144*	*07/12/23 09:20*	*07/14/23 14:57*	*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		07/14/23 10:19	07/17/23 19:49	1
Benzenethiol	ND	*-	10	1.7	ug/L		07/14/23 10:19	07/17/23 19:49	1
Benzoic acid	ND		30	7.3	ug/L		07/14/23 10:19	07/17/23 19:49	1
Benzyl alcohol	ND		10	2.0	ug/L		07/14/23 10:19	07/17/23 19:49	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/14/23 10:19	07/17/23 19:49	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/14/23 10:19	07/17/23 19:49	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/14/23 10:19	07/17/23 19:49	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/14/23 10:19	07/17/23 19:49	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/14/23 10:19	07/17/23 19:49	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/14/23 10:19	07/17/23 19:49	1
4-Chloroaniline	ND		10	3.4	ug/L		07/14/23 10:19	07/17/23 19:49	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/14/23 10:19	07/17/23 19:49	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/14/23 10:19	07/17/23 19:49	1
2-Chlorophenol	ND	*- *1	10	2.2	ug/L		07/14/23 10:19	07/17/23 19:49	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/14/23 10:19	07/17/23 19:49	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/14/23 10:19	07/17/23 19:49	1
Dibenzofuran	**0.49**	**J**	10	0.17	ug/L		07/14/23 10:19	07/17/23 19:49	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/14/23 10:19	07/17/23 19:49	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/14/23 10:19	07/17/23 19:49	1
Diethyl phthalate	ND		10	0.24	ug/L		07/14/23 10:19	07/17/23 19:49	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/14/23 10:19	07/17/23 19:49	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/14/23 10:19	07/17/23 19:49	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/14/23 10:19	07/17/23 19:49	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/14/23 10:19	07/17/23 19:49	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/14/23 10:19	07/17/23 19:49	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/14/23 10:19	07/17/23 19:49	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/14/23 10:19	07/17/23 19:49	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/14/23 10:19	07/17/23 19:49	1
1,4-Dioxane	ND		10	1.0	ug/L		07/14/23 10:19	07/17/23 19:49	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/14/23 10:19	07/17/23 19:49	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/14/23 10:19	07/17/23 19:49	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/14/23 10:19	07/17/23 19:49	1
Hexachloroethane	ND		10	4.2	ug/L		07/14/23 10:19	07/17/23 19:49	1
Indene	ND		10	1.0	ug/L		07/14/23 10:19	07/17/23 19:49	1
Isophorone	ND		10	0.14	ug/L		07/14/23 10:19	07/17/23 19:49	1
2-Methylphenol	ND		10	1.8	ug/L		07/14/23 10:19	07/17/23 19:49	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/14/23 10:19	07/17/23 19:49	1
2-Nitroaniline	ND		10	2.2	ug/L		07/14/23 10:19	07/17/23 19:49	1
3-Nitroaniline	ND		10	1.8	ug/L		07/14/23 10:19	07/17/23 19:49	1
4-Nitroaniline	ND		10	1.5	ug/L		07/14/23 10:19	07/17/23 19:49	1
Nitrobenzene	ND		10	0.13	ug/L		07/14/23 10:19	07/17/23 19:49	1
2-Nitrophenol	ND		10	5.2	ug/L		07/14/23 10:19	07/17/23 19:49	1
4-Nitrophenol	ND		10	2.1	ug/L		07/14/23 10:19	07/17/23 19:49	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/14/23 10:19	07/17/23 19:49	1

Client Sample ID: P56-ROX-071023
Date Collected: 07/10/23 14:05
Date Received: 07/11/23 09:47

Lab Sample ID: 400-240307-12
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	3.3	ug/L		07/14/23 10:19	07/17/23 19:49	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/14/23 10:19	07/17/23 19:49	1
Pentachlorophenol	ND		20	1.4	ug/L		07/14/23 10:19	07/17/23 19:49	1
Phenol	ND	*1	10	2.6	ug/L		07/14/23 10:19	07/17/23 19:49	1
Pyridine	ND		10	3.2	ug/L		07/14/23 10:19	07/17/23 19:49	1
Quinoline	ND		10	4.5	ug/L		07/14/23 10:19	07/17/23 19:49	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/14/23 10:19	07/17/23 19:49	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/14/23 10:19	07/17/23 19:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*46 - 124*	*07/14/23 10:19*	*07/17/23 19:49*	*1*
2-Fluorophenol	*20*		*13 - 113*	*07/14/23 10:19*	*07/17/23 19:49*	*1*
Nitrobenzene-d5	*73*		*36 - 126*	*07/14/23 10:19*	*07/17/23 19:49*	*1*
Phenol-d5	*54*		*17 - 127*	*07/14/23 10:19*	*07/17/23 19:49*	*1*
Terphenyl-d14	*83*		*44 - 149*	*07/14/23 10:19*	*07/17/23 19:49*	*1*
2,4,6-Tribromophenol	*109*		*26 - 150*	*07/14/23 10:19*	*07/17/23 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		07/13/23 14:23	07/15/23 00:34	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/13/23 14:23	07/15/23 00:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*51 - 149*	*07/13/23 14:23*	*07/15/23 00:34*	*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.
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

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	Me hod Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Me hod Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Nega ive / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ra io (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: 400-240307-1

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)
400-240307-1	TB-ROX-071023-8260-A	104	101	102
400-240307-3	MW24-ROX-071023-EB	100	97	102
400-240307-4	MW24-ROX-071023	103	99	101
400-240307-5	MW3-ROX-071023	105	99	101
400-240307-5 MS	MW3-ROX-071023	101	101	102
400-240307-5 MSD	MW3-ROX-071023	103	99	102
400-240307-6	MW26-ROX-071023	103	101	101
400-240307-7	TB-ROX-071023-8260-B	102	100	101
400-240307-9	MW1-ROX-071023-EB	103	99	101
400-240307-10	MW1-ROX-071023	103	100	102
400-240307-11	ROST4PZG-ROX-071023	103	101	102
400-240307-12	P56-ROX-071023	103	102	103
LCS 400-633878/1002	Lab Control Sample	100	100	103
LCS 400-634057/1002	Lab Control Sample	96	101	103
MB 400-633878/4	Method Blank	104	100	104
MB 400-634057/30	Method Blank	101	98	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)
400-240307-3	MW24-ROX-071023-EB	92	15	81	47	119	85
400-240307-4	MW24-ROX-071023	87	25	77	51	115	69
400-240307-5	MW3-ROX-071023	87	16	79	42	77	94
400-240307-5 MS	MW3-ROX-071023	88	25	80	59	107	113
400-240307-5 MSD	MW3-ROX-071023	90	39	82	68	106	116
400-240307-6	MW26-ROX-071023	86	18	78	40	110	65
400-240307-9	MW1-ROX-071023-EB	83	35	75	58	113	91
400-240307-10	MW1-ROX-071023	89	13	77	42	104	82
400-240307-11	ROST4PZG-ROX-071023	74	8 S1-	67	32	93	86
400-240307-12	P56-ROX-071023	82	20	73	54	83	109
LCS 400-632824/13-A	Lab Control Sample	90	9 S1-	78	30	117	80
LCS 400-632824/2-A	Lab Control Sample	85	46	79	68	103	107
LCS 400-633166/2-A	Lab Control Sample	85	43	82	68	104	118
LCS 400-633166/4-A	Lab Control Sample	74	27	67	55	92	80
LCSD 400-632824/14-A	Lab Control Sample Dup	92	50	80	71	114	63
LCSD 400-633166/3-A	Lab Control Sample Dup	83	13	76	46	100	109
LCSD 400-633166/5-A	Lab Control Sample Dup	83	20	73	49	101	80
MB 400-632824/1-A	Method Blank	94	25	84	63	116	96
MB 400-633166/1-A	Method Blank	77	4 S1-	66	29	93	82

Surrogate Legend

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol

Client: AECOM Technical Services Inc. Job ID: 400-240307-1
Project/Site: ROXANA QUARTERLY GW

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)
400-240307-3	MW24-ROX-071023-EB	121	106	99
400-240307-4	MW24-ROX-071023	108	95	90
400-240307-5	MW3-ROX-071023	62	96	88
400-240307-5 MS	MW3-ROX-071023	82	87	53
400-240307-5 MSD	MW3-ROX-071023	80	88	54
400-240307-6	MW26-ROX-071023	100	96	90
400-240307-9	MW1-ROX-071023-EB	103	94	89
400-240307-10	MW1-ROX-071023	97	96	87
400-240307-11	ROST4PZG-ROX-071023	99	91	88
400-240307-12	P56-ROX-071023	81	79	96
LCS 400-632824/15-A	Lab Control Sample	91	89	85
LCSD 400-632824/16-A	Lab Control Sample Dup	90	87	83
MB 400-632824/1-A	Method Blank	105	96	90

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)
400-240307-2	TB-ROX-071023-8011-A	107
400-240307-3	MW24-ROX-071023-EB	102
400-240307-4	MW24-ROX-071023	97
400-240307-5	MW3-ROX-071023	113
400-240307-5 MS	MW3-ROX-071023	95
400-240307-5 MSD	MW3-ROX-071023	104
400-240307-6	MW26-ROX-071023	120
400-240307-8	TB-ROX-071023-8011-B	113
400-240307-9	MW1-ROX-071023-EB	98
400-240307-10	MW1-ROX-071023	103
400-240307-11	ROST4PZG-ROX-071023	95
400-240307-12	P56-ROX-071023	104
LCS 400-633052/2-A	Lab Control Sample	100
LCSD 400-633052/3-A	Lab Control Sample Dup	95
MB 400-633052/1-A	Method Blank	91

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-240307-1

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 S M	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

Client Sample ID: TB-ROX-071023-8260-A

Lab Sample ID: 400-240307-1

Date Collected: 07/10/23 12:00

Matrix: Water

Date Received: 07/11/23 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	633878	07/20/23 16:21	BPO	EET PEN

Client Sample ID: TB-ROX-071023-8011-A

Lab Sample ID: 400-240307-2

Date Collected: 07/10/23 12:00

Matrix: Water

Date Received: 07/11/23 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.9 mL	35 mL	633052	07/13/23 14:23	PG	EET PEN
Total/NA	Analysis	8011		1			633182	07/14/23 20:22	PG	EET PEN

Client Sample ID: MW24-ROX-071023-EB

Lab Sample ID: 400-240307-3

Date Collected: 07/10/23 08:30

Matrix: Water

Date Received: 07/11/23 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	633878	07/20/23 16:48	BPO	EET PEN
Total/NA	Prep	3520C			246 mL	1 mL	632824	07/12/23 09:20	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633026	07/13/23 17:56	S1B	EET PEN
Total/NA	Prep	3520C			246 mL	1 mL	632824	07/12/23 09:20	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633116	07/14/23 12:51	KJA	EET PEN
Total/NA	Prep	8011			35.2 mL	35 mL	633052	07/13/23 14:23	PG	EET PEN
Total/NA	Analysis	8011		1			633182	07/14/23 20:43	PG	EET PEN

Client Sample ID: MW24-ROX-071023

Lab Sample ID: 400-240307-4

Date Collected: 07/10/23 10:20

Matrix: Water

Date Received: 07/11/23 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	633878	07/20/23 19:04	BPO	EET PEN
Total/NA	Prep	3520C			254.2 mL	1 mL	632824	07/12/23 09:20	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633026	07/13/23 18:23	S1B	EET PEN
Total/NA	Prep	3520C			254.2 mL	1 mL	632824	07/12/23 09:20	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633116	07/14/23 13:12	KJA	EET PEN
Total/NA	Prep	8011			36 mL	35 mL	633052	07/13/23 14:23	PG	EET PEN
Total/NA	Analysis	8011		1			633182	07/14/23 21:04	PG	EET PEN

Client Sample ID: MW3-ROX-071023

Lab Sample ID: 400-240307-5

Date Collected: 07/10/23 11:20

Matrix: Water

Date Received: 07/11/23 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	633878	07/20/23 12:43	BPO	EET PEN
Total/NA	Prep	3520C			247 mL	1 mL	632824	07/12/23 09:20	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633026	07/13/23 17:30	S1B	EET PEN

Client Sample ID: MW3-ROX-071023
Lab Sample ID: 400-240307-5

Date Collected: 07/10/23 11:20
Matrix: Water
Date Received: 07/11/23 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			247 mL	1 mL	632824	07/12/23 09:20	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633116	07/14/23 15:17	KJA	EET PEN
Total/NA	Prep	8011			37 mL	35 mL	633052	07/13/23 14:23	PG	EET PEN
Total/NA	Analysis	8011		1			633182	07/14/23 21:25	PG	EET PEN

Client Sample ID: MW26-ROX-071023
Lab Sample ID: 400-240307-6

Date Collected: 07/10/23 13:45
Matrix: Water
Date Received: 07/11/23 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	633878	07/20/23 19:31	BPO	EET PEN
Total/NA	Prep	3520C			257.8 mL	1 mL	632824	07/12/23 09:20	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633026	07/13/23 18:50	S1B	EET PEN
Total/NA	Prep	3520C			257.8 mL	1 mL	632824	07/12/23 09:20	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633116	07/14/23 13:33	KJA	EET PEN
Total/NA	Prep	8011			36.5 mL	35 mL	633052	07/13/23 14:23	PG	EET PEN
Total/NA	Analysis	8011		1			633182	07/14/23 22:28	PG	EET PEN

Client Sample ID: TB-ROX-071023-8260-B
Lab Sample ID: 400-240307-7

Date Collected: 07/10/23 12:00
Matrix: Water
Date Received: 07/11/23 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	633878	07/20/23 17:15	BPO	EET PEN

Client Sample ID: TB-ROX-071023-8011-B
Lab Sample ID: 400-240307-8

Date Collected: 07/10/23 12:00
Matrix: Water
Date Received: 07/11/23 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			36.3 mL	35 mL	633052	07/13/23 14:23	PG	EET PEN
Total/NA	Analysis	8011		1			633182	07/14/23 23:10	PG	EET PEN

Client Sample ID: MW1-ROX-071023-EB
Lab Sample ID: 400-240307-9

Date Collected: 07/10/23 08:30
Matrix: Water
Date Received: 07/11/23 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	633878	07/20/23 17:43	BPO	EET PEN
Total/NA	Prep	3520C			249.8 mL	1 mL	632824	07/12/23 09:20	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633026	07/13/23 19:16	S1B	EET PEN
Total/NA	Prep	3520C			249.8 mL	1 mL	632824	07/12/23 09:20	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633116	07/14/23 13:54	KJA	EET PEN
Total/NA	Prep	8011			36.4 mL	35 mL	633052	07/13/23 14:23	PG	EET PEN
Total/NA	Analysis	8011		1			633182	07/14/23 23:31	PG	EET PEN

Client Sample ID: MW1-ROX-071023
Lab Sample ID: 400-240307-10

Date Collected: 07/10/23 10:40
Matrix: Water
Date Received: 07/11/23 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	633878	07/20/23 19:58	BPO	EET PEN
Total/NA	Prep	3520C			252.2 mL	1 mL	632824	07/12/23 09:20	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633026	07/13/23 19:43	S1B	EET PEN
Total/NA	Prep	3520C			252.2 mL	1 mL	632824	07/12/23 09:20	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633116	07/14/23 14:15	KJA	EET PEN
Total/NA	Prep	8011			36.1 mL	35 mL	633052	07/13/23 14:23	PG	EET PEN
Total/NA	Analysis	8011		1			633182	07/14/23 23:52	PG	EET PEN

Client Sample ID: ROST4PZG-ROX-071023
Lab Sample ID: 400-240307-11

Date Collected: 07/10/23 12:05
Matrix: Water
Date Received: 07/11/23 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	634057	07/21/23 16:16	BPO	EET PEN
Total/NA	Prep	3520C			248.4 mL	1 mL	633166	07/14/23 10:19	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633421	07/17/23 19:21	S1B	EET PEN
Total/NA	Prep	3520C			245.6 mL	1 mL	632824	07/12/23 09:20	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633116	07/14/23 14:36	KJA	EET PEN
Total/NA	Prep	8011			34.9 mL	35 mL	633052	07/13/23 14:23	PG	EET PEN
Total/NA	Analysis	8011		1			633182	07/15/23 00:13	PG	EET PEN

Client Sample ID: P56-ROX-071023
Lab Sample ID: 400-240307-12

Date Collected: 07/10/23 14:05
Matrix: Water
Date Received: 07/11/23 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	634057	07/21/23 16:43	BPO	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	633166	07/14/23 10:19	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633421	07/17/23 19:49	S1B	EET PEN
Total/NA	Prep	3520C			252.8 mL	1 mL	632824	07/12/23 09:20	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633116	07/14/23 14:57	KJA	EET PEN
Total/NA	Prep	8011			35.4 mL	35 mL	633052	07/13/23 14:23	PG	EET PEN
Total/NA	Analysis	8011		1			633182	07/15/23 00:34	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-632824/1-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	632824	07/12/23 09:19	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633026	07/13/23 14:50	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	632824	07/12/23 09:19	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633116	07/14/23 10:53	KJA	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-633052/1-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	633052	07/13/23 14:23	PG	EET PEN
Total/NA	Analysis	8011		1			633182	07/14/23 19:18	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-633166/1-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	633166	07/14/23 10:19	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633421	07/17/23 17:00	S1B	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-633878/4
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	633878	07/20/23 10:28	BPO	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-634057/30
Date Collected: N/A
Matrix: Water
Date Received: 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	634057	07/21/23 11:18	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-632824/13-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	632824	07/12/23 09:26	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633026	07/13/23 15:17	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-632824/15-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	3520C			250 mL	1 mL	632824	07/12/23 09:26	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633116	07/14/23 12:09	KJA	EET PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-632824/2-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	632824	07/12/23 09:19	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633026	07/13/23 16:10	S1B	EET PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-633052/2-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	633052	07/13/23 14:23	PG	EET PEN
Total/NA	Analysis	8011		1			633182	07/14/23 19:39	PG	EET PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-633166/2-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	633166	07/14/23 10:19	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633421	07/17/23 17:28	S1B	EET PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-633166/4-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	633166	07/14/23 10:19	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633421	07/17/23 18:24	S1B	EET PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-633878/1002**
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	633878	07/20/23 09:07	BPO	EET PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-634057/1002**
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	634057	07/21/23 09:17	BPO	EET PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Job ID: 400-240307-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-632824/14-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	632824	07/12/23 09:26	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633026	07/13/23 15:44	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-632824/16-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	3520C			250 mL	1 mL	632824	07/12/23 09:26	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633116	07/14/23 12:30	KJA	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633052/3-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	633052	07/13/23 14:23	PG	EET PEN
Total/NA	Analysis	8011		1			633182	07/14/23 20:01	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633166/3-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	633166	07/14/23 10:19	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633421	07/17/23 17:55	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633166/5-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	633166	07/14/23 10:19	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633421	07/17/23 18:52	S1B	EET PEN

Client Sample ID: MW3-ROX-071023
Lab Sample ID: 400-240307-5 MS
Date Collected: 07/10/23 11:20
Matrix: Water
Date Received: 07/11/23 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	633878	07/20/23 14:05	BPO	EET PEN
Total/NA	Prep	3520C			254.8 mL	1 mL	632824	07/12/23 09:20	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633026	07/13/23 16:37	S1B	EET PEN
Total/NA	Prep	3520C			254.8 mL	1 mL	632824	07/12/23 09:20	BKL	EET PEN
Total/NA	Analysis	8270E SIM		50	0.4 mL	0.4 mL	633116	07/14/23 15:38	KJA	EET PEN

Client: AECOM Technical Services Inc.
Job ID: 400-240307-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: MW3-ROX-071023
Lab Sample ID: 400-240307-5 MS

Date Collected: 07/10/23 11:20
Matrix: Water
Date Received: 07/11/23 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			36.6 mL	35 mL	633052	07/13/23 14:23	PG	EET PEN
Total/NA	Analysis	8011		1			633182	07/14/23 21:46	PG	EET PEN

Client Sample ID: MW3-ROX-071023
Lab Sample ID: 400-240307-5 MSD

Date Collected: 07/10/23 11:20
Matrix: Water
Date Received: 07/11/23 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	633878	07/20/23 14:32	BPO	EET PEN
Total/NA	Prep	3520C			253.2 mL	1 mL	632824	07/12/23 09:20	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633026	07/13/23 17:03	S1B	EET PEN
Total/NA	Prep	3520C			253.2 mL	1 mL	632824	07/12/23 09:20	BKL	EET PEN
Total/NA	Analysis	8270E SIM		50	0.4 mL	0.4 mL	633116	07/14/23 15:59	KJA	EET PEN
Total/NA	Prep	8011			36.3 mL	35 mL	633052	07/13/23 14:23	PG	EET PEN
Total/NA	Analysis	8011		1			633182	07/14/23 22:07	PG	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 633878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240307-1	TB-ROX-071023-8260-A	Total/NA	Water	8260D	
400-240307-3	MW24-ROX-071023-EB	Total/NA	Water	8260D	
400-240307-4	MW24-ROX-071023	Total/NA	Water	8260D	
400-240307-5	MW3-ROX-071023	Total/NA	Water	8260D	
400-240307-6	MW26-ROX-071023	Total/NA	Water	8260D	
400-240307-7	TB-ROX-071023-8260-B	Total/NA	Water	8260D	
400-240307-9	MW1-ROX-071023-EB	Total/NA	Water	8260D	
400-240307-10	MW1-ROX-071023	Total/NA	Water	8260D	
MB 400-633878/4	Method Blank	Total/NA	Water	8260D	
LCS 400-633878/1002	Lab Control Sample	Total/NA	Water	8260D	
400-240307-5 MS	MW3-ROX-071023	Total/NA	Water	8260D	
400-240307-5 MSD	MW3-ROX-071023	Total/NA	Water	8260D	

Analysis Batch: 634057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240307-11	ROST4PZG-ROX-071023	Total/NA	Water	8260D	
400-240307-12	P56-ROX-071023	Total/NA	Water	8260D	
MB 400-634057/30	Method Blank	Total/NA	Water	8260D	
LCS 400-634057/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 632824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240307-3	MW24-ROX-071023-EB	Total/NA	Water	3520C	
400-240307-4	MW24-ROX-071023	Total/NA	Water	3520C	
400-240307-5	MW3-ROX-071023	Total/NA	Water	3520C	
400-240307-6	MW26-ROX-071023	Total/NA	Water	3520C	
400-240307-9	MW1-ROX-071023-EB	Total/NA	Water	3520C	
400-240307-10	MW1-ROX-071023	Total/NA	Water	3520C	
400-240307-11	ROST4PZG-ROX-071023	Total/NA	Water	3520C	
400-240307-12	P56-ROX-071023	Total/NA	Water	3520C	
MB 400-632824/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-632824/13-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-632824/15-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-632824/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-632824/14-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-632824/16-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-240307-5 MS	MW3-ROX-071023	Total/NA	Water	3520C	
400-240307-5 MSD	MW3-ROX-071023	Total/NA	Water	3520C	

Analysis Batch: 633026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240307-3	MW24-ROX-071023-EB	Total/NA	Water	8270E	632824
400-240307-4	MW24-ROX-071023	Total/NA	Water	8270E	632824
400-240307-5	MW3-ROX-071023	Total/NA	Water	8270E	632824
400-240307-6	MW26-ROX-071023	Total/NA	Water	8270E	632824
400-240307-9	MW1-ROX-071023-EB	Total/NA	Water	8270E	632824
400-240307-10	MW1-ROX-071023	Total/NA	Water	8270E	632824
MB 400-632824/1-A	Method Blank	Total/NA	Water	8270E	632824
LCS 400-632824/13-A	Lab Control Sample	Total/NA	Water	8270E	632824

GC/MS Semi VOA (Continued)

Analysis Batch: 633026 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-632824/2-A	Lab Control Sample	Total/NA	Water	8270E	632824
LCSD 400-632824/14-A	Lab Control Sample Dup	Total/NA	Water	8270E	632824
400-240307-5 MS	MW3-ROX-071023	Total/NA	Water	8270E	632824
400-240307-5 MSD	MW3-ROX-071023	Total/NA	Water	8270E	632824

Analysis Batch: 633116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240307-3	MW24-ROX-071023-EB	Total/NA	Water	8270E SIM	632824
400-240307-4	MW24-ROX-071023	Total/NA	Water	8270E SIM	632824
400-240307-5	MW3-ROX-071023	Total/NA	Water	8270E SIM	632824
400-240307-6	MW26-ROX-071023	Total/NA	Water	8270E SIM	632824
400-240307-9	MW1-ROX-071023-EB	Total/NA	Water	8270E SIM	632824
400-240307-10	MW1-ROX-071023	Total/NA	Water	8270E SIM	632824
400-240307-11	ROST4PZG-ROX-071023	Total/NA	Water	8270E SIM	632824
400-240307-12	P56-ROX-071023	Total/NA	Water	8270E SIM	632824
MB 400-632824/1-A	Method Blank	Total/NA	Water	8270E SIM	632824
LCS 400-632824/15-A	Lab Control Sample	Total/NA	Water	8270E SIM	632824
LCSD 400-632824/16-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	632824
400-240307-5 MS	MW3-ROX-071023	Total/NA	Water	8270E SIM	632824
400-240307-5 MSD	MW3-ROX-071023	Total/NA	Water	8270E SIM	632824

Prep Batch: 633166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240307-11	ROST4PZG-ROX-071023	Total/NA	Water	3520C	
400-240307-12	P56-ROX-071023	Total/NA	Water	3520C	
MB 400-633166/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-633166/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-633166/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-633166/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-633166/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 633421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240307-11	ROST4PZG-ROX-071023	Total/NA	Water	8270E	633166
400-240307-12	P56-ROX-071023	Total/NA	Water	8270E	633166
MB 400-633166/1-A	Method Blank	Total/NA	Water	8270E	633166
LCS 400-633166/2-A	Lab Control Sample	Total/NA	Water	8270E	633166
LCS 400-633166/4-A	Lab Control Sample	Total/NA	Water	8270E	633166
LCSD 400-633166/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	633166
LCSD 400-633166/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	633166

GC Semi VOA

Prep Batch: 633052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240307-2	TB-ROX-071023-8011-A	Total/NA	Water	8011	
400-240307-3	MW24-ROX-071023-EB	Total/NA	Water	8011	
400-240307-4	MW24-ROX-071023	Total/NA	Water	8011	
400-240307-5	MW3-ROX-071023	Total/NA	Water	8011	
400-240307-6	MW26-ROX-071023	Total/NA	Water	8011	
400-240307-8	TB-ROX-071023-8011-B	Total/NA	Water	8011	

GC Semi VOA (Continued)

Prep Batch: 633052 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240307-9	MW1-ROX-071023-EB	Total/NA	Water	8011	
400-240307-10	MW1-ROX-071023	Total/NA	Water	8011	
400-240307-11	ROST4PZG-ROX-071023	Total/NA	Water	8011	
400-240307-12	P56-ROX-071023	Total/NA	Water	8011	
MB 400-633052/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-633052/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-633052/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-240307-5 MS	MW3-ROX-071023	Total/NA	Water	8011	
400-240307-5 MSD	MW3-ROX-071023	Total/NA	Water	8011	

Analysis Batch: 633182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240307-2	TB-ROX-071023-8011-A	Total/NA	Water	8011	633052
400-240307-3	MW24-ROX-071023-EB	Total/NA	Water	8011	633052
400-240307-4	MW24-ROX-071023	Total/NA	Water	8011	633052
400-240307-5	MW3-ROX-071023	Total/NA	Water	8011	633052
400-240307-6	MW26-ROX-071023	Total/NA	Water	8011	633052
400-240307-8	TB-ROX-071023-8011-B	Total/NA	Water	8011	633052
400-240307-9	MW1-ROX-071023-EB	Total/NA	Water	8011	633052
400-240307-10	MW1-ROX-071023	Total/NA	Water	8011	633052
400-240307-11	ROST4PZG-ROX-071023	Total/NA	Water	8011	633052
400-240307-12	P56-ROX-071023	Total/NA	Water	8011	633052
MB 400-633052/1-A	Method Blank	Total/NA	Water	8011	633052
LCS 400-633052/2-A	Lab Control Sample	Total/NA	Water	8011	633052
LCSD 400-633052/3-A	Lab Control Sample Dup	Total/NA	Water	8011	633052
400-240307-5 MS	MW3-ROX-071023	Total/NA	Water	8011	633052
400-240307-5 MSD	MW3-ROX-071023	Total/NA	Water	8011	633052

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

Lab Sample ID: MB 400-633878/4
Matrix: Water
Analysis Batch: 633878

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/20/23 10:28	1
Acrolein	ND		20	3.3	ug/L			07/20/23 10:28	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/23 10:28	1
Benzene	ND		1.0	0.50	ug/L			07/20/23 10:28	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/23 10:28	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/20/23 10:28	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/23 10:28	1
Bromoform	ND		5.0	0.25	ug/L			07/20/23 10:28	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/23 10:28	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/20/23 10:28	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/23 10:28	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/20/23 10:28	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/20/23 10:28	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/23 10:28	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/23 10:28	1
Chloroform	ND		1.0	0.90	ug/L			07/20/23 10:28	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/20/23 10:28	1
Chloromethane	ND		1.0	0.90	ug/L			07/20/23 10:28	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/20/23 10:28	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/23 10:28	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/20/23 10:28	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/23 10:28	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/23 10:28	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/23 10:28	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/23 10:28	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/23 10:28	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/20/23 10:28	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/23 10:28	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 10:28	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 10:28	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/23 10:28	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/23 10:28	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/23 10:28	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/23 10:28	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/20/23 10:28	1
2-Hexanone	ND		25	1.4	ug/L			07/20/23 10:28	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/23 10:28	1
Methylene bromide	ND		5.0	0.22	ug/L			07/20/23 10:28	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/23 10:28	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/23 10:28	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/20/23 10:28	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/20/23 10:28	1
Naphthalene	ND		5.0	3.0	ug/L			07/20/23 10:28	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/23 10:28	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/23 10:28	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/23 10:28	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/23 10:28	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/23 10:28	1

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

Lab Sample ID: MB 400-633878/4
Matrix: Water
Analysis Batch: 633878

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/23 10:28	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/20/23 10:28	1
Styrene	ND		1.0	1.0	ug/L			07/20/23 10:28	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/23 10:28	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/20/23 10:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/23 10:28	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/20/23 10:28	1
Toluene	ND		1.0	0.90	ug/L			07/20/23 10:28	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/23 10:28	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/20/23 10:28	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/20/23 10:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/23 10:28	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/20/23 10:28	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/20/23 10:28	1
Trichloroethene	ND		1.0	0.15	ug/L			07/20/23 10:28	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/23 10:28	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/23 10:28	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/23 10:28	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/23 10:28	1
Vinyl acetate	ND		25	0.93	ug/L			07/20/23 10:28	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/23 10:28	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/23 10:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*07/20/23 10:28*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*07/20/23 10:28*	*1*
Toluene-d8 (Surr)	*104*		*64 - 132*		*07/20/23 10:28*	*1*

Lab Sample ID: LCS 400-633878/1002
Matrix: Water
Analysis Batch: 633878

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	195		ug/L		98	43 - 160
Acrolein	500	519		ug/L		104	38 - 160
Acrylonitrile	500	549		ug/L		110	64 - 142
Benzene	50.0	49.6		ug/L		99	70 - 130
Bromobenzene	50.0	50.2		ug/L		100	70 - 132
Bromochloromethane	50.0	50.4		ug/L		101	70 - 130
Bromodichloromethane	50.0	49.5		ug/L		99	67 - 133
Bromoform	50.0	52.5		ug/L		105	57 - 140
Bromomethane	50.0	48.9		ug/L		98	10 - 160
2-Butanone (MEK)	200	221		ug/L		111	61 - 145
Carbon disulfide	50.0	50.2		ug/L		100	61 - 137
Carbon tetrachloride	50.0	48.7		ug/L		97	61 - 137
Chlorobenzene	50.0	50.4		ug/L		101	70 - 130
Chloroethane	50.0	50.2		ug/L		100	55 - 141
2-Chloroethyl vinyl ether	50.0	51.8		ug/L		104	10 - 160

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

Lab Sample ID: LCS 400-633878/1002
Matrix: Water
Analysis Batch: 633878

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	50.5		ug/L		101	69 - 130
Chloromethane	50.0	45.5		ug/L		91	58 - 137
cis-1,2-Dichloroethene	50.0	50.0		ug/L		100	68 - 130
cis-1,3-Dichloropropene	50.0	50.1		ug/L		100	69 - 132
Dibromochloromethane	50.0	50.4		ug/L		101	67 - 135
1,2-Dichlorobenzene	50.0	52.3		ug/L		105	67 - 130
1,3-Dichlorobenzene	50.0	50.4		ug/L		101	70 - 130
1,4-Dichlorobenzene	50.0	50.1		ug/L		100	70 - 130
Dichlorodifluoromethane	50.0	47.6		ug/L		95	41 - 146
1,1-Dichloroethane	50.0	49.2		ug/L		98	70 - 130
1,2-Dichloroethane	50.0	49.2		ug/L		98	69 - 130
1,1-Dichloroethene	50.0	45.2		ug/L		90	63 - 134
1,2-Dichloropropane	50.0	49.2		ug/L		98	70 - 130
1,3-Dichloropropane	50.0	52.3		ug/L		105	70 - 130
2,2-Dichloropropane	50.0	49.1		ug/L		98	52 - 135
1,1-Dichloropropene	50.0	49.6		ug/L		99	70 - 130
Ethylbenzene	50.0	50.6		ug/L		101	70 - 130
Ethyl methacrylate	50.0	53.5		ug/L		107	68 - 130
Hexachlorobutadiene	50.0	51.0		ug/L		102	53 - 140
2-Hexanone	200	223		ug/L		112	65 - 137
Isopropylbenzene	50.0	50.3		ug/L		101	70 - 130
Methylene bromide	50.0	50.5		ug/L		101	70 - 130
Methylene Chloride	50.0	58.0		ug/L		116	66 - 135
4-Methyl-2-pentanone (MIBK)	200	214		ug/L		107	69 - 138
Methyl tert-butyl ether	50.0	51.0		ug/L		102	66 - 130
m-Xylene & p-Xylene	50.0	50.4		ug/L		101	70 - 130
Naphthalene	50.0	53.7		ug/L		107	47 - 149
n-Butylbenzene	50.0	53.8		ug/L		108	67 - 130
N-Propylbenzene	50.0	50.7		ug/L		101	70 - 130
o-Chlorotoluene	50.0	49.9		ug/L		100	70 - 130
o-Xylene	50.0	50.1		ug/L		100	70 - 130
p-Chlorotoluene	50.0	50.7		ug/L		101	70 - 130
p-Isopropyltoluene	50.0	51.5		ug/L		103	65 - 130
sec-Butylbenzene	50.0	51.2		ug/L		102	66 - 130
Styrene	50.0	49.9		ug/L		100	70 - 130
tert-Butylbenzene	50.0	50.1		ug/L		100	64 - 139
1,1,1,2-Tetrachloroethane	50.0	50.3		ug/L		101	67 - 131
1,1,2,2-Tetrachloroethane	50.0	52.0		ug/L		104	70 - 131
Tetrachloroethene	50.0	54.2		ug/L		108	65 - 130
Toluene	50.0	50.9		ug/L		102	70 - 130
trans-1,2-Dichloroethene	50.0	49.7		ug/L		99	70 - 130
trans-1,3-Dichloropropene	50.0	51.8		ug/L		104	63 - 130
1,2,3-Trichlorobenzene	50.0	50.8		ug/L		102	60 - 138
1,2,4-Trichlorobenzene	50.0	51.6		ug/L		103	60 - 140
1,1,1-Trichloroethane	50.0	48.7		ug/L		97	68 - 130
1,1,2-Trichloroethane	50.0	51.7		ug/L		103	70 - 130
Trichloroethene	50.0	49.9		ug/L		100	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 400-633878/1002
Matrix: Water
Analysis Batch: 633878

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	53.2		ug/L		106	70 - 130		
1,2,4-Trimethylbenzene			50.0	50.1		ug/L		100	70 - 130		
1,3,5-Trimethylbenzene			50.0	50.1		ug/L		100	69 - 130		
Vinyl acetate			100	106		ug/L		106	26 - 160		
Vinyl chloride			50.0	48.5		ug/L		97	59 - 136		
Xylenes, Total			100	100		ug/L		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*72 - 130*
Dibromofluoromethane	*100*		*75 - 126*
Toluene-d8 (Surr)	*103*		*64 - 132*

Lab Sample ID: 400-240307-5 MS
Matrix: Water
Analysis Batch: 633878

Client Sample ID: MW3-ROX-071023
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Acetone	ND		200	199		ug/L		99	43 - 150		
Acrolein	ND		500	507		ug/L		101	38 - 150		
Acrylonitrile	ND		500	633		ug/L		127	62 - 149		
Benzene	ND		50.0	53.3		ug/L		107	56 - 142		
Bromobenzene	ND		50.0	50.8		ug/L		102	59 - 136		
Bromochloromethane	ND		50.0	57.6		ug/L		115	64 - 140		
Bromodichloromethane	ND		50.0	54.7		ug/L		109	59 - 143		
Bromoform	ND		50.0	56.8		ug/L		114	50 - 140		
Bromomethane	ND		50.0	42.8		ug/L		86	10 - 150		
2-Butanone (MEK)	ND		200	238		ug/L		119	55 - 150		
Carbon disulfide	ND		50.0	53.3		ug/L		107	48 - 150		
Carbon tetrachloride	ND		50.0	51.1		ug/L		102	55 - 145		
Chlorobenzene	ND		50.0	51.8		ug/L		104	64 - 130		
Chloroethane	ND		50.0	41.1		ug/L		82	50 - 150		
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150		
Chloroform	ND		50.0	54.8		ug/L		110	60 - 141		
1-Chlorohexane	ND		50.0	49.4		ug/L		99	56 - 136		
Chloromethane	ND		50.0	41.3		ug/L		83	49 - 148		
cis-1,2-Dichloroethene	ND		50.0	54.3		ug/L		109	59 - 143		
cis-1,3-Dichloropropene	ND		50.0	54.3		ug/L		109	57 - 140		
Dibromochloromethane	ND		50.0	56.0		ug/L		112	56 - 143		
1,2-Dichlorobenzene	ND		50.0	50.5		ug/L		101	52 - 137		
1,3-Dichlorobenzene	ND		50.0	48.6		ug/L		97	54 - 135		
1,4-Dichlorobenzene	ND		50.0	48.2		ug/L		96	53 - 135		
Dichlorodifluoromethane	ND		50.0	45.0		ug/L		90	16 - 150		
1,1-Dichloroethane	ND		50.0	53.4		ug/L		107	61 - 144		
1,2-Dichloroethane	ND		50.0	59.4		ug/L		119	60 - 141		
1,1-Dichloroethene	ND		50.0	53.4		ug/L		107	54 - 147		
1,2-Dichloropropane	ND		50.0	56.0		ug/L		112	66 - 137		
1,3-Dichloropropane	ND		50.0	57.6		ug/L		115	66 - 133		
2,2-Dichloropropane	ND		50.0	51.3		ug/L		103	42 - 144		

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

Lab Sample ID: 400-240307-5 MS
Matrix: Water
Analysis Batch: 633878

Client Sample ID: MW3-ROX-071023
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloropropene	ND		50.0	51.5		ug/L		103	65 - 136
Ethylbenzene	ND		50.0	50.8		ug/L		102	58 - 131
Ethyl methacrylate	ND		50.0	63.0		ug/L		126	64 - 130
Hexachlorobutadiene	ND	F2	50.0	45.0		ug/L		90	31 - 149
2-Hexanone	ND		200	257		ug/L		128	65 - 140
Isopropylbenzene	ND	F2	50.0	49.2		ug/L		98	56 - 133
Methylene bromide	ND		50.0	59.0		ug/L		118	63 - 138
Methylene Chloride	ND		50.0	55.2		ug/L		110	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	260		ug/L		130	63 - 146
Methyl tert-butyl ether	1.0		50.0	60.2		ug/L		118	59 - 137
m-Xylene & p-Xylene	ND		50.0	50.6		ug/L		101	57 - 130
Naphthalene	ND		50.0	60.0		ug/L		120	25 - 150
n-Butylbenzene	ND	F2	50.0	43.4		ug/L		87	41 - 142
N-Propylbenzene	ND	F2	50.0	45.7		ug/L		91	51 - 138
o-Chlorotoluene	ND		50.0	46.3		ug/L		93	53 - 134
o-Xylene	ND		50.0	51.4		ug/L		103	61 - 130
p-Chlorotoluene	ND		50.0	48.4		ug/L		97	54 - 133
p-Isopropyltoluene	ND	F2	50.0	45.7		ug/L		91	48 - 139
sec-Butylbenzene	ND	F2	50.0	46.0		ug/L		92	50 - 138
Styrene	ND		50.0	51.7		ug/L		103	58 - 131
tert-Butylbenzene	ND		50.0	47.5		ug/L		95	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	53.8		ug/L		108	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	58.2		ug/L		116	66 - 135
Tetrachloroethene	ND		50.0	47.8		ug/L		96	52 - 133
Toluene	ND		50.0	52.6		ug/L		105	65 - 130
trans-1,2-Dichloroethene	ND		50.0	52.7		ug/L		105	61 - 143
trans-1,3-Dichloropropene	ND		50.0	56.0		ug/L		112	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	52.8		ug/L		106	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	50.7		ug/L		101	39 - 148
1,1,1-Trichloroethane	ND		50.0	51.9		ug/L		104	57 - 142
1,1,2-Trichloroethane	ND		50.0	56.5		ug/L		113	66 - 131
Trichloroethene	ND		50.0	51.0		ug/L		102	64 - 136
Trichlorofluoromethane	ND		50.0	47.9		ug/L		96	54 - 150
1,2,3-Trichloropropane	ND		50.0	58.8		ug/L		118	65 - 133
1,2,4-Trimethylbenzene	ND	F2	50.0	47.4		ug/L		95	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	46.6		ug/L		93	52 - 135
Vinyl acetate	ND		100	99.9		ug/L		100	26 - 150
Vinyl chloride	ND		50.0	46.2		ug/L		92	46 - 150
Xylenes, Total	ND		100	102		ug/L		102	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*72 - 130*
Dibromofluoromethane	*101*		*75 - 126*
Toluene-d8 (Surr)	*102*		*64 - 132*

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

Lab Sample ID: 400-240307-5 MSD
Matrix: Water
Analysis Batch: 633878

Client Sample ID: MW3-ROX-071023
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	168		ug/L		84	43 - 150	17	30
Acrolein	ND		500	508		ug/L		102	38 - 150	0	31
Acrylonitrile	ND		500	515		ug/L		103	62 - 149	21	30
Benzene	ND		50.0	44.1		ug/L		88	56 - 142	19	30
Bromobenzene	ND		50.0	40.2		ug/L		80	59 - 136	23	30
Bromochloromethane	ND		50.0	46.8		ug/L		94	64 - 140	21	30
Bromodichloromethane	ND		50.0	44.7		ug/L		89	59 - 143	20	30
Bromoform	ND		50.0	47.2		ug/L		94	50 - 140	18	30
Bromomethane	ND		50.0	44.8		ug/L		90	10 - 150	5	50
2-Butanone (MEK)	ND		200	196		ug/L		98	55 - 150	19	30
Carbon disulfide	ND		50.0	43.2		ug/L		86	48 - 150	21	30
Carbon tetrachloride	ND		50.0	42.6		ug/L		85	55 - 145	18	30
Chlorobenzene	ND		50.0	40.3		ug/L		81	64 - 130	25	30
Chloroethane	ND		50.0	44.0		ug/L		88	50 - 150	7	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	45.3		ug/L		91	60 - 141	19	30
1-Chlorohexane	ND		50.0	36.4		ug/L		73	56 - 136	30	30
Chloromethane	ND		50.0	46.3		ug/L		93	49 - 148	11	31
cis-1,2-Dichloroethene	ND		50.0	45.1		ug/L		90	59 - 143	18	30
cis-1,3-Dichloropropene	ND		50.0	44.8		ug/L		90	57 - 140	19	30
Dibromochloromethane	ND		50.0	45.4		ug/L		91	56 - 143	21	30
1,2-Dichlorobenzene	ND		50.0	38.9		ug/L		78	52 - 137	26	30
1,3-Dichlorobenzene	ND		50.0	36.1		ug/L		72	54 - 135	30	30
1,4-Dichlorobenzene	ND		50.0	36.2		ug/L		72	53 - 135	29	30
Dichlorodifluoromethane	ND		50.0	47.7		ug/L		95	16 - 150	6	31
1,1-Dichloroethane	ND		50.0	45.2		ug/L		90	61 - 144	17	30
1,2-Dichloroethane	ND		50.0	48.5		ug/L		97	60 - 141	20	30
1,1-Dichloroethene	ND		50.0	43.5		ug/L		87	54 - 147	20	30
1,2-Dichloropropane	ND		50.0	45.1		ug/L		90	66 - 137	22	30
1,3-Dichloropropane	ND		50.0	47.2		ug/L		94	66 - 133	20	30
2,2-Dichloropropane	ND		50.0	43.5		ug/L		87	42 - 144	16	31
1,1-Dichloropropene	ND		50.0	42.2		ug/L		84	65 - 136	20	30
Ethylbenzene	ND		50.0	38.1		ug/L		76	58 - 131	28	30
Ethyl methacrylate	ND		50.0	51.5		ug/L		103	64 - 130	20	30
Hexachlorobutadiene	ND	F2	50.0	29.6	F2	ug/L		59	31 - 149	41	36
2-Hexanone	ND		200	210		ug/L		105	65 - 140	20	30
Isopropylbenzene	ND	F2	50.0	35.5	F2	ug/L		71	56 - 133	32	30
Methylene bromide	ND		50.0	48.6		ug/L		97	63 - 138	19	30
Methylene Chloride	ND		50.0	46.7		ug/L		93	60 - 146	17	32
4-Methyl-2-pentanone (MIBK)	ND		200	209		ug/L		105	63 - 146	22	30
Methyl tert-butyl ether	1.0		50.0	50.5		ug/L		99	59 - 137	17	30
m-Xylene & p-Xylene	ND		50.0	37.3		ug/L		75	57 - 130	30	30
Naphthalene	ND		50.0	49.4		ug/L		99	25 - 150	20	30
n-Butylbenzene	ND	F2	50.0	30.4	F2	ug/L		61	41 - 142	35	31
N-Propylbenzene	ND	F2	50.0	33.3	F2	ug/L		67	51 - 138	31	30
o-Chlorotoluene	ND		50.0	36.8		ug/L		74	53 - 134	23	30
o-Xylene	ND		50.0	38.7		ug/L		77	61 - 130	28	30
p-Chlorotoluene	ND		50.0	36.0		ug/L		72	54 - 133	29	30

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

Lab Sample ID: 400-240307-5 MSD
Matrix: Water
Analysis Batch: 633878

Client Sample ID: MW3-ROX-071023
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	32.0	F2	ug/L		64	48 - 139	35	30
sec-Butylbenzene	ND	F2	50.0	32.8	F2	ug/L		66	50 - 138	34	30
Styrene	ND		50.0	38.3		ug/L		77	58 - 131	30	30
tert-Butylbenzene	ND		50.0	35.6		ug/L		71	54 - 146	29	30
1,1,1,2-Tetrachloroethane	ND		50.0	43.9		ug/L		88	59 - 137	20	30
1,1,2,2-Tetrachloroethane	ND		50.0	49.6		ug/L		99	66 - 135	16	30
Tetrachloroethene	ND		50.0	37.1		ug/L		74	52 - 133	25	30
Toluene	ND		50.0	41.9		ug/L		84	65 - 130	23	30
trans-1,2-Dichloroethene	ND		50.0	43.8		ug/L		88	61 - 143	18	30
trans-1,3-Dichloropropene	ND		50.0	46.0		ug/L		92	53 - 133	20	30
1,2,3-Trichlorobenzene	ND		50.0	40.8		ug/L		82	43 - 145	26	30
1,2,4-Trichlorobenzene	ND		50.0	38.0		ug/L		76	39 - 148	29	30
1,1,1-Trichloroethane	ND		50.0	44.0		ug/L		88	57 - 142	17	30
1,1,2-Trichloroethane	ND		50.0	47.7		ug/L		95	66 - 131	17	30
Trichloroethene	ND		50.0	41.5		ug/L		83	64 - 136	21	30
Trichlorofluoromethane	ND		50.0	51.2		ug/L		102	54 - 150	7	30
1,2,3-Trichloropropane	ND		50.0	50.8		ug/L		102	65 - 133	15	30
1,2,4-Trimethylbenzene	ND	F2	50.0	34.8	F2	ug/L		70	50 - 139	31	30
1,3,5-Trimethylbenzene	ND		50.0	34.6		ug/L		69	52 - 135	30	30
Vinyl acetate	ND		100	103		ug/L		103	26 - 150	3	33
Vinyl chloride	ND		50.0	49.4		ug/L		99	46 - 150	7	30
Xylenes, Total	ND		100	76.0		ug/L		76	59 - 130	29	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*72 - 130*
Dibromofluoromethane	*99*		*75 - 126*
Toluene-d8 (Surr)	*102*		*64 - 132*

Lab Sample ID: MB 400-634057/30
Matrix: Water
Analysis Batch: 634057

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/21/23 11:18	1
Acrolein	ND		20	3.3	ug/L			07/21/23 11:18	1
Acrylonitrile	ND		10	2.8	ug/L			07/21/23 11:18	1
Benzene	ND		1.0	0.50	ug/L			07/21/23 11:18	1
Bromobenzene	ND		1.0	0.54	ug/L			07/21/23 11:18	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/21/23 11:18	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/21/23 11:18	1
Bromoform	ND		5.0	0.25	ug/L			07/21/23 11:18	1
Bromomethane	ND		1.0	0.98	ug/L			07/21/23 11:18	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/21/23 11:18	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/21/23 11:18	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/21/23 11:18	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/21/23 11:18	1
Chloroethane	ND		1.0	0.76	ug/L			07/21/23 11:18	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/21/23 11:18	1

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

Lab Sample ID: MB 400-634057/30
Matrix: Water
Analysis Batch: 634057

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			07/21/23 11:18	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/21/23 11:18	1
Chloromethane	ND		1.0	0.90	ug/L			07/21/23 11:18	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/21/23 11:18	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/21/23 11:18	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/21/23 11:18	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/21/23 11:18	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/21/23 11:18	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/21/23 11:18	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/21/23 11:18	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/21/23 11:18	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/21/23 11:18	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/21/23 11:18	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/21/23 11:18	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/21/23 11:18	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/21/23 11:18	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/21/23 11:18	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/21/23 11:18	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/21/23 11:18	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/21/23 11:18	1
2-Hexanone	ND		25	1.4	ug/L			07/21/23 11:18	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/21/23 11:18	1
Methylene bromide	ND		5.0	0.22	ug/L			07/21/23 11:18	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/21/23 11:18	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/21/23 11:18	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/21/23 11:18	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/21/23 11:18	1
Naphthalene	ND		5.0	3.0	ug/L			07/21/23 11:18	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/21/23 11:18	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/21/23 11:18	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/21/23 11:18	1
o-Xylene	ND		5.0	0.60	ug/L			07/21/23 11:18	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/21/23 11:18	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/21/23 11:18	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/21/23 11:18	1
Styrene	ND		1.0	1.0	ug/L			07/21/23 11:18	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/21/23 11:18	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/21/23 11:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/21/23 11:18	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/21/23 11:18	1
Toluene	ND		1.0	0.90	ug/L			07/21/23 11:18	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/21/23 11:18	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/21/23 11:18	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/21/23 11:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/21/23 11:18	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/21/23 11:18	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/21/23 11:18	1
Trichloroethene	ND		1.0	0.15	ug/L			07/21/23 11:18	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/21/23 11:18	1

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

Lab Sample ID: MB 400-634057/30
Matrix: Water
Analysis Batch: 634057

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/21/23 11:18	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/21/23 11:18	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/21/23 11:18	1
Vinyl acetate	ND		25	0.93	ug/L			07/21/23 11:18	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/21/23 11:18	1
Xylenes, Total	ND		10	1.6	ug/L			07/21/23 11:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*07/21/23 11:18*	*1*
Dibromofluoromethane	*98*		*75 - 126*		*07/21/23 11:18*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*07/21/23 11:18*	*1*

Lab Sample ID: LCS 400-634057/1002
Matrix: Water
Analysis Batch: 634057

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	207		ug/L		103	43 - 160
Acrolein	500	488		ug/L		98	38 - 160
Acrylonitrile	500	584		ug/L		117	64 - 142
Benzene	50.0	54.8		ug/L		110	70 - 130
Bromobenzene	50.0	55.8		ug/L		112	70 - 132
Bromochloromethane	50.0	57.8		ug/L		116	70 - 130
Bromodichloromethane	50.0	55.1		ug/L		110	67 - 133
Bromoform	50.0	57.6		ug/L		115	57 - 140
Bromomethane	50.0	44.4		ug/L		89	10 - 160
2-Butanone (MEK)	200	242		ug/L		121	61 - 145
Carbon disulfide	50.0	55.8		ug/L		112	61 - 137
Carbon tetrachloride	50.0	54.5		ug/L		109	61 - 137
Chlorobenzene	50.0	57.0		ug/L		114	70 - 130
Chloroethane	50.0	57.0		ug/L		114	55 - 141
2-Chloroethyl vinyl ether	50.0	50.0		ug/L		100	10 - 160
Chloroform	50.0	54.1		ug/L		108	69 - 130
1-Chlorohexane	50.0	55.3		ug/L		111	69 - 130
Chloromethane	50.0	43.4		ug/L		87	58 - 137
cis-1,2-Dichloroethene	50.0	54.4		ug/L		109	68 - 130
cis-1,3-Dichloropropene	50.0	55.3		ug/L		111	69 - 132
Dibromochloromethane	50.0	56.0		ug/L		112	67 - 135
1,2-Dichlorobenzene	50.0	58.9		ug/L		118	67 - 130
1,3-Dichlorobenzene	50.0	57.0		ug/L		114	70 - 130
1,4-Dichlorobenzene	50.0	56.8		ug/L		114	70 - 130
Dichlorodifluoromethane	50.0	46.7		ug/L		93	41 - 146
1,1-Dichloroethane	50.0	53.9		ug/L		108	70 - 130
1,2-Dichloroethane	50.0	53.9		ug/L		108	69 - 130
1,1-Dichloroethene	50.0	51.2		ug/L		102	63 - 134
1,2-Dichloropropane	50.0	55.2		ug/L		110	70 - 130
1,3-Dichloropropane	50.0	57.3		ug/L		115	70 - 130
2,2-Dichloropropane	50.0	54.7		ug/L		109	52 - 135

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

Lab Sample ID: LCS 400-634057/1002
Matrix: Water
Analysis Batch: 634057

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	54.1		ug/L		108	70 - 130
Ethylbenzene	50.0	56.5		ug/L		113	70 - 130
Ethyl methacrylate	50.0	59.2		ug/L		118	68 - 130
Hexachlorobutadiene	50.0	59.3		ug/L		119	53 - 140
2-Hexanone	200	234		ug/L		117	65 - 137
Isopropylbenzene	50.0	56.7		ug/L		113	70 - 130
Methylene bromide	50.0	56.1		ug/L		112	70 - 130
Methylene Chloride	50.0	66.3		ug/L		133	66 - 135
4-Methyl-2-pentanone (MIBK)	200	230		ug/L		115	69 - 138
Methyl tert-butyl ether	50.0	56.5		ug/L		113	66 - 130
m-Xylene & p-Xylene	50.0	56.3		ug/L		113	70 - 130
Naphthalene	50.0	59.1		ug/L		118	47 - 149
n-Butylbenzene	50.0	60.6		ug/L		121	67 - 130
N-Propylbenzene	50.0	55.6		ug/L		111	70 - 130
o-Chlorotoluene	50.0	54.6		ug/L		109	70 - 130
o-Xylene	50.0	56.4		ug/L		113	70 - 130
p-Chlorotoluene	50.0	56.6		ug/L		113	70 - 130
p-Isopropyltoluene	50.0	57.9		ug/L		116	65 - 130
sec-Butylbenzene	50.0	57.4		ug/L		115	66 - 130
Styrene	50.0	56.3		ug/L		113	70 - 130
tert-Butylbenzene	50.0	55.8		ug/L		112	64 - 139
1,1,1,2-Tetrachloroethane	50.0	57.2		ug/L		114	67 - 131
1,1,2,2-Tetrachloroethane	50.0	56.0		ug/L		112	70 - 131
Tetrachloroethene	50.0	60.0		ug/L		120	65 - 130
Toluene	50.0	56.9		ug/L		114	70 - 130
trans-1,2-Dichloroethene	50.0	55.9		ug/L		112	70 - 130
trans-1,3-Dichloropropene	50.0	57.2		ug/L		114	63 - 130
1,2,3-Trichlorobenzene	50.0	58.3		ug/L		117	60 - 138
1,2,4-Trichlorobenzene	50.0	58.1		ug/L		116	60 - 140
1,1,1-Trichloroethane	50.0	54.2		ug/L		108	68 - 130
1,1,2-Trichloroethane	50.0	56.8		ug/L		114	70 - 130
Trichloroethene	50.0	56.3		ug/L		113	70 - 130
Trichlorofluoromethane	50.0	50.3		ug/L		101	65 - 138
1,2,3-Trichloropropane	50.0	56.5		ug/L		113	70 - 130
1,2,4-Trimethylbenzene	50.0	56.9		ug/L		114	70 - 130
1,3,5-Trimethylbenzene	50.0	55.4		ug/L		111	69 - 130
Vinyl acetate	100	104		ug/L		104	26 - 160
Vinyl chloride	50.0	46.4		ug/L		93	59 - 136
Xylenes, Total	100	113		ug/L		113	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*72 - 130*
Dibromofluoromethane	*101*		*75 - 126*
Toluene-d8 (Surr)	*103*		*64 - 132*

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

Lab Sample ID: MB 400-632824/1-A
Matrix: Water
Analysis Batch: 633026

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632824

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/12/23 09:19	07/13/23 14:50	1
Benzenethiol	ND		10	1.7	ug/L		07/12/23 09:19	07/13/23 14:50	1
Benzoic acid	ND		30	7.3	ug/L		07/12/23 09:19	07/13/23 14:50	1
Benzyl alcohol	ND		10	2.0	ug/L		07/12/23 09:19	07/13/23 14:50	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/12/23 09:19	07/13/23 14:50	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/12/23 09:19	07/13/23 14:50	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/12/23 09:19	07/13/23 14:50	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/12/23 09:19	07/13/23 14:50	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/12/23 09:19	07/13/23 14:50	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/12/23 09:19	07/13/23 14:50	1
4-Chloroaniline	ND		10	3.4	ug/L		07/12/23 09:19	07/13/23 14:50	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/12/23 09:19	07/13/23 14:50	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/12/23 09:19	07/13/23 14:50	1
2-Chlorophenol	ND		10	2.2	ug/L		07/12/23 09:19	07/13/23 14:50	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/12/23 09:19	07/13/23 14:50	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/12/23 09:19	07/13/23 14:50	1
Dibenzofuran	ND		10	0.17	ug/L		07/12/23 09:19	07/13/23 14:50	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/12/23 09:19	07/13/23 14:50	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/12/23 09:19	07/13/23 14:50	1
Diethyl phthalate	ND		10	0.24	ug/L		07/12/23 09:19	07/13/23 14:50	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/12/23 09:19	07/13/23 14:50	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/12/23 09:19	07/13/23 14:50	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/12/23 09:19	07/13/23 14:50	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/12/23 09:19	07/13/23 14:50	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/12/23 09:19	07/13/23 14:50	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/12/23 09:19	07/13/23 14:50	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/12/23 09:19	07/13/23 14:50	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/12/23 09:19	07/13/23 14:50	1
1,4-Dioxane	ND		10	1.0	ug/L		07/12/23 09:19	07/13/23 14:50	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/12/23 09:19	07/13/23 14:50	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/12/23 09:19	07/13/23 14:50	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/12/23 09:19	07/13/23 14:50	1
Hexachloroethane	ND		10	4.2	ug/L		07/12/23 09:19	07/13/23 14:50	1
Indene	ND		10	1.0	ug/L		07/12/23 09:19	07/13/23 14:50	1
Isophorone	ND		10	0.14	ug/L		07/12/23 09:19	07/13/23 14:50	1
2-Methylphenol	ND		10	1.8	ug/L		07/12/23 09:19	07/13/23 14:50	1
3 & 4 Me hylphenol	ND		20	0.39	ug/L		07/12/23 09:19	07/13/23 14:50	1
2-Nitroaniline	ND		10	2.2	ug/L		07/12/23 09:19	07/13/23 14:50	1
3-Nitroaniline	ND		10	1.8	ug/L		07/12/23 09:19	07/13/23 14:50	1
4-Nitroaniline	ND		10	1.5	ug/L		07/12/23 09:19	07/13/23 14:50	1
Nitrobenzene	ND		10	0.13	ug/L		07/12/23 09:19	07/13/23 14:50	1
2-Nitrophenol	ND		10	5.2	ug/L		07/12/23 09:19	07/13/23 14:50	1
4-Nitrophenol	ND		10	2.1	ug/L		07/12/23 09:19	07/13/23 14:50	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/12/23 09:19	07/13/23 14:50	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/12/23 09:19	07/13/23 14:50	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/12/23 09:19	07/13/23 14:50	1
Pentachlorophenol	ND		20	1.4	ug/L		07/12/23 09:19	07/13/23 14:50	1
Phenol	ND		10	2.6	ug/L		07/12/23 09:19	07/13/23 14:50	1

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

Lab Sample ID: MB 400-632824/1-A
Matrix: Water
Analysis Batch: 633026

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632824

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	ND		10	3.2	ug/L		07/12/23 09:19	07/13/23 14:50	1
Quinoline	ND		10	4.5	ug/L		07/12/23 09:19	07/13/23 14:50	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/12/23 09:19	07/13/23 14:50	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/12/23 09:19	07/13/23 14:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*94*		*46 - 124*	*07/12/23 09:19*	*07/13/23 14:50*	*1*
2-Fluorophenol	*25*		*13 - 113*	*07/12/23 09:19*	*07/13/23 14:50*	*1*
Nitrobenzene-d5	*84*		*36 - 126*	*07/12/23 09:19*	*07/13/23 14:50*	*1*
Phenol-d5	*63*		*17 - 127*	*07/12/23 09:19*	*07/13/23 14:50*	*1*
Terphenyl-d14	*116*		*44 - 149*	*07/12/23 09:19*	*07/13/23 14:50*	*1*
2,4,6-Tribromophenol	*96*		*26 - 150*	*07/12/23 09:19*	*07/13/23 14:50*	*1*

Lab Sample ID: LCS 400-632824/13-A
Matrix: Water
Analysis Batch: 633026

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632824

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	4.82	J *-	ug/L		4	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*90*		*46 - 124*
2-Fluorophenol	*9*	*S1-*	*13 - 113*
Nitrobenzene-d5	*78*		*36 - 126*
Phenol-d5	*30*		*17 - 127*
Terphenyl-d14	*117*		*44 - 149*
2,4,6-Tribromophenol	*80*		*26 - 150*

Lab Sample ID: LCS 400-632824/2-A
Matrix: Water
Analysis Batch: 633026

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632824

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	88.7		ug/L		74	21 - 120
Benzoic acid	522	375		ug/L		72	10 - 144
Benzyl alcohol	120	59.1		ug/L		49	28 - 120
Bis(2-chloroethoxy)methane	120	86.1		ug/L		72	47 - 120
Bis(2-chloroethyl)ether	120	94.2		ug/L		79	44 - 120
bis (2-chloroisopropyl) ether	120	70.6		ug/L		59	33 - 121
Bis(2-ethylhexyl) phthalate	120	108		ug/L		90	52 - 147
4-Bromophenyl phenyl ether	120	110		ug/L		92	54 - 122
Butyl benzyl phthalate	120	105		ug/L		88	54 - 133
4-Chloroaniline	120	78.0		ug/L		65	26 - 120
4-Chloro-3-methylphenol	120	98.2		ug/L		82	48 - 131
2-Chloronaphthalene	120	104		ug/L		87	52 - 121
2-Chlorophenol	120	81.0		ug/L		67	40 - 120
4-Chlorophenyl phenyl ether	120	112		ug/L		93	56 - 125
Dibenz[a,h]acridine	110	98.0		ug/L		90	31 - 150

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

Lab Sample ID: LCS 400-632824/2-A
Matrix: Water
Analysis Batch: 633026

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632824

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dibenzofuran	120	101		ug/L		84	56 - 122
3,3'-Dichlorobenzidine	160	141		ug/L		88	36 - 132
2,4-Dichlorophenol	120	100		ug/L		83	49 - 120
Diethyl phthalate	120	108		ug/L		90	50 - 137
2,4-Dimethylphenol	120	97.4		ug/L		81	48 - 120
Dimethyl phthalate	120	103		ug/L		86	57 - 124
Di-n-butyl phthalate	120	103		ug/L		86	58 - 126
4,6-Dinitro-ortho-cresol	240	237		ug/L		99	23 - 148
2,4-Dinitrophenol	240	210		ug/L		88	10 - 150
2,4-Dinitrotoluene	120	118		ug/L		98	54 - 142
2,6-Dinitrotoluene	120	108		ug/L		90	55 - 130
Di-n-octyl phthalate	120	109		ug/L		90	57 - 138
1,4-Dioxane	120	57.9		ug/L		48	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	90.0		ug/L		75	45 - 124
Hexachlorobenzene	120	115		ug/L		96	52 - 129
Hexachlorocyclopentadiene	120	101		ug/L		84	10 - 134
Hexachloroethane	120	87.0		ug/L		72	20 - 120
Indene	120	102		ug/L		85	49 - 120
Isophorone	120	82.3		ug/L		69	48 - 120
2-Methylphenol	120	113		ug/L		94	46 - 124
3 & 4 Me hylphenol	120	92.4		ug/L		77	45 - 120
2-Nitroaniline	120	86.5		ug/L		72	51 - 145
3-Nitroaniline	120	72.7		ug/L		61	37 - 127
4-Nitroaniline	120	105		ug/L		88	36 - 137
Nitrobenzene	120	81.8		ug/L		68	45 - 120
2-Nitrophenol	120	98.5		ug/L		82	40 - 124
4-Nitrophenol	240	119		ug/L		50	23 - 146
N-Nitrosodimethylamine	120	70.5		ug/L		59	29 - 137
N-Nitrosodi-n-propylamine	120	89.7		ug/L		75	45 - 120
N-Nitrosodiphenylamine	119	98.6		ug/L		83	54 - 120
Pentachlorophenol	240	247		ug/L		103	31 - 130
Phenol	120	80.3		ug/L		67	11 - 120
Pyridine	240	138		ug/L		58	16 - 120
Quinoline	110	94.2		ug/L		86	49 - 130
2,4,5-Trichlorophenol	120	118		ug/L		99	51 - 136
2,4,6-Trichlorophenol	120	111		ug/L		93	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*85*		*46 - 124*
2-Fluorophenol	*46*		*13 - 113*
Nitrobenzene-d5	*79*		*36 - 126*
Phenol-d5	*68*		*17 - 127*
Terphenyl-d14	*103*		*44 - 149*
2,4,6-Tribromophenol	*107*		*26 - 150*

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

Lab Sample ID: LCSD 400-632824/14-A
Matrix: Water
Analysis Batch: 633026

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 632824

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	4.43	J *-	ug/L		4	10 - 120	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*92*		*46 - 124*
2-Fluorophenol	*50*		*13 - 113*
Nitrobenzene-d5	*80*		*36 - 126*
Phenol-d5	*71*		*17 - 127*
Terphenyl-d14	*114*		*44 - 149*
2,4,6-Tribromophenol	*63*		*26 - 150*

Lab Sample ID: 400-240307-5 MS
Matrix: Water
Analysis Batch: 633026

Client Sample ID: MW3-ROX-071023
Prep Type: Total/NA
Prep Batch: 632824

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	ND		118	89.2		ug/L		76	10 - 120
Benzoic acid	ND		512	435		ug/L		85	10 - 149
Benzyl alcohol	ND		118	60.5		ug/L		51	33 - 120
Bis(2-chloroethoxy)methane	ND		118	86.7		ug/L		74	26 - 120
Bis(2-chloroethyl)ether	ND		118	124		ug/L		105	42 - 120
bis (2-chloroisopropyl) ether	ND		118	71.3		ug/L		61	28 - 120
Bis(2-ethylhexyl) phthalate	ND		118	112		ug/L		95	39 - 120
4-Bromophenyl phenyl ether	ND		118	114		ug/L		97	40 - 120
Butyl benzyl phthalate	ND		118	110		ug/L		93	45 - 120
4-Chloroaniline	ND		118	76.8		ug/L		65	10 - 120
4-Chloro-3-methylphenol	ND		118	95.7		ug/L		81	34 - 120
2-Chloronaphthalene	ND		118	106		ug/L		90	39 - 120
2-Chlorophenol	ND		118	65.0		ug/L		55	25 - 120
4-Chlorophenyl phenyl ether	ND		118	116		ug/L		98	44 - 120
Dibenz[a,h]acridine	ND		107	96.4		ug/L		90	50 - 150
Dibenzofuran	ND		118	103		ug/L		88	25 - 130
3,3'-Dichlorobenzidine	ND		157	119		ug/L		76	10 - 120
2,4-Dichlorophenol	ND		118	94.1		ug/L		80	31 - 120
Diethyl phthalate	0.65	J	118	112		ug/L		94	46 - 120
2,4-Dimethylphenol	ND		118	98.6		ug/L		84	21 - 120
Dimethyl ph halate	ND		118	106		ug/L		90	38 - 120
Di-n-butyl phthalate	ND		118	105		ug/L		89	49 - 120
4,6-Dinitro-ortho-cresol	ND		235	263		ug/L		112	25 - 120
2,4-Dinitrophenol	ND		235	258		ug/L		110	15 - 140
2,4-Dinitrotoluene	ND		118	121		ug/L		102	53 - 120
2,6-Dinitrotoluene	ND		118	112		ug/L		95	43 - 120
Di-n-octyl phthalate	ND		118	112		ug/L		95	35 - 121
1,4-Dioxane	ND		118	61.0		ug/L		52	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		118	91.2		ug/L		78	50 - 150
Hexachlorobenzene	ND		118	119		ug/L		101	38 - 122
Hexachlorocyclopentadiene	ND		118	109		ug/L		92	10 - 120
Hexachloroethane	ND		118	86.9		ug/L		74	10 - 150

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

Lab Sample ID: 400-240307-5 MS
Matrix: Water
Analysis Batch: 633026

Client Sample ID: MW3-ROX-071023
Prep Type: Total/NA
Prep Batch: 632824

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Indene	ND		118	102		ug/L		87	50 - 150
Isophorone	ND		118	82.3		ug/L		70	42 - 120
2-Methylphenol	ND		118	113		ug/L		96	28 - 120
3 & 4 Me hylphenol	ND		118	91.0		ug/L		77	31 - 120
2-Nitroaniline	ND		118	89.7		ug/L		76	45 - 120
3-Nitroaniline	ND		118	75.3		ug/L		64	10 - 130
4-Nitroaniline	ND		118	109		ug/L		93	10 - 132
Nitrobenzene	ND		118	82.5		ug/L		70	39 - 120
2-Nitrophenol	ND		118	94.3		ug/L		80	33 - 120
4-Nitrophenol	ND		235	153		ug/L		65	10 - 120
N-Nitrosodimethylamine	ND		118	71.8		ug/L		61	10 - 139
N-Nitrosodi-n-propylamine	ND		118	90.5		ug/L		77	37 - 124
N-Nitrosodiphenylamine	ND		117	102		ug/L		87	10 - 150
Pentachlorophenol	ND		235	276		ug/L		117	29 - 130
Phenol	ND		118	69.7		ug/L		59	10 - 150
Pyridine	ND		235	139		ug/L		59	10 - 120
Quinoline	ND		107	95.7		ug/L		89	51 - 120
2,4,5-Trichlorophenol	ND		118	121		ug/L		103	34 - 120
2,4,6-Trichlorophenol	ND		118	114		ug/L		97	33 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*88*		*46 - 124*
2-Fluorophenol	*25*		*13 - 113*
Nitrobenzene-d5	*80*		*36 - 126*
Phenol-d5	*59*		*17 - 127*
Terphenyl-d14	*107*		*44 - 149*
2,4,6-Tribromophenol	*113*		*26 - 150*

Lab Sample ID: 400-240307-5 MSD
Matrix: Water
Analysis Batch: 633026

Client Sample ID: MW3-ROX-071023
Prep Type: Total/NA
Prep Batch: 632824

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	ND		118	101		ug/L		85	10 - 120	13	63
Benzoic acid	ND		515	503		ug/L		98	10 - 149	15	49
Benzyl alcohol	ND		118	68.1		ug/L		57	33 - 120	12	37
Bis(2-chloroethoxy)methane	ND		118	90.8		ug/L		77	26 - 120	5	70
Bis(2-chloroethyl)ether	ND		118	96.8		ug/L		82	42 - 120	24	42
bis (2-chloroisopropyl) ether	ND		118	72.6		ug/L		61	28 - 120	2	41
Bis(2-ethylhexyl) phthalate	ND		118	113		ug/L		95	39 - 120	1	35
4-Bromophenyl phenyl ether	ND		118	114		ug/L		96	40 - 120	0	30
Butyl benzyl phthalate	ND		118	111		ug/L		94	45 - 120	1	32
4-Chloroaniline	ND		118	80.1		ug/L		68	10 - 120	4	94
4-Chloro-3-methylphenol	ND		118	100		ug/L		84	34 - 120	4	40
2-Chloronaphthalene	ND		118	108		ug/L		91	39 - 120	2	29
2-Chlorophenol	ND		118	78.6		ug/L		66	25 - 120	19	42
4-Chlorophenyl phenyl ether	ND		118	116		ug/L		98	44 - 120	0	27
Dibenz[a,h]acridine	ND		108	96.2		ug/L		89	50 - 150	0	40

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

Lab Sample ID: 400-240307-5 MSD
Matrix: Water
Analysis Batch: 633026

Client Sample ID: MW3-ROX-071023
Prep Type: Total/NA
Prep Batch: 632824

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dibenzofuran	ND		118	106		ug/L		90	25 - 130	3	29
3,3'-Dichlorobenzidine	ND		158	117		ug/L		74	10 - 120	2	58
2,4-Dichlorophenol	ND		118	101		ug/L		85	31 - 120	7	43
Diethyl phthalate	0.65	J	118	111		ug/L		93	46 - 120	0	40
2,4-Dimethylphenol	ND		118	99.8		ug/L		84	21 - 120	1	47
Dimethyl phthalate	ND		118	108		ug/L		91	38 - 120	2	36
Di-n-butyl phthalate	ND		118	103		ug/L		87	49 - 120	2	32
4,6-Dinitro-ortho-cresol	ND		237	257		ug/L		108	25 - 120	2	42
2,4-Dinitrophenol	ND		237	255		ug/L		108	15 - 140	1	36
2,4-Dinitrotoluene	ND		118	124		ug/L		105	53 - 120	3	28
2,6-Dinitrotoluene	ND		118	114		ug/L		96	43 - 120	2	28
Di-n-octyl phthalate	ND		118	112		ug/L		95	35 - 121	0	35
1,4-Dioxane	ND		118	59.3		ug/L		50	50 - 150	3	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		118	91.7		ug/L		77	50 - 150	0	40
Hexachlorobenzene	ND		118	119		ug/L		101	38 - 122	1	33
Hexachlorocyclopentadiene	ND		118	92.2		ug/L		78	10 - 120	16	50
Hexachloroethane	ND		118	87.5		ug/L		74	10 - 150	1	41
Indene	ND		118	106		ug/L		89	50 - 150	3	40
Isophorone	ND		118	84.7		ug/L		71	42 - 120	3	33
2-Methylphenol	ND		118	117		ug/L		99	28 - 120	4	47
3 & 4 Me hylphenol	ND		118	94.2		ug/L		79	31 - 120	3	47
2-Nitroaniline	ND		118	92.4		ug/L		78	45 - 120	3	33
3-Nitroaniline	ND		118	76.1		ug/L		64	10 - 130	1	39
4-Nitroaniline	ND		118	106		ug/L		90	10 - 132	3	50
Nitrobenzene	ND		118	85.0		ug/L		72	39 - 120	3	35
2-Nitrophenol	ND		118	102		ug/L		86	33 - 120	8	43
4-Nitrophenol	ND		237	155		ug/L		66	10 - 120	1	82
N-Nitrosodimethylamine	ND		118	73.6		ug/L		62	10 - 139	2	62
N-Nitrosodi-n-propylamine	ND		118	92.3		ug/L		78	37 - 124	2	36
N-Nitrosodiphenylamine	ND		118	102		ug/L		86	10 - 150	0	34
Pentachlorophenol	ND		237	274		ug/L		116	29 - 130	0	42
Phenol	ND		118	80.2		ug/L		68	10 - 150	14	52
Pyridine	ND		237	143		ug/L		61	10 - 120	3	55
Quinoline	ND		108	97.7		ug/L		90	51 - 120	2	40
2,4,5-Trichlorophenol	ND		118	125		ug/L		105	34 - 120	3	42
2,4,6-Trichlorophenol	ND		118	118		ug/L		100	33 - 120	4	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*90*		*46 - 124*
2-Fluorophenol	*39*		*13 - 113*
Nitrobenzene-d5	*82*		*36 - 126*
Phenol-d5	*68*		*17 - 127*
Terphenyl-d14	*106*		*44 - 149*
2,4,6-Tribromophenol	*116*		*26 - 150*

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

Lab Sample ID: MB 400-633166/1-A
Matrix: Water
Analysis Batch: 633421

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633166

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/14/23 10:19	07/17/23 17:00	1
Benzenethiol	ND		10	1.7	ug/L		07/14/23 10:19	07/17/23 17:00	1
Benzoic acid	ND		30	7.3	ug/L		07/14/23 10:19	07/17/23 17:00	1
Benzyl alcohol	ND		10	2.0	ug/L		07/14/23 10:19	07/17/23 17:00	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/14/23 10:19	07/17/23 17:00	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/14/23 10:19	07/17/23 17:00	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/14/23 10:19	07/17/23 17:00	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/14/23 10:19	07/17/23 17:00	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/14/23 10:19	07/17/23 17:00	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/14/23 10:19	07/17/23 17:00	1
4-Chloroaniline	ND		10	3.4	ug/L		07/14/23 10:19	07/17/23 17:00	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/14/23 10:19	07/17/23 17:00	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/14/23 10:19	07/17/23 17:00	1
2-Chlorophenol	ND		10	2.2	ug/L		07/14/23 10:19	07/17/23 17:00	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/14/23 10:19	07/17/23 17:00	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/14/23 10:19	07/17/23 17:00	1
Dibenzofuran	ND		10	0.17	ug/L		07/14/23 10:19	07/17/23 17:00	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/14/23 10:19	07/17/23 17:00	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/14/23 10:19	07/17/23 17:00	1
Diethyl phthalate	ND		10	0.24	ug/L		07/14/23 10:19	07/17/23 17:00	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/14/23 10:19	07/17/23 17:00	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/14/23 10:19	07/17/23 17:00	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/14/23 10:19	07/17/23 17:00	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/14/23 10:19	07/17/23 17:00	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/14/23 10:19	07/17/23 17:00	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/14/23 10:19	07/17/23 17:00	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/14/23 10:19	07/17/23 17:00	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/14/23 10:19	07/17/23 17:00	1
1,4-Dioxane	ND		10	1.0	ug/L		07/14/23 10:19	07/17/23 17:00	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/14/23 10:19	07/17/23 17:00	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/14/23 10:19	07/17/23 17:00	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/14/23 10:19	07/17/23 17:00	1
Hexachloroethane	ND		10	4.2	ug/L		07/14/23 10:19	07/17/23 17:00	1
Indene	ND		10	1.0	ug/L		07/14/23 10:19	07/17/23 17:00	1
Isophorone	ND		10	0.14	ug/L		07/14/23 10:19	07/17/23 17:00	1
2-Methylphenol	ND		10	1.8	ug/L		07/14/23 10:19	07/17/23 17:00	1
3 & 4 Me hylphenol	ND		20	0.39	ug/L		07/14/23 10:19	07/17/23 17:00	1
2-Nitroaniline	ND		10	2.2	ug/L		07/14/23 10:19	07/17/23 17:00	1
3-Nitroaniline	ND		10	1.8	ug/L		07/14/23 10:19	07/17/23 17:00	1
4-Nitroaniline	ND		10	1.5	ug/L		07/14/23 10:19	07/17/23 17:00	1
Nitrobenzene	ND		10	0.13	ug/L		07/14/23 10:19	07/17/23 17:00	1
2-Nitrophenol	ND		10	5.2	ug/L		07/14/23 10:19	07/17/23 17:00	1
4-Nitrophenol	ND		10	2.1	ug/L		07/14/23 10:19	07/17/23 17:00	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/14/23 10:19	07/17/23 17:00	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/14/23 10:19	07/17/23 17:00	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/14/23 10:19	07/17/23 17:00	1
Pentachlorophenol	ND		20	1.4	ug/L		07/14/23 10:19	07/17/23 17:00	1
Phenol	ND		10	2.6	ug/L		07/14/23 10:19	07/17/23 17:00	1

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

Lab Sample ID: MB 400-633166/1-A
Matrix: Water
Analysis Batch: 633421

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633166

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	ND		10	3.2	ug/L		07/14/23 10:19	07/17/23 17:00	1
Quinoline	ND		10	4.5	ug/L		07/14/23 10:19	07/17/23 17:00	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/14/23 10:19	07/17/23 17:00	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/14/23 10:19	07/17/23 17:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*46 - 124*	*07/14/23 10:19*	*07/17/23 17:00*	*1*
2-Fluorophenol	*4*	*S1-*	*13 - 113*	*07/14/23 10:19*	*07/17/23 17:00*	*1*
Nitrobenzene-d5	*66*		*36 - 126*	*07/14/23 10:19*	*07/17/23 17:00*	*1*
Phenol-d5	*29*		*17 - 127*	*07/14/23 10:19*	*07/17/23 17:00*	*1*
Terphenyl-d14	*93*		*44 - 149*	*07/14/23 10:19*	*07/17/23 17:00*	*1*
2,4,6-Tribromophenol	*82*		*26 - 150*	*07/14/23 10:19*	*07/17/23 17:00*	*1*

Lab Sample ID: LCS 400-633166/2-A
Matrix: Water
Analysis Batch: 633421

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633166

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	105		ug/L		87	21 - 120
Benzoic acid	522	378		ug/L		72	10 - 144
Benzyl alcohol	120	80.4		ug/L		67	28 - 120
Bis(2-chloroethoxy)methane	120	89.6		ug/L		75	47 - 120
Bis(2-chloroethyl)ether	120	99.0		ug/L		83	44 - 120
bis (2-chloroisopropyl) ether	120	69.8		ug/L		58	33 - 121
Bis(2-ethylhexyl) phthalate	120	110		ug/L		92	52 - 147
4-Bromophenyl phenyl ether	120	114		ug/L		95	54 - 122
Butyl benzyl phthalate	120	108		ug/L		90	54 - 133
4-Chloroaniline	120	86.6		ug/L		72	26 - 120
4-Chloro-3-methylphenol	120	109		ug/L		91	48 - 131
2-Chloronaphthalene	120	104		ug/L		87	52 - 121
2-Chlorophenol	120	79.4		ug/L		66	40 - 120
4-Chlorophenyl phenyl ether	120	116		ug/L		97	56 - 125
Dibenz[a,h]acridine	110	119		ug/L		109	31 - 150
Dibenzofuran	120	104		ug/L		86	56 - 122
3,3'-Dichlorobenzidine	160	156		ug/L		98	36 - 132
2,4-Dichlorophenol	120	106		ug/L		88	49 - 120
Diethyl phthalate	120	113		ug/L		94	50 - 137
2,4-Dimethylphenol	120	96.9		ug/L		81	48 - 120
Dimethyl phthalate	120	108		ug/L		90	57 - 124
Di-n-butyl phthalate	120	108		ug/L		90	58 - 126
4,6-Dinitro-ortho-cresol	240	260		ug/L		109	23 - 148
2,4-Dinitrophenol	240	261		ug/L		109	10 - 150
2,4-Dinitrotoluene	120	126		ug/L		105	54 - 142
2,6-Dinitrotoluene	120	113		ug/L		94	55 - 130
Di-n-octyl phthalate	120	115		ug/L		96	57 - 138
1,4-Dioxane	120	61.1		ug/L		51	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	88.6		ug/L		74	45 - 124
Hexachlorobenzene	120	121		ug/L		101	52 - 129

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

Lab Sample ID: LCS 400-633166/2-A
Matrix: Water
Analysis Batch: 633421

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633166

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Hexachlorocyclopentadiene			120	83.8		ug/L		70	10 - 134		
Hexachloroethane			120	89.5		ug/L		75	20 - 120		
Indene			120	103		ug/L		86	49 - 120		
Isophorone			120	88.5		ug/L		74	48 - 120		
2-Methylphenol			120	99.5		ug/L		83	46 - 124		
3 & 4 Me hylphenol			120	90.5		ug/L		75	45 - 120		
2-Nitroaniline			120	89.6		ug/L		75	51 - 145		
3-Nitroaniline			120	80.4		ug/L		67	37 - 127		
4-Nitroaniline			120	113		ug/L		95	36 - 137		
Nitrobenzene			120	86.5		ug/L		72	45 - 120		
2-Nitrophenol			120	104		ug/L		86	40 - 124		
4-Nitrophenol			240	230		ug/L		96	23 - 146		
N-Nitrosodimethylamine			120	68.6		ug/L		57	29 - 137		
N-Nitrosodi-n-propylamine			120	88.5		ug/L		74	45 - 120		
N-Nitrosodiphenylamine			119	101		ug/L		85	54 - 120		
Pentachlorophenol			240	265		ug/L		110	31 - 130		
Phenol			120	77.2		ug/L		64	11 - 120		
Pyridine			240	137		ug/L		57	16 - 120		
Quinoline			110	101		ug/L		92	49 - 130		
2,4,5-Trichlorophenol			120	120		ug/L		100	51 - 136		
2,4,6-Trichlorophenol			120	117		ug/L		97	50 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*85*		*46 - 124*
2-Fluorophenol	*43*		*13 - 113*
Nitrobenzene-d5	*82*		*36 - 126*
Phenol-d5	*68*		*17 - 127*
Terphenyl-d14	*104*		*44 - 149*
2,4,6-Tribromophenol	*118*		*26 - 150*

Lab Sample ID: LCS 400-633166/4-A
Matrix: Water
Analysis Batch: 633421

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633166

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	3.92	J *-	ug/L		3	10 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*74*		*46 - 124*
2-Fluorophenol	*27*		*13 - 113*
Nitrobenzene-d5	*67*		*36 - 126*
Phenol-d5	*55*		*17 - 127*
Terphenyl-d14	*92*		*44 - 149*
2,4,6-Tribromophenol	*80*		*26 - 150*

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

Lab Sample ID: LCSD 400-633166/3-A
Matrix: Water
Analysis Batch: 633421

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633166

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	102		ug/L		85	21 - 120	3	30
Benzoic acid			522	326		ug/L		63	10 - 144	15	30
Benzyl alcohol			120	77.5		ug/L		65	28 - 120	4	30
Bis(2-chloroethoxy)methane			120	85.7		ug/L		71	47 - 120	4	30
Bis(2-chloroethyl)ether			120	123		ug/L		102	44 - 120	21	30
bis (2-chloroisopropyl) ether			120	67.9		ug/L		57	33 - 121	3	30
Bis(2-ethylhexyl) phthalate			120	106		ug/L		88	52 - 147	4	30
4-Bromophenyl phenyl ether			120	112		ug/L		93	54 - 122	2	30
Butyl benzyl phthalate			120	103		ug/L		86	54 - 133	5	30
4-Chloroaniline			120	74.8		ug/L		62	26 - 120	15	30
4-Chloro-3-methylphenol			120	92.3		ug/L		77	48 - 131	16	30
2-Chloronaphthalene			120	106		ug/L		89	52 - 121	2	30
2-Chlorophenol			120	47.0	*- *1	ug/L		39	40 - 120	51	30
4-Chlorophenyl phenyl ether			120	115		ug/L		96	56 - 125	1	30
Dibenz[a,h]acridine			110	116		ug/L		106	31 - 150	3	30
Dibenzofuran			120	103		ug/L		86	56 - 122	0	30
3,3'-Dichlorobenzidine			160	147		ug/L		92	36 - 132	6	30
2,4-Dichlorophenol			120	83.3		ug/L		69	49 - 120	24	30
Diethyl phthalate			120	109		ug/L		91	50 - 137	3	30
2,4-Dimethylphenol			120	89.5		ug/L		75	48 - 120	8	30
Dimethyl phthalate			120	105		ug/L		88	57 - 124	2	30
Di-n-butyl phthalate			120	104		ug/L		87	58 - 126	4	30
4,6-Dinitro-ortho-cresol			240	246		ug/L		103	23 - 148	6	30
2,4-Dinitrophenol			240	236		ug/L		98	10 - 150	10	30
2,4-Dinitrotoluene			120	122		ug/L		101	54 - 142	4	30
2,6-Dinitrotoluene			120	110		ug/L		92	55 - 130	3	30
Di-n-octyl phthalate			120	112		ug/L		93	57 - 138	3	30
1,4-Dioxane			120	53.6		ug/L		45	31 - 120	13	30
1,2-Diphenylhydrazine (as Azobenzene)			120	87.5		ug/L		73	45 - 124	1	30
Hexachlorobenzene			120	119		ug/L		99	52 - 129	2	30
Hexachlorocyclopentadiene			120	82.4		ug/L		69	10 - 134	2	30
Hexachloroethane			120	86.0		ug/L		72	20 - 120	4	30
Indene			120	101		ug/L		84	49 - 120	2	30
Isophorone			120	82.1		ug/L		68	48 - 120	7	30
2-Methylphenol			120	93.0		ug/L		78	46 - 124	7	30
3 & 4 Methylphenol			120	81.8		ug/L		68	45 - 120	10	30
2-Nitroaniline			120	89.5		ug/L		75	51 - 145	0	30
3-Nitroaniline			120	68.9		ug/L		57	37 - 127	15	30
4-Nitroaniline			120	109		ug/L		91	36 - 137	4	30
Nitrobenzene			120	80.6		ug/L		67	45 - 120	7	30
2-Nitrophenol			120	80.3		ug/L		67	40 - 124	25	30
4-Nitrophenol			240	203		ug/L		85	23 - 146	12	30
N-Nitrosodimethylamine			120	66.9		ug/L		56	29 - 137	2	30
N-Nitrosodi-n-propylamine			120	87.5		ug/L		73	45 - 120	1	30
N-Nitrosodiphenylamine			119	99.9		ug/L		84	54 - 120	1	30
Pentachlorophenol			240	256		ug/L		107	31 - 130	3	30
Phenol			120	55.0	*1	ug/L		46	11 - 120	34	30
Pyridine			240	135		ug/L		56	16 - 120	1	30

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

Lab Sample ID: LCSD 400-633166/3-A
Matrix: Water
Analysis Batch: 633421

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633166

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Quinoline			110	92.6		ug/L		85	49 - 130	9	30
2,4,5-Trichlorophenol			120	112		ug/L		94	51 - 136	7	30
2,4,6-Trichlorophenol			120	110		ug/L		92	50 - 127	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*46 - 124*
2-Fluorophenol	*13*		*13 - 113*
Nitrobenzene-d5	*76*		*36 - 126*
Phenol-d5	*46*		*17 - 127*
Terphenyl-d14	*100*		*44 - 149*
2,4,6-Tribromophenol	*109*		*26 - 150*

Lab Sample ID: LCSD 400-633166/5-A
Matrix: Water
Analysis Batch: 633421

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633166

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	4.74	J *-	ug/L		4	10 - 120	19	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*46 - 124*
2-Fluorophenol	*20*		*13 - 113*
Nitrobenzene-d5	*73*		*36 - 126*
Phenol-d5	*49*		*17 - 127*
Terphenyl-d14	*101*		*44 - 149*
2,4,6-Tribromophenol	*80*		*26 - 150*

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

Lab Sample ID: MB 400-632824/1-A
Matrix: Water
Analysis Batch: 633116

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632824

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/12/23 09:19	07/14/23 10:53	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/12/23 09:19	07/14/23 10:53	1
Anthracene	ND		0.20	0.047	ug/L		07/12/23 09:19	07/14/23 10:53	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/12/23 09:19	07/14/23 10:53	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/12/23 09:19	07/14/23 10:53	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/12/23 09:19	07/14/23 10:53	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/12/23 09:19	07/14/23 10:53	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/12/23 09:19	07/14/23 10:53	1
Chrysene	ND		0.20	0.033	ug/L		07/12/23 09:19	07/14/23 10:53	1
Dibenz(a,h)an hracene	ND		0.20	0.048	ug/L		07/12/23 09:19	07/14/23 10:53	1
Fluoranthene	ND		0.20	0.034	ug/L		07/12/23 09:19	07/14/23 10:53	1
Fluorene	ND		0.20	0.089	ug/L		07/12/23 09:19	07/14/23 10:53	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/12/23 09:19	07/14/23 10:53	1
Phenanthrene	ND		0.20	0.090	ug/L		07/12/23 09:19	07/14/23 10:53	1

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

Lab Sample ID: MB 400-632824/1-A
Matrix: Water
Analysis Batch: 633116

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632824

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		0.20	0.039	ug/L		07/12/23 09:19	07/14/23 10:53	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/12/23 09:19	07/14/23 10:53	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/12/23 09:19	07/14/23 10:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*105*		*18 - 147*	*07/12/23 09:19*	*07/14/23 10:53*	*1*
2-Fluorobiphenyl	*96*		*15 - 128*	*07/12/23 09:19*	*07/14/23 10:53*	*1*
Nitrobenzene-d5	*90*		*10 - 144*	*07/12/23 09:19*	*07/14/23 10:53*	*1*

Lab Sample ID: LCS 400-632824/15-A
Matrix: Water
Analysis Batch: 633116

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632824

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	2.00	1.56		ug/L		78	40 - 140
Acenaphthylene	2.00	1.56		ug/L		78	40 - 140
Anthracene	2.00	1.47		ug/L		74	40 - 140
Benzo[a]anthracene	2.00	1.67		ug/L		83	40 - 140
Benzo[a]pyrene	2.00	1.44		ug/L		72	40 - 140
Benzo[b]fluoranthene	2.00	1.42		ug/L		71	40 - 140
Benzo[g,h,i]perylene	2.00	1.57		ug/L		79	40 - 140
Benzo[k]fluoranthene	2.00	1.45		ug/L		73	40 - 140
Chrysene	2.00	1.60		ug/L		80	40 - 140
Dibenz(a,h)an hracene	2.00	1.57		ug/L		78	40 - 140
Fluoranthene	2.00	1.70		ug/L		85	40 - 140
Fluorene	2.00	1.53		ug/L		77	40 - 140
Indeno[1,2,3-cd]pyrene	2.00	1.56		ug/L		78	40 - 140
Phenanthrene	2.00	1.49		ug/L		75	40 - 140
Pyrene	2.00	1.35		ug/L		67	40 - 140
1-Methylnaphthalene	2.00	1.50		ug/L		75	40 - 140
2-Methylnaphthalene	2.00	1.54		ug/L		77	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*91*		*18 - 147*
2-Fluorobiphenyl	*89*		*15 - 128*
Nitrobenzene-d5	*85*		*10 - 144*

Lab Sample ID: LCSD 400-632824/16-A
Matrix: Water
Analysis Batch: 633116

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 632824

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	2.00	1.48		ug/L		74	40 - 140	5	40
Acenaphthylene	2.00	1.51		ug/L		75	40 - 140	4	40
Anthracene	2.00	1.47		ug/L		74	40 - 140	0	40
Benzo[a]anthracene	2.00	1.61		ug/L		81	40 - 140	3	40
Benzo[a]pyrene	2.00	1.41		ug/L		70	40 - 140	2	40
Benzo[b]fluoranthene	2.00	1.43		ug/L		72	40 - 140	1	40

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

Lab Sample ID: LCSD 400-632824/16-A
Matrix: Water
Analysis Batch: 633116

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 632824

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[g,h,i]perylene			2.00	1.45		ug/L		72	40 - 140	8	40
Benzo[k]fluoranthene			2.00	1.40		ug/L		70	40 - 140	4	40
Chrysene			2.00	1.56		ug/L		78	40 - 140	3	40
Dibenz(a,h)an hracene			2.00	1.42		ug/L		71	40 - 140	10	40
Fluoranthene			2.00	1.64		ug/L		82	40 - 140	4	40
Fluorene			2.00	1.47		ug/L		74	40 - 140	4	40
Indeno[1,2,3-cd]pyrene			2.00	1.45		ug/L		73	40 - 140	7	40
Phenanthrene			2.00	1.46		ug/L		73	40 - 140	2	40
Pyrene			2.00	1.37		ug/L		68	40 - 140	1	40
1-Methylnaphthalene			2.00	1.49		ug/L		75	40 - 140	1	40
2-Methylnaphthalene			2.00	1.53		ug/L		77	40 - 140	0	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*90*		*18 - 147*
2-Fluorobiphenyl	*87*		*15 - 128*
Nitrobenzene-d5	*83*		*10 - 144*

Lab Sample ID: 400-240307-5 MS
Matrix: Water
Analysis Batch: 633116

Client Sample ID: MW3-ROX-071023
Prep Type: Total/NA
Prep Batch: 632824

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		118	92.7		ug/L		79	50 - 150
Acenaphthylene	ND		118	96.1		ug/L		82	50 - 150
Anthracene	ND		118	88.7		ug/L		75	50 - 150
Benzo[a]anthracene	ND		118	97.6		ug/L		83	50 - 150
Benzo[a]pyrene	ND		118	88.9		ug/L		76	50 - 150
Benzo[b]fluoranthene	ND		118	91.7		ug/L		78	50 - 150
Benzo[g,h,i]perylene	ND		118	90.5		ug/L		77	50 - 150
Benzo[k]fluoranthene	ND		118	88.1		ug/L		75	50 - 150
Chrysene	ND		118	91.4		ug/L		78	50 - 150
Dibenz(a,h)an hracene	ND		118	95.1		ug/L		81	50 - 150
Fluoranthene	ND		118	96.1		ug/L		82	50 - 150
Fluorene	ND		118	93.2		ug/L		79	50 - 150
Indeno[1,2,3-cd]pyrene	ND		118	93.6		ug/L		80	50 - 150
Phenanthrene	ND		118	86.8		ug/L		74	50 - 150
Pyrene	ND		118	80.0		ug/L		68	50 - 150
1-Methylnaphthalene	ND	F1	118	53.1	F1	ug/L		45	50 - 150
2-Methylnaphthalene	ND	F1	118	52.1	F1	ug/L		44	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*82*		*18 - 147*
2-Fluorobiphenyl	*87*		*15 - 128*
Nitrobenzene-d5	*53*		*10 - 144*

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

Lab Sample ID: 400-240307-5 MSD
Matrix: Water
Analysis Batch: 633116

Client Sample ID: MW3-ROX-071023
Prep Type: Total/NA
Prep Batch: 632824

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		118	92.5		ug/L		78	50 - 150	0	40
Acenaphthylene	ND		118	96.1		ug/L		81	50 - 150	0	40
Anthracene	ND		118	91.2		ug/L		77	50 - 150	3	40
Benzo[a]anthracene	ND		118	102		ug/L		86	50 - 150	4	40
Benzo[a]pyrene	ND		118	91.7		ug/L		77	50 - 150	3	40
Benzo[b]fluoranthene	ND		118	92.5		ug/L		78	50 - 150	1	40
Benzo[g,h,i]perylene	ND		118	92.4		ug/L		78	50 - 150	2	40
Benzo[k]fluoranthene	ND		118	90.9		ug/L		77	50 - 150	3	40
Chrysene	ND		118	94.5		ug/L		80	50 - 150	3	40
Dibenz(a,h)an hracene	ND		118	97.4		ug/L		82	50 - 150	2	40
Fluoranthene	ND		118	96.1		ug/L		81	50 - 150	0	40
Fluorene	ND		118	93.4		ug/L		79	50 - 150	0	40
Indeno[1,2,3-cd]pyrene	ND		118	96.7		ug/L		82	50 - 150	3	40
Phenanthrene	ND		118	89.2		ug/L		75	50 - 150	3	40
Pyrene	ND		118	82.4		ug/L		70	50 - 150	3	40
1-Methylnaphthalene	ND	F1	118	53.1	F1	ug/L		45	50 - 150	0	40
2-Methylnaphthalene	ND	F1	118	54.0	F1	ug/L		46	50 - 150	4	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*80*		*18 - 147*
2-Fluorobiphenyl	*88*		*15 - 128*
Nitrobenzene-d5	*54*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-633052/1-A
Matrix: Water
Analysis Batch: 633182

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633052

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/13/23 14:23	07/14/23 19:18	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/13/23 14:23	07/14/23 19:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*51 - 149*	*07/13/23 14:23*	*07/14/23 19:18*	*1*

Lab Sample ID: LCS 400-633052/2-A
Matrix: Water
Analysis Batch: 633182

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633052

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.114		ug/L		114	60 - 140		
1,2-Dibromoethane			0.101	0.106		ug/L		105	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-633052/3-A
Matrix: Water
Analysis Batch: 633182

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633052

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.112		ug/L		111	60 - 140	2	30
1,2-Dibromoethane			0.101	0.109		ug/L		108	60 - 140	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*51 - 149*

Lab Sample ID: 400-240307-5 MS
Matrix: Water
Analysis Batch: 633182

Client Sample ID: MW3-ROX-071023
Prep Type: Total/NA
Prep Batch: 633052

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane	ND		0.0961	0.109		ug/L		114	10 - 150		
1,2-Dibromoethane	ND		0.0963	0.104		ug/L		108	39 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*51 - 149*

Lab Sample ID: 400-240307-5 MSD
Matrix: Water
Analysis Batch: 633182

Client Sample ID: MW3-ROX-071023
Prep Type: Total/NA
Prep Batch: 633052

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		0.0969	0.113		ug/L		117	10 - 150	3	20
1,2-Dibromoethane	ND		0.0971	0.102		ug/L		105	39 - 150	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*51 - 149*

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other (_____)

Shell Oil Products US Chain Of Custody Record

AECOM

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES	

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 7/10/2023
PO #	**GSAP Project ID**	PAGE: 1 of _____
60697537 – 3.3.2	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 60697537 – 3.3.2

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, E. Chalfant

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@aecom.com

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; loredana.filimon@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

400-240307 COC

FIELD NOTES:

0.8°C, 1.7°C
TEMPERATURE ON RECEIPT C°
IR 11

Container PID Readings or Laboratory Notes:

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-071023-8260-A	7/10/2023	0000	Water	2					2	X			
	TB-ROX-071023-8011-A	7/10/2023	0000	Water	2					2		X		
	MW24-ROX-071023-EB	7/10/2023	0830	Water	6			2		8	X	X	X	X
	MW24-ROX-071023	7/10/2023	1020	Water	6			2		8	X	X	X	X
	MW3-ROX-071023	7/10/2023	1120	Water	6			2		8	X	X	X	X
	MW3-ROX-071023-MS	7/10/2023	1120	Water	6			2		8	X	X	X	X
	MW3-ROX-071023-MSD	7/10/2023	1120	Water	6			2		8	X	X	X	X
	MW26-ROX-071023	7/10/2023	1345	Water	6			2		8	X	X	X	X

7/10/23

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time
MARY MASSA	FEDEX: 6339 6592 6440, 6339 6592 6510	7/10/2023	1600
Relinquished by: (Signature)	Received by: (Signature)	Date: 7-11-23	Time: 947 1.7 IR11
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 13Oct22

CUSTODY SEALS: 2349722, 2349723, 2349708, 2349709

7/24/2023

LAB (LOCATION)

☑ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other (_____)

Shell Oil Products US Chain Of Custody Record

AECOM

Please Check Appropriate Box:			
☐ SGW FDG	☐ PIPELINE	☐ RETAIL	
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES	
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES		

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 7/10/2023
PO #	GSAP Project ID	PAGE: 2 of 2
60697537 – 3.3.2	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 60697537 – 3.3.2

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	J. Mayer, 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; loredana.filimon@aecom.com**

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

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 8270LL
	TB-ROX-071023-8260-B	7/10/2023	0000	Water	2					2	X			
	TB-ROX-071023-8011-B	7/10/2023	0000	Water	2					2		X		
	MW1-ROX-071023-EB	7/10/2023	0830	Water	6			2		8	X	X	X	X
	MW1-ROX-071023	7/10/2023	1040	Water	6			2		8	X	X	X	X
	ROST4PZG-ROX-071023	7/10/2023	1205	Water	6			2		8	X	X	X	X
	P56-ROX-071023	7/10/2023	1405	Water	6			2		8	X	X	X	X

Joe Mayer 7-10-23

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Joe Mayer	FEDEX: See page 1	7/10/2023	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	Matt Pobanz	7-11-23	947 1-7IR11
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version 13Oct22

CUSTODY SEALS: See page 1

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7/24/2023

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-240307-1

Login Number: 240307

List Source: Eurofins Pensacola

List Number: 1

Creator: Perez, Trina M

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	2349722,2349723,2349708,2349709
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, 1.7°C IR-11
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 leg ble 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").	False	Headspace larger than 1/4" in one or more vials, one vial with accpt. headspace
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-240307-1

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	09-01-23
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Ilinois	NELAP	200041	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-23
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 – 3rd Quarter 2023 Data Review

Laboratory SDG: 400-240426-1-Rev.1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 8/18/2023

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

Sample Identification	Sample Identification
TB-ROX-071123-8260-A	TB-ROX-071123-8011-A
MW16-ROX-071123	MW6C-ROX-071123
MW6A-ROX-071123	MW6B-ROX-071123
MW6B-ROX-071123-DUP	TB-ROX-071123-8260-B
TB-ROX-071123-8011-B	P93A-ROX-071123-EB
P93A-ROX-071123	P93D-ROX-071123
ROST4PZC-ROX-071123	

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 re-extracted outside extraction time criteria in sample TB-ROX-071123-8260-B; PAHs in samples MW6A-ROX-071123 and MW6B-ROX-071123 were also re-analyzed outside holding time. 2-Butanone (MEK) was detected in trip blank TB-ROX-071123-8260-B and diethyl phthalate was detected in equipment blank P93A-ROX-071123-EB. Several VOC and SVOC LCS/LCSD recoveries, and the LCS/LCSD RPD for benzenethiol, were outside evaluation criteria. Surrogate recoveries for SVOC 2-fluorophenol and PAH 2-fluorobiphenyl in several investigative and quality control samples were outside criteria. Several VOC, SVOC and PAH MS/MSD recoveries were outside evaluation criteria in samples P93D-ROX-071123, MW6C-ROX-071123, and P93A-ROX-07112. The continuing calibration verification for several analytes 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 July 31, 2023, to include the PAH results for P93A-ROX-071123-EB (400-240426-10).

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 MW6A-ROX-071123 and MW6B-ROX-071123 were re-extracted 3

days outside extraction time criteria (7 days) and then re-analyzed for confirmation; the re-extracted and re-analyzed samples were 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 MW6A-ROX-071123 and MW6B-ROX-071123 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. 2-Butanone (MEK) in sample TB-ROX-071123-8260-B was re-analyzed one (1) day outside holding time (14 days) for confirmation; trip blanks are quality control samples and do not require qualification. Data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW6A-ROX-071123 – RE	PAHs	Benzo[b]fluoranthene	**UJ**
MW6A-ROX-071123 – RE	PAHs	Dibenz(a,h)anthracene	**UJ**
MW6A-ROX-071123 – RE	PAHs	Indeno[1,2,3-cd]pyrene	**UJ**
MW6B-ROX-071123 – RE	PAHs	Benzo[a]anthracene	**UJ**
MW6B-ROX-071123 – RE	PAHs	Benzo[b]fluoranthene	**UJ**
MW6B-ROX-071123 – RE	PAHs	Indeno[1,2,3-cd]pyrene	**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
TB-ROX-071123-8260-B	VOCs	2-Butanone (MEK)	2.7 µg/L
P93A-ROX-071123-EB	SVOCs	Diethyl phthalate	0.35 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 400-633574/16-A/17-A	SVOCs	Benzenethiol	10/**7**	**34**	10-120/30
LCS 400-634255/1006	VOCs	Chloromethane	**182**	NA	58-137
LCS 400-634255/1006	VOCs	Vinyl chloride	**157**	NA	59-136
LCS 400-634257/1005	VOCs	Chloromethane	**149**	NA	58-137
LCS 400-634257/1005	VOCs	Vinyl chloride	**139**	NA	59-136

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/ RPD Criteria
LCS 400-633574/2-A	SVOCs	Indene	**149**	NA	49-120

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 below evaluation criteria; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW16-ROX-071123	SVOCs	Benzenethiol	**UJ**
MW6C-ROX-071123	SVOCs	Benzenethiol	**UJ**
MW6A-ROX-071123	SVOCs	Benzenethiol	**UJ**
MW6B-ROX-071123	SVOCs	Benzenethiol	**UJ**
MW6B-ROX-071123-DUP	SVOCs	Benzenethiol	**UJ**
P93A-ROX-071123	SVOCs	Benzenethiol	**UJ**
P93D-ROX-071123	SVOCs	Benzenethiol	**UJ**
ROST4PZC-ROX-071123	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW6C-ROX-071123	SVOCs	2-Fluorophenol	**8**	13-113
MW6B-ROX-071123	SVOCs	2-Fluorophenol	**6**	13-113
MW6B-ROX-071123-DUP	SVOCs	2-Fluorophenol	**3**	13-113
P93A-ROX-071123-EB	SVOCs	2-Fluorophenol	**10**	13-113
P93D-ROX-071123	SVOCs	2-Fluorophenol	**9**	13-113
ROST4PZC-ROX-071123	SVOCs	2-Fluorophenol	**6**	13-113
LCS 400-633899/6-A	PAHs	2-Fluorobiphenyl	**134**	15-128
LCSD 400-633899/7-A	PAHs	2-Fluorobiphenyl	**141**	15-128

Qualifications due to surrogate recoveries were not required if only one of three base/neutral and/or acid SVOC surrogate recoveries were outside evaluation criteria. Laboratory control samples and equipment 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?

Yes, samples P93D-ROX-071123 and MW6C-ROX-071123 were spiked and analyzed for VOCs, SVOCs, PAHs, and VOCs by 8011. Although not requested, sample P93A-ROX-071123 was spiked and analyzed for VOCs.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
P93D-ROX-071123 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/30
P93D-ROX-071123 MS/MSD	VOCs	Chloromethane	**33/39**	17	49-148/31
P93D-ROX-071123 MS/MSD	VOCs	Dichlorodifluoromethane	**4/5**	17	16-150/31
P93D-ROX-071123 MS/MSD	VOCs	Vinyl chloride	**41**/46	11	46-150/30
MW6C-ROX-071123 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/30
MW6C-ROX-071123 MS/MSD	VOCs	Chloromethane	**25/24**	1	49-148/31
MW6C-ROX-071123 MS/MSD	VOCs	Dichlorodifluoromethane	**4/5**	8	16-150/31
MW6C-ROX-071123 MS/MSD	VOCs	Vinyl chloride	**44**/46	5	46-150/30
P93A-ROX-071123 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/30
MW6C-ROX-071123 MS/MSD	SVOCs	1,4-Dioxane	**48/40**	16	50-150/40
MW6C-ROX-071123 MS/MSD	SVOCs	Indene	**158**/142	8	50-150/40
P93D-ROX-071123 MS/MSD	SVOCs	1,4-Dioxane	**40/42**	4	50-150/40
P93D-ROX-071123 MS/MSD	SVOCs	Indene	130/**153**	15	50-150/40
MW6C-ROX-071123 MS/MSD	PAHs	1-Methylnaphthalene	**47/44**	3	50-150/40
MW6C-ROX-071123 MS/MSD	PAHs	2-Methylnaphthalene	**48/45**	4	50-150/40
P93D-ROX-071123 MS/MSD	PAHs	1-Methylnaphthalene	**40/46**	11	50-150/40
P93D-ROX-071123 MS/MSD	PAHs	2-Methylnaphthalene	**40/47**	14	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 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. Chloromethane and vinyl chloride in samples P93D-ROX-071123 and MW6C-ROX-071123 are qualified in Section 12.0 of this data review due to continuing calibration verification (CCV) outside evaluation criteria exceedance; no further qualification is required.

Sample ID	Parameter	Analyte	Qualification
P93D-ROX-071123	VOCs	2-Chloroethyl vinyl ether	**UJ**
P93D-ROX-071123	VOCs	Dichlorodifluoromethane	**UJ**
P93D-ROX-071123	PAHs	1-Methylnaphthalene	**UJ**
P93D-ROX-071123	PAHs	2-Methylnaphthalene	**UJ**
P93D-ROX-071123	SVOCs	1,4-Dioxane	**UJ**
MW6C-ROX-071123	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW6C-ROX-071123	VOCs	Dichlorodifluoromethane	**UJ**
MW6C-ROX-071123	SVOCs	1,4-Dioxane	**UJ**
MW6C-ROX-071123	PAHs	1-Methylnaphthalene	**UJ**
MW6C-ROX-071123	PAHs	2-Methylnaphthalene	**UJ**
P93A-ROX-07112	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
MW6B-ROX-071123	MW6B-ROX-071123-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 for several analytes was outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table. Dichlorodifluoromethane in samples P93D-ROX-071123 and MW6C-ROX-071123 was previously qualified in Section 7.0 of this data review due to MS/MSD outside evaluation criteria exceedance; no further qualification is required.

Sample ID	Parameter	Analyte	Qualification
MW6C-ROX-071123	VOCs	Chloromethane	**UJ**
MW6C-ROX-071123	VOCs	Vinyl chloride	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW6C-ROX-071123	VOCs	Bromomethane	UJ
MW6C-ROX-071123	VOCs	Chloroethane	UJ
MW6C-ROX-071123	VOCs	Trichlorofluoromethane	UJ
MW6C-ROX-071123	PAHs	Pyrene	UJ
MW6C-ROX-071123	SVOCs	Hexachlorocyclopentadiene	UJ
MW16-ROX-071123	VOCs	Dichlorodifluoromethane	UJ
MW16-ROX-071123	PAHs	Pyrene	UJ
MW16-ROX-071123	SVOCs	Hexachlorocyclopentadiene	UJ
MW6A-ROX-071123	VOCs	Dichlorodifluoromethane	UJ
MW6A-ROX-071123	PAHs	Pyrene	UJ
MW6A-ROX-071123	SVOCs	Hexachlorocyclopentadiene	UJ
MW6B-ROX-071123	VOCs	Dichlorodifluoromethane	UJ
MW6B-ROX-071123	PAHs	Pyrene	UJ
MW6B-ROX-071123	SVOCs	Hexachlorocyclopentadiene	UJ
MW6B-ROX-071123-DUP	VOCs	Dichlorodifluoromethane	UJ
MW6B-ROX-071123-DUP	PAHs	Pyrene	UJ
MW6B-ROX-071123-DUP	SVOCs	Hexachlorocyclopentadiene	UJ
P93A-ROX-071123	VOCs	Dichlorodifluoromethane	UJ
P93A-ROX-071123	PAHs	Pyrene	UJ
P93A-ROX-071123	SVOCs	Hexachlorocyclopentadiene	UJ
P93D-ROX-071123	VOCs	Chloromethane	UJ
P93D-ROX-071123	VOCs	Vinyl chloride	UJ
P93D-ROX-071123	VOCs	Trichlorofluoromethane	UJ
P93D-ROX-071123	PAHs	Pyrene	UJ
P93D-ROX-071123	SVOCs	Hexachlorocyclopentadiene	UJ
ROST4PZC-ROX-071123	VOCs	Dichlorodifluoromethane	UJ
ROST4PZC-ROX-071123	VOCs	Chloromethane	UJ
ROST4PZC-ROX-071123	VOCs	Vinyl chloride	UJ
ROST4PZC-ROX-071123	VOCs	Trichlorofluoromethane	UJ
ROST4PZC-ROX-071123	PAHs	Pyrene	J
ROST4PZC-ROX-071123	SVOCs	Hexachlorocyclopentadiene	UJ

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ANALYTICAL REPORT

PREPARED FOR

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St. Louis, Missouri 63102

Generated 7/31/2023 10:48:24 AM Revision 1

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-240426-1

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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Revision 1

Authorized for release by
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Job ID: 400-240426-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-240426-1

Comments
Revised Report
Report revised to add the results for PAHs to P93A-ROX-071123-EB (400-240426-10). Sample ID's corrected.
Supersedes report dated 7-27-2023.

Receipt
The samples were received on 7/13/2023 8:19 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 5.1º C and 5.6º C.

GC/MS VOA
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 continuing calibration verification (CCV) associated with batch 400-634255 recovered outside acceptance criteria, low biased, for Trichlorofluoromethane, Dichlorodifluoromethane, Chloromethane and Vinyl chloride. A reporting limit (RL) standard was analyzed, and the target analyte was 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 400-634255 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 400-634255 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-634257 recovered outside acceptance criteria, low biased, for Bromomethane, Chloroethane and Trichlorofluoromethane, Vinyl chloride, 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 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-071123-8260-A (400-240426-1) and MW6C-ROX-071123 (400-240426-4). 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-634257 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 400-634257 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: The laboratory control sample (LCS) for analytical batch 400-634257 recovered outside control limits for the following analytes: Chloromethane and Vinyl chloride. 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-634257 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 laboratory control sample (LCS) for analytical batch 400-634255 recovered outside control limits for the following analytes: Chloromethane and Vinyl chloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Job ID: 400-240426-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-634255 recovered above the upper control limit for Bromomethane, n-Butylbenzene and Tetrachloroethene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-634255 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 continuing calibration verification (CCV) associated with batch 400-634409 recovered outside acceptance criteria, low biased, for 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 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: MW16-ROX-071123 (400-240426-3), MW6A-ROX-071123 (400-240426-5), MW6B-ROX-071123 (400-240426-6), MW6B-ROX-071123-DUP (400-240426-7), TB-ROX-071123-8260-B (400-240426-8), P93A-ROX-071123-EB (400-240426-10) and P93A-ROX-071123 (400-240426-11). 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 400-634409 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 400-634409 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: Reanalysis of the following sample was performed outside of the analytical holding time because the original analysis contained 2-Butanone (MEK) above the method detection limit (MDL): TB-ROX-071123-8260-B (400-240426-8).

Method 8260D: The following sample contained 2-Butanone (MEK) above the method detection limit (MDL): TB-ROX-071123-8260-B (400-240426-8). Reanalysis was performed outside of analytical holding time. The original analysis is reported as primary and the reanalysis is reported as secondary for 2-Butanone (MEK).

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: P93D-ROX-071123 (400-240426-12) and ROST4PZC-ROX-071123 (400-240426-13). The requested target analyte list includes 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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

GC/MS Semi VOA

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-633574 and analytical batch 400-633800 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270E: The laboratory control sample duplicate (LCSD) for preparation batch 400-633574 and analytical batch 400-633800 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 400-633574 and analytical batch 400-633800 recovered outside control limits for the following analytes: Indene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-633574 and analytical batch 400-633800 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: 400-240426-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-633800 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 400-633800 recovered above the upper control limit for 2-Nitrophenol. 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 400-633800 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: MW6C-ROX-071123 (400-240426-4), MW6B-ROX-071123 (400-240426-6), MW6B-ROX-071123-DUP (400-240426-7), P93A-ROX-071123-EB (400-240426-10) and ROST4PZC-ROX-071123 (400-240426-13). These results have been reported and qualified.

Method 8270E SIM: The continuing calibration verification (CCV) associated with batch 400-633763 recovered outside acceptance criteria, low biased, for Pyrene. 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.

Methods 625.1 SIM, 8270E SIM: The continuing calibration verification (CCV) associated with batch 400-633883 recovered outside acceptance criteria, low biased, for Pyrene. 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-633574 and analytical batch 400-633763 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 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: (LCS 400-633899/6-A) and (LCSD 400-633899/7-A). These results have been reported and qualified.

Method 8270E SIM: The following samples were re-prepared outside of preparation holding time for confirmation: MW6A-ROX-071123 (400-240426-5) and MW6B-ROX-071123 (400-240426-6). 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 400-633483 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 400-633052/18-A).

Method 8011: The continuing calibration verification (CCV) associated with batch 400-633483 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 samples are impacted: (CCV 400-633461/24-A) and (CCV 400-633461/25-A).

Method 8011: The continuing calibration verification (CCV) associated with batch 400-633678 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8011: The continuing calibration verification (CCV) associated with batch 400-634065 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

Job ID: 400-240426-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

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

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

Sample Summary

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

Job ID: 400-240426-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-240426-1	TB-ROX-071123-8260-A	Water	07/11/23 12:00	07/13/23 08:19
400-240426-2	TB-ROX-071123-8011-A	Water	07/11/23 12:00	07/13/23 08:19
400-240426-3	MW16-ROX-071123	Water	07/11/23 09:25	07/13/23 08:19
400-240426-4	MW6C-ROX-071123	Water	07/11/23 10:55	07/13/23 08:19
400-240426-5	MW6A-ROX-071123	Water	07/11/23 12:00	07/13/23 08:19
400-240426-6	MW6B-ROX-071123	Water	07/11/23 13:20	07/13/23 08:19
400-240426-7	MW6B-ROX-071123-DUP	Water	07/11/23 13:20	07/13/23 08:19
400-240426-8	TB-ROX-071123-8260-B	Water	07/11/23 12:00	07/13/23 08:19
400-240426-9	TB-ROX-071123-8011-B	Water	07/11/23 12:00	07/13/23 08:19
400-240426-10	P93A-ROX-071123-EB	Water	07/11/23 08:35	07/13/23 08:19
400-240426-11	P93A-ROX-071123	Water	07/11/23 10:15	07/13/23 08:19
400-240426-12	P93D-ROX-071123	Water	07/11/23 11:15	07/13/23 08:19
400-240426-13	ROST4PZC-ROX-071123	Water	07/11/23 13:05	07/13/23 08:19

Detection Summary

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

Job ID: 400-240426-1

Client Sample ID: TB-ROX-071123-8260-A — Lab Sample ID: 400-240426-1

No Detections.

Client Sample ID: TB-ROX-071123-8011-A — Lab Sample ID: 400-240426-2

No Detections.

Client Sample ID: MW16-ROX-071123 — Lab Sample ID: 400-240426-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	0.61	J	9.9	0.24	ug/L	1		8270E	Total/NA

Client Sample ID: MW6C-ROX-071123 — Lab Sample ID: 400-240426-4

No Detections.

Client Sample ID: MW6A-ROX-071123 — Lab Sample ID: 400-240426-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.31	J	1.0	0.22	ug/L	1		8260D	Total/NA
Benzo[b]fluoranthene	0.054	J	0.20	0.037	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
Indeno[1,2,3-cd]pyrene	0.068	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW6B-ROX-071123 — Lab Sample ID: 400-240426-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.34	J	1.0	0.22	ug/L	1		8260D	Total/NA
Benzo[a]anthracene	0.056	J	0.21	0.035	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.053	J	0.21	0.038	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.057	J	0.21	0.035	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW6B-ROX-071123-DUP — Lab Sample ID: 400-240426-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.31	J	1.0	0.22	ug/L	1		8260D	Total/NA

Client Sample ID: TB-ROX-071123-8260-B — Lab Sample ID: 400-240426-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	2.7	J	25	2.6	ug/L	1		8260D	Total/NA

Client Sample ID: TB-ROX-071123-8011-B — Lab Sample ID: 400-240426-9

No Detections.

Client Sample ID: P93A-ROX-071123-EB — Lab Sample ID: 400-240426-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	0.35	J	10	0.24	ug/L	1		8270E	Total/NA

Client Sample ID: P93A-ROX-071123 — Lab Sample ID: 400-240426-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	5.3		1.0	0.50	ug/L	1		8260D	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: 400-240426-1

Client Sample ID: P93D-ROX-071123 — Lab Sample ID: 400-240426-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.72	J	1.0	0.22	ug/L	1		8260D	Total/NA

Client Sample ID: ROST4PZC-ROX-071123 — Lab Sample ID: 400-240426-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.2		1.0	0.50	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	16	J	25	2.6	ug/L	1		8260D	Total/NA
Ethylbenzene	2.0		1.0	0.50	ug/L	1		8260D	Total/NA
Isopropy benzene	3.0		1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	23		5.0	0.63	ug/L	1		8260D	Total/NA
Naphthalene	35		5.0	3.0	ug/L	1		8260D	Total/NA
N-Propylbenzene	5.6		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
Toluene	6.4		1.0	0.90	ug/L	1		8260D	Total/NA
1,2,4-Trimethy benzene	5.7		1.0	0.82	ug/L	1		8260D	Total/NA
1,3,5-Trimethy benzene	0.67	J	1.0	0.56	ug/L	1		8260D	Total/NA
Xylenes, Total	24		10	1.6	ug/L	1		8260D	Total/NA
Acenaphthene	0.69		0.21	0.10	ug/L	1		8270E SIM	Total/NA
Anthracene	0.32		0.21	0.049	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.036	J	0.21	0.035	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.11	J	0.21	0.035	ug/L	1		8270E SIM	Total/NA
Fluorene	0.59		0.21	0.093	ug/L	1		8270E SIM	Total/NA
Phenanthrene	1.5		0.21	0.094	ug/L	1		8270E SIM	Total/NA
Pyrene	0.070	J	0.21	0.041	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	14		0.21	0.083	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	1.6		0.21	0.069	ug/L	1		8270E SIM	Total/NA
Dibenzofuran	0.60	J	10	0.18	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: 400-240426-1

Client Sample ID: TB-ROX-071123-8260-A
Date Collected: 07/11/23 12:00
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-1
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			07/24/23 16:24	1
Acrolein	ND		20	3.3	ug/L			07/24/23 16:24	1
Acrylonitrile	ND		10	2.8	ug/L			07/24/23 16:24	1
Benzene	ND		1.0	0.50	ug/L			07/24/23 16:24	1
Bromobenzene	ND		1.0	0.54	ug/L			07/24/23 16:24	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/24/23 16:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/24/23 16:24	1
Bromoform	ND		5.0	0.25	ug/L			07/24/23 16:24	1
Bromomethane	ND		1.0	0.98	ug/L			07/24/23 16:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/24/23 16:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/24/23 16:24	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/24/23 16:24	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/24/23 16:24	1
Chloroethane	ND		1.0	0.76	ug/L			07/24/23 16:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/24/23 16:24	1
Chloroform	ND		1.0	0.90	ug/L			07/24/23 16:24	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/24/23 16:24	1
Chloromethane	ND	*- *+	1.0	0.90	ug/L			07/24/23 16:24	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/24/23 16:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/24/23 16:24	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/24/23 16:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/24/23 16:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/24/23 16:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/24/23 16:24	1
Dichlorodifluoromethane	ND	*-	1.0	0.85	ug/L			07/24/23 16:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/24/23 16:24	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/24/23 16:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/24/23 16:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/24/23 16:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/24/23 16:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/24/23 16:24	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/24/23 16:24	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/24/23 16:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/24/23 16:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/24/23 16:24	1
2-Hexanone	ND		25	1.4	ug/L			07/24/23 16:24	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/24/23 16:24	1
Methylene bromide	ND		5.0	0.22	ug/L			07/24/23 16:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/24/23 16:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/24/23 16:24	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/24/23 16:24	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/24/23 16:24	1
Naphthalene	ND		5.0	3.0	ug/L			07/24/23 16:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/24/23 16:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/24/23 16:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/24/23 16:24	1
o-Xylene	ND		5.0	0.60	ug/L			07/24/23 16:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/24/23 16:24	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/24/23 16:24	1

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

Job ID: 400-240426-1

Client Sample ID: TB-ROX-071123-8260-A
Date Collected: 07/11/23 12:00
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-1
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			07/24/23 16:24	1
Styrene	ND		1.0	1.0	ug/L			07/24/23 16:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/24/23 16:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/24/23 16:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/24/23 16:24	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/24/23 16:24	1
Toluene	ND		1.0	0.90	ug/L			07/24/23 16:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/24/23 16:24	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/24/23 16:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/24/23 16:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/24/23 16:24	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/24/23 16:24	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/24/23 16:24	1
Trichloroethene	ND		1.0	0.15	ug/L			07/24/23 16:24	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/24/23 16:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/24/23 16:24	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/24/23 16:24	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/24/23 16:24	1
Vinyl acetate	ND		25	0.93	ug/L			07/24/23 16:24	1
Vinyl chloride	ND	*+	1.0	0.50	ug/L			07/24/23 16:24	1
Xylenes, Total	ND		10	1.6	ug/L			07/24/23 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*07/24/23 16:24*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*07/24/23 16:24*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/24/23 16:24*	*1*

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

Job ID: 400-240426-1

Client Sample ID: TB-ROX-071123-8011-A
Date Collected: 07/11/23 12:00
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-2
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-D bromo-3-Chloropropane	ND		0.028	0.016	ug/L		07/18/23 08:10	07/18/23 22:50	1
1,2-D bromoethane	ND		0.019	0.014	ug/L		07/18/23 08:10	07/18/23 22:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*51 - 149*	*07/18/23 08:10*	*07/18/23 22:50*	*1*

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

Job ID: 400-240426-1

Client Sample ID: MW16-ROX-071123
Date Collected: 07/11/23 09:25
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-3
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			07/25/23 12:08	1
Acrolein	ND		20	3.3	ug/L			07/25/23 12:08	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 12:08	1
Benzene	ND		1.0	0.50	ug/L			07/25/23 12:08	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 12:08	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 12:08	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 12:08	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 12:08	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 12:08	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/25/23 12:08	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 12:08	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 12:08	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 12:08	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 12:08	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 12:08	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 12:08	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 12:08	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 12:08	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 12:08	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 12:08	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 12:08	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 12:08	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 12:08	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 12:08	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 12:08	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 12:08	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 12:08	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 12:08	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 12:08	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 12:08	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 12:08	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 12:08	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 12:08	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 12:08	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 12:08	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 12:08	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/25/23 12:08	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 12:08	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 12:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 12:08	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/25/23 12:08	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 12:08	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 12:08	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 12:08	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 12:08	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 12:08	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 12:08	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 12:08	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 12:08	1

Client Sample ID: MW16-ROX-071123
Date Collected: 07/11/23 09:25
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-3
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			07/25/23 12:08	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 12:08	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 12:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 12:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 12:08	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 12:08	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 12:08	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 12:08	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 12:08	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 12:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 12:08	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 12:08	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 12:08	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 12:08	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 12:08	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 12:08	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/25/23 12:08	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/25/23 12:08	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 12:08	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 12:08	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 12:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*07/25/23 12:08*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/25/23 12:08*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*07/25/23 12:08*	*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	0.098	ug/L		07/18/23 10:59	07/20/23 10:26	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/18/23 10:59	07/20/23 10:26	1
Anthracene	ND		0.20	0.047	ug/L		07/18/23 10:59	07/20/23 10:26	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/18/23 10:59	07/20/23 10:26	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/18/23 10:59	07/20/23 10:26	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/18/23 10:59	07/20/23 10:26	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/18/23 10:59	07/20/23 10:26	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		07/18/23 10:59	07/20/23 10:26	1
Chrysene	ND		0.20	0.033	ug/L		07/18/23 10:59	07/20/23 10:26	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/18/23 10:59	07/20/23 10:26	1
Fluoranthene	ND		0.20	0.034	ug/L		07/18/23 10:59	07/20/23 10:26	1
Fluorene	ND		0.20	0.088	ug/L		07/18/23 10:59	07/20/23 10:26	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/18/23 10:59	07/20/23 10:26	1
Phenanthrene	ND		0.20	0.089	ug/L		07/18/23 10:59	07/20/23 10:26	1
Pyrene	ND		0.20	0.039	ug/L		07/18/23 10:59	07/20/23 10:26	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		07/18/23 10:59	07/20/23 10:26	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		07/18/23 10:59	07/20/23 10:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*88*		*18 - 147*	*07/18/23 10:59*	*07/20/23 10:26*	*1*
2-Fluorobiphenyl	*80*		*15 - 128*	*07/18/23 10:59*	*07/20/23 10:26*	*1*

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

Job ID: 400-240426-1

Client Sample ID: MW16-ROX-071123
Date Collected: 07/11/23 09:25
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-3
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*	*07/18/23 10:59*	*07/20/23 10:26*	*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		07/18/23 10:59	07/19/23 19:34	1
Benzenethiol	ND	*- *1	9.9	1.7	ug/L		07/18/23 10:59	07/19/23 19:34	1
Benzoic acid	ND		30	7.2	ug/L		07/18/23 10:59	07/19/23 19:34	1
Benzyl alcohol	ND		9.9	2.0	ug/L		07/18/23 10:59	07/19/23 19:34	1
Bis(2-chloroethoxy)methane	ND		9.9	0.16	ug/L		07/18/23 10:59	07/19/23 19:34	1
Bis(2-chloroethyl)ether	ND		9.9	2.7	ug/L		07/18/23 10:59	07/19/23 19:34	1
bis (2-chloroisopropyl) ether	ND		9.9	0.16	ug/L		07/18/23 10:59	07/19/23 19:34	1
Bis(2-ethylhexyl) phthalate	ND		9.9	5.0	ug/L		07/18/23 10:59	07/19/23 19:34	1
4-Bromophenyl phenyl ether	ND		9.9	0.20	ug/L		07/18/23 10:59	07/19/23 19:34	1
Butyl benzyl phthalate	ND		9.9	0.19	ug/L		07/18/23 10:59	07/19/23 19:34	1
4-Chloroaniline	ND		9.9	3.4	ug/L		07/18/23 10:59	07/19/23 19:34	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		07/18/23 10:59	07/19/23 19:34	1
2-Chloronaphthalene	ND		9.9	0.14	ug/L		07/18/23 10:59	07/19/23 19:34	1
2-Chlorophenol	ND		9.9	2.2	ug/L		07/18/23 10:59	07/19/23 19:34	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		07/18/23 10:59	07/19/23 19:34	1
Dibenz[a,h]acridine	ND		9.9	0.99	ug/L		07/18/23 10:59	07/19/23 19:34	1
Dibenzofuran	ND		9.9	0.17	ug/L		07/18/23 10:59	07/19/23 19:34	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		07/18/23 10:59	07/19/23 19:34	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		07/18/23 10:59	07/19/23 19:34	1
Diethyl phthalate	**0.61**	**J**	9.9	0.24	ug/L		07/18/23 10:59	07/19/23 19:34	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		07/18/23 10:59	07/19/23 19:34	1
Dimethyl phthalate	ND		9.9	0.17	ug/L		07/18/23 10:59	07/19/23 19:34	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		07/18/23 10:59	07/19/23 19:34	1
4,6-Dinitro-ortho-cresol	ND		9.9	1.6	ug/L		07/18/23 10:59	07/19/23 19:34	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/18/23 10:59	07/19/23 19:34	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		07/18/23 10:59	07/19/23 19:34	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		07/18/23 10:59	07/19/23 19:34	1
Di-n-octyl phthalate	ND		9.9	0.17	ug/L		07/18/23 10:59	07/19/23 19:34	1
1,4-Dioxane	ND		9.9	0.99	ug/L		07/18/23 10:59	07/19/23 19:34	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		07/18/23 10:59	07/19/23 19:34	1
Hexachlorobenzene	ND		9.9	0.17	ug/L		07/18/23 10:59	07/19/23 19:34	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/18/23 10:59	07/19/23 19:34	1
Hexachloroethane	ND		9.9	4.2	ug/L		07/18/23 10:59	07/19/23 19:34	1
Indene	ND	*+	9.9	0.99	ug/L		07/18/23 10:59	07/19/23 19:34	1
Isophorone	ND		9.9	0.14	ug/L		07/18/23 10:59	07/19/23 19:34	1
2-Methylphenol	ND		9.9	1.8	ug/L		07/18/23 10:59	07/19/23 19:34	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/18/23 10:59	07/19/23 19:34	1
2-Nitroaniline	ND		9.9	2.2	ug/L		07/18/23 10:59	07/19/23 19:34	1
3-Nitroaniline	ND		9.9	1.8	ug/L		07/18/23 10:59	07/19/23 19:34	1
4-Nitroaniline	ND		9.9	1.5	ug/L		07/18/23 10:59	07/19/23 19:34	1
Nitrobenzene	ND		9.9	0.13	ug/L		07/18/23 10:59	07/19/23 19:34	1
2-Nitrophenol	ND		9.9	5.2	ug/L		07/18/23 10:59	07/19/23 19:34	1
4-Nitrophenol	ND		9.9	2.1	ug/L		07/18/23 10:59	07/19/23 19:34	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		07/18/23 10:59	07/19/23 19:34	1

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

Job ID: 400-240426-1

Client Sample ID: MW16-ROX-071123
Date Collected: 07/11/23 09:25
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-3
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		07/18/23 10:59	07/19/23 19:34	1
N-Nitrosodiphenylamine	ND		9.9	0.18	ug/L		07/18/23 10:59	07/19/23 19:34	1
Pentachlorophenol	ND		20	1.4	ug/L		07/18/23 10:59	07/19/23 19:34	1
Phenol	ND		9.9	2.6	ug/L		07/18/23 10:59	07/19/23 19:34	1
Pyridine	ND		9.9	3.2	ug/L		07/18/23 10:59	07/19/23 19:34	1
Quinoline	ND		9.9	4.5	ug/L		07/18/23 10:59	07/19/23 19:34	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		07/18/23 10:59	07/19/23 19:34	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		07/18/23 10:59	07/19/23 19:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*46 - 124*	*07/18/23 10:59*	*07/19/23 19:34*	*1*
2-Fluorophenol	*22*		*13 - 113*	*07/18/23 10:59*	*07/19/23 19:34*	*1*
Nitrobenzene-d5	*57*		*36 - 126*	*07/18/23 10:59*	*07/19/23 19:34*	*1*
Phenol-d5	*52*		*17 - 127*	*07/18/23 10:59*	*07/19/23 19:34*	*1*
Terphenyl-d14	*84*		*44 - 149*	*07/18/23 10:59*	*07/19/23 19:34*	*1*
2,4,6-Tribromophenol	*72*		*26 - 150*	*07/18/23 10:59*	*07/19/23 19:34*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.029	0.016	ug/L		07/18/23 08:10	07/18/23 23:11	1
1,2-D bromoethane	ND		0.019	0.014	ug/L		07/18/23 08:10	07/18/23 23:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*51 - 149*	*07/18/23 08:10*	*07/18/23 23:11*	*1*

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

Job ID: 400-240426-1

Client Sample ID: MW6C-ROX-071123
Date Collected: 07/11/23 10:55
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-4
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			07/24/23 11:54	1
Acrolein	ND		20	3.3	ug/L			07/24/23 11:54	1
Acrylonitrile	ND	*+	10	2.8	ug/L			07/24/23 11:54	1
Benzene	ND	*+	1.0	0.50	ug/L			07/24/23 11:54	1
Bromobenzene	ND	*+	1.0	0.54	ug/L			07/24/23 11:54	1
Bromochloromethane	ND	*+	1.0	0.21	ug/L			07/24/23 11:54	1
Bromodichloromethane	ND	*+	1.0	0.50	ug/L			07/24/23 11:54	1
Bromoform	ND	*+	5.0	0.25	ug/L			07/24/23 11:54	1
Bromomethane	ND		1.0	0.98	ug/L			07/24/23 11:54	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/24/23 11:54	1
Carbon disulfide	ND	*+	1.0	0.50	ug/L			07/24/23 11:54	1
Carbon tetrachloride	ND	*+	1.0	0.19	ug/L			07/24/23 11:54	1
Chlorobenzene	ND	*+	1.0	0.15	ug/L			07/24/23 11:54	1
Chloroethane	ND	*+	1.0	0.76	ug/L			07/24/23 11:54	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			07/24/23 11:54	1
Chloroform	ND	*+	1.0	0.90	ug/L			07/24/23 11:54	1
1-Chlorohexane	ND	*+	1.0	0.32	ug/L			07/24/23 11:54	1
Chloromethane	ND	F1 *+	1.0	0.90	ug/L			07/24/23 11:54	1
cis-1,2-Dichloroethene	ND	*+	1.0	0.20	ug/L			07/24/23 11:54	1
cis-1,3-Dichloropropene	ND	*+	5.0	0.50	ug/L			07/24/23 11:54	1
Dibromochloromethane	ND	*+	1.0	0.24	ug/L			07/24/23 11:54	1
1,2-Dichlorobenzene	ND	*+	1.0	0.50	ug/L			07/24/23 11:54	1
1,3-Dichlorobenzene	ND	*+	1.0	0.54	ug/L			07/24/23 11:54	1
1,4-Dichlorobenzene	ND	*+	1.0	0.64	ug/L			07/24/23 11:54	1
Dichlorodifluoromethane	ND	F1	1.0	0.85	ug/L			07/24/23 11:54	1
1,1-Dichloroethane	ND	*+	1.0	0.50	ug/L			07/24/23 11:54	1
1,2-Dichloroethane	ND	*+	1.0	0.19	ug/L			07/24/23 11:54	1
1,1-Dichloroethene	ND	*+	1.0	0.50	ug/L			07/24/23 11:54	1
1,2-Dichloropropane	ND	*+	1.0	0.50	ug/L			07/24/23 11:54	1
1,3-Dichloropropane	ND	*+	1.0	0.50	ug/L			07/24/23 11:54	1
2,2-Dichloropropane	ND	*+	1.0	0.50	ug/L			07/24/23 11:54	1
1,1-Dichloropropene	ND	*+	1.0	0.50	ug/L			07/24/23 11:54	1
Ethylbenzene	ND	*+	1.0	0.50	ug/L			07/24/23 11:54	1
Ethyl methacrylate	ND	*+	1.0	0.60	ug/L			07/24/23 11:54	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/24/23 11:54	1
2-Hexanone	ND	*+	25	1.4	ug/L			07/24/23 11:54	1
Isopropy benzene	ND	*+	1.0	0.53	ug/L			07/24/23 11:54	1
Methylene bromide	ND	*+	5.0	0.22	ug/L			07/24/23 11:54	1
Methylene Chloride	ND	*+	5.0	3.0	ug/L			07/24/23 11:54	1
4-Methyl-2-pentanone (MIBK)	ND	*+	25	1.8	ug/L			07/24/23 11:54	1
Methyl tert-butyl ether	ND	*+	1.0	0.22	ug/L			07/24/23 11:54	1
m-Xylene & p-Xylene	ND	*+	5.0	0.63	ug/L			07/24/23 11:54	1
Naphthalene	ND	*+	5.0	3.0	ug/L			07/24/23 11:54	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/24/23 11:54	1
N-Propylbenzene	ND	*+	1.0	0.69	ug/L			07/24/23 11:54	1
o-Chlorotoluene	ND	*+	1.0	0.57	ug/L			07/24/23 11:54	1
o-Xylene	ND	*+	5.0	0.60	ug/L			07/24/23 11:54	1
p-Chlorotoluene	ND	*+	1.0	0.56	ug/L			07/24/23 11:54	1
p-Isopropyltoluene	ND	*+	1.0	0.71	ug/L			07/24/23 11:54	1

Client Sample ID: MW6C-ROX-071123
Date Collected: 07/11/23 10:55
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-4
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			07/24/23 11:54	1
Styrene	ND		1.0	1.0	ug/L			07/24/23 11:54	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/24/23 11:54	1
1,1,1,2-Tetrachloroethane	ND	*+	1.0	0.16	ug/L			07/24/23 11:54	1
1,1,2,2-Tetrachloroethane	ND	*+	1.0	0.50	ug/L			07/24/23 11:54	1
Tetrachloroethene	ND	*+	1.0	0.90	ug/L			07/24/23 11:54	1
Toluene	ND	*+	1.0	0.90	ug/L			07/24/23 11:54	1
trans-1,2-Dichloroethene	ND	*+	1.0	0.50	ug/L			07/24/23 11:54	1
trans-1,3-Dichloropropene	ND	*+	5.0	0.20	ug/L			07/24/23 11:54	1
1,2,3-Trichlorobenzene	ND	*+	1.0	0.90	ug/L			07/24/23 11:54	1
1,2,4-Trichlorobenzene	ND	*+	1.0	0.82	ug/L			07/24/23 11:54	1
1,1,1-Trichloroethane	ND	*+	1.0	0.18	ug/L			07/24/23 11:54	1
1,1,2-Trichloroethane	ND	*+	5.0	0.21	ug/L			07/24/23 11:54	1
Trichloroethene	ND	*+	1.0	0.15	ug/L			07/24/23 11:54	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/24/23 11:54	1
1,2,3-Trichloropropane	ND	*+	5.0	0.84	ug/L			07/24/23 11:54	1
1,2,4-Trimethy benzene	ND	*+	1.0	0.82	ug/L			07/24/23 11:54	1
1,3,5-Trimethy benzene	ND	*+	1.0	0.56	ug/L			07/24/23 11:54	1
Vinyl acetate	ND		25	0.93	ug/L			07/24/23 11:54	1
Vinyl chloride	ND	F1 *+	1.0	0.50	ug/L			07/24/23 11:54	1
Xylenes, Total	ND	*+	10	1.6	ug/L			07/24/23 11:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*07/24/23 11:54*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*07/24/23 11:54*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*07/24/23 11:54*	*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		07/18/23 10:59	07/20/23 01:41	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/18/23 10:59	07/20/23 01:41	1
Anthracene	ND		0.20	0.048	ug/L		07/18/23 10:59	07/20/23 01:41	1
Benzo[a]anthracene	ND		0.20	0.035	ug/L		07/18/23 10:59	07/20/23 01:41	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		07/18/23 10:59	07/20/23 01:41	1
Benzo[b]fluoranthene	ND		0.20	0.038	ug/L		07/18/23 10:59	07/20/23 01:41	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/18/23 10:59	07/20/23 01:41	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		07/18/23 10:59	07/20/23 01:41	1
Chrysene	ND		0.20	0.034	ug/L		07/18/23 10:59	07/20/23 01:41	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		07/18/23 10:59	07/20/23 01:41	1
Fluoranthene	ND		0.20	0.035	ug/L		07/18/23 10:59	07/20/23 01:41	1
Fluorene	ND		0.20	0.091	ug/L		07/18/23 10:59	07/20/23 01:41	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.035	ug/L		07/18/23 10:59	07/20/23 01:41	1
Phenanthrene	ND		0.20	0.092	ug/L		07/18/23 10:59	07/20/23 01:41	1
Pyrene	ND		0.20	0.040	ug/L		07/18/23 10:59	07/20/23 01:41	1
1-Methylnaphthalene	ND	F1	0.20	0.081	ug/L		07/18/23 10:59	07/20/23 01:41	1
2-Methylnaphthalene	ND	F1	0.20	0.067	ug/L		07/18/23 10:59	07/20/23 01:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*87*		*18 - 147*	*07/18/23 10:59*	*07/20/23 01:41*	*1*
2-Fluorobiphenyl	*90*		*15 - 128*	*07/18/23 10:59*	*07/20/23 01:41*	*1*

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

Job ID: 400-240426-1

Client Sample ID: MW6C-ROX-071123
Date Collected: 07/11/23 10:55
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-4
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*	*07/18/23 10:59*	*07/20/23 01:41*	*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		07/18/23 10:59	07/19/23 19:57	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		07/18/23 10:59	07/19/23 19:57	1
Benzoic acid	ND		31	7.4	ug/L		07/18/23 10:59	07/19/23 19:57	1
Benzyl alcohol	ND		10	2.0	ug/L		07/18/23 10:59	07/19/23 19:57	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/18/23 10:59	07/19/23 19:57	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/18/23 10:59	07/19/23 19:57	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/18/23 10:59	07/19/23 19:57	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/18/23 10:59	07/19/23 19:57	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/18/23 10:59	07/19/23 19:57	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/18/23 10:59	07/19/23 19:57	1
4-Chloroaniline	ND		10	3.5	ug/L		07/18/23 10:59	07/19/23 19:57	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/18/23 10:59	07/19/23 19:57	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/18/23 10:59	07/19/23 19:57	1
2-Chlorophenol	ND		10	2.2	ug/L		07/18/23 10:59	07/19/23 19:57	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/18/23 10:59	07/19/23 19:57	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 19:57	1
Dibenzofuran	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 19:57	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/18/23 10:59	07/19/23 19:57	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/18/23 10:59	07/19/23 19:57	1
Diethyl phthalate	ND		10	0.24	ug/L		07/18/23 10:59	07/19/23 19:57	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/18/23 10:59	07/19/23 19:57	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 19:57	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/18/23 10:59	07/19/23 19:57	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/18/23 10:59	07/19/23 19:57	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/18/23 10:59	07/19/23 19:57	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/18/23 10:59	07/19/23 19:57	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/18/23 10:59	07/19/23 19:57	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 19:57	1
1,4-Dioxane	ND	F1	10	1.0	ug/L		07/18/23 10:59	07/19/23 19:57	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 19:57	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 19:57	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/18/23 10:59	07/19/23 19:57	1
Hexachloroethane	ND		10	4.3	ug/L		07/18/23 10:59	07/19/23 19:57	1
Indene	ND	*+ F1	10	1.0	ug/L		07/18/23 10:59	07/19/23 19:57	1
Isophorone	ND		10	0.14	ug/L		07/18/23 10:59	07/19/23 19:57	1
2-Methylphenol	ND		10	1.8	ug/L		07/18/23 10:59	07/19/23 19:57	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		07/18/23 10:59	07/19/23 19:57	1
2-Nitroaniline	ND		10	2.2	ug/L		07/18/23 10:59	07/19/23 19:57	1
3-Nitroaniline	ND		10	1.8	ug/L		07/18/23 10:59	07/19/23 19:57	1
4-Nitroaniline	ND		10	1.5	ug/L		07/18/23 10:59	07/19/23 19:57	1
Nitrobenzene	ND		10	0.13	ug/L		07/18/23 10:59	07/19/23 19:57	1
2-Nitrophenol	ND		10	5.3	ug/L		07/18/23 10:59	07/19/23 19:57	1
4-Nitrophenol	ND		10	2.1	ug/L		07/18/23 10:59	07/19/23 19:57	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/18/23 10:59	07/19/23 19:57	1

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

Job ID: 400-240426-1

Client Sample ID: MW6C-ROX-071123
Date Collected: 07/11/23 10:55
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-4
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		07/18/23 10:59	07/19/23 19:57	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/18/23 10:59	07/19/23 19:57	1
Pentachlorophenol	ND		20	1.4	ug/L		07/18/23 10:59	07/19/23 19:57	1
Phenol	ND		10	2.6	ug/L		07/18/23 10:59	07/19/23 19:57	1
Pyridine	ND		10	3.3	ug/L		07/18/23 10:59	07/19/23 19:57	1
Quinoline	ND		10	4.6	ug/L		07/18/23 10:59	07/19/23 19:57	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/18/23 10:59	07/19/23 19:57	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/18/23 10:59	07/19/23 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*46 - 124*	*07/18/23 10:59*	*07/19/23 19:57*	*1*
2-Fluorophenol	*8*	*S1-*	*13 - 113*	*07/18/23 10:59*	*07/19/23 19:57*	*1*
Nitrobenzene-d5	*60*		*36 - 126*	*07/18/23 10:59*	*07/19/23 19:57*	*1*
Phenol-d5	*32*		*17 - 127*	*07/18/23 10:59*	*07/19/23 19:57*	*1*
Terphenyl-d14	*86*		*44 - 149*	*07/18/23 10:59*	*07/19/23 19:57*	*1*
2,4,6-Tribromophenol	*77*		*26 - 150*	*07/18/23 10:59*	*07/19/23 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-D bromo-3-Chloropropane	ND		0.029	0.016	ug/L		07/18/23 08:10	07/18/23 23:32	1
1,2-D bromoethane	ND		0.019	0.014	ug/L		07/18/23 08:10	07/18/23 23:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*51 - 149*	*07/18/23 08:10*	*07/18/23 23:32*	*1*

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

Job ID: 400-240426-1

Client Sample ID: MW6A-ROX-071123
Date Collected: 07/11/23 12:00
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-5
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			07/25/23 12:35	1
Acrolein	ND		20	3.3	ug/L			07/25/23 12:35	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 12:35	1
Benzene	ND		1.0	0.50	ug/L			07/25/23 12:35	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 12:35	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 12:35	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 12:35	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 12:35	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 12:35	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/25/23 12:35	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 12:35	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 12:35	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 12:35	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 12:35	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 12:35	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 12:35	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 12:35	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 12:35	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 12:35	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 12:35	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 12:35	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 12:35	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 12:35	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 12:35	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 12:35	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 12:35	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 12:35	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 12:35	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 12:35	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 12:35	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 12:35	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 12:35	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 12:35	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 12:35	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 12:35	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 12:35	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/25/23 12:35	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 12:35	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 12:35	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 12:35	1
Methyl tert-butyl ether	**0.31**	**J**	1.0	0.22	ug/L			07/25/23 12:35	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 12:35	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 12:35	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 12:35	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 12:35	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 12:35	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 12:35	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 12:35	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 12:35	1

Client Sample ID: MW6A-ROX-071123
Date Collected: 07/11/23 12:00
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-5
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			07/25/23 12:35	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 12:35	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 12:35	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 12:35	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 12:35	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 12:35	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 12:35	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 12:35	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 12:35	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 12:35	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 12:35	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 12:35	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 12:35	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 12:35	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 12:35	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 12:35	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/25/23 12:35	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/25/23 12:35	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 12:35	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 12:35	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 12:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*07/25/23 12:35*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*07/25/23 12:35*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*07/25/23 12:35*	*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	0.099	ug/L		07/18/23 10:59	07/20/23 02:03	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/18/23 10:59	07/20/23 02:03	1
Anthracene	ND		0.20	0.047	ug/L		07/18/23 10:59	07/20/23 02:03	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/18/23 10:59	07/20/23 02:03	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/18/23 10:59	07/20/23 02:03	1
Benzo[b]fluoranthene	**0.054**	**J**	0.20	0.037	ug/L		07/18/23 10:59	07/20/23 02:03	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/18/23 10:59	07/20/23 02:03	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/18/23 10:59	07/20/23 02:03	1
Chrysene	ND		0.20	0.033	ug/L		07/18/23 10:59	07/20/23 02:03	1
Dibenz(a,h)anthracene	**0.060**	**J**	0.20	0.048	ug/L		07/18/23 10:59	07/20/23 02:03	1
Fluoranthene	ND		0.20	0.034	ug/L		07/18/23 10:59	07/20/23 02:03	1
Fluorene	ND		0.20	0.089	ug/L		07/18/23 10:59	07/20/23 02:03	1
Indeno[1,2,3-cd]pyrene	**0.068**	**J**	0.20	0.034	ug/L		07/18/23 10:59	07/20/23 02:03	1
Phenanthrene	ND		0.20	0.090	ug/L		07/18/23 10:59	07/20/23 02:03	1
Pyrene	ND		0.20	0.039	ug/L		07/18/23 10:59	07/20/23 02:03	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/18/23 10:59	07/20/23 02:03	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/18/23 10:59	07/20/23 02:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*78*		*18 - 147*	*07/18/23 10:59*	*07/20/23 02:03*	*1*
2-Fluorobiphenyl	*75*		*15 - 128*	*07/18/23 10:59*	*07/20/23 02:03*	*1*

Client Sample ID: MW6A-ROX-071123
Date Collected: 07/11/23 12:00
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-5
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*66*		*10 - 144*	*07/18/23 10:59*	*07/20/23 02:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.20	0.10	ug/L		07/21/23 09:00	07/25/23 17:33	1
Acenaphthylene	ND	H	0.20	0.044	ug/L		07/21/23 09:00	07/25/23 17:33	1
Anthracene	ND	H	0.20	0.047	ug/L		07/21/23 09:00	07/25/23 17:33	1
Benzo[a]anthracene	ND	H	0.20	0.034	ug/L		07/21/23 09:00	07/25/23 17:33	1
Benzo[a]pyrene	ND	H	0.20	0.065	ug/L		07/21/23 09:00	07/25/23 17:33	1
Benzo[b]fluoranthene	ND	H	0.20	0.037	ug/L		07/21/23 09:00	07/25/23 17:33	1
Benzo[g,h,i]perylene	ND	H	0.20	0.027	ug/L		07/21/23 09:00	07/25/23 17:33	1
Benzo[k]fluoranthene	ND	H	0.20	0.063	ug/L		07/21/23 09:00	07/25/23 17:33	1
Chrysene	ND	H	0.20	0.033	ug/L		07/21/23 09:00	07/25/23 17:33	1
Dibenz(a,h)anthracene	ND	H	0.20	0.049	ug/L		07/21/23 09:00	07/25/23 17:33	1
Fluoranthene	ND	H	0.20	0.034	ug/L		07/21/23 09:00	07/25/23 17:33	1
Fluorene	ND	H	0.20	0.090	ug/L		07/21/23 09:00	07/25/23 17:33	1
Indeno[1,2,3-cd]pyrene	ND	H	0.20	0.034	ug/L		07/21/23 09:00	07/25/23 17:33	1
Phenanthrene	ND	H	0.20	0.091	ug/L		07/21/23 09:00	07/25/23 17:33	1
Pyrene	ND	H	0.20	0.039	ug/L		07/21/23 09:00	07/25/23 17:33	1
1-Methylnaphthalene	ND	H	0.20	0.081	ug/L		07/21/23 09:00	07/25/23 17:33	1
2-Methylnaphthalene	ND	H	0.20	0.067	ug/L		07/21/23 09:00	07/25/23 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*83*		*18 - 147*	*07/21/23 09:00*	*07/25/23 17:33*	*1*
2-Fluorobiphenyl	*79*		*15 - 128*	*07/21/23 09:00*	*07/25/23 17:33*	*1*
Nitrobenzene-d5	*90*		*10 - 144*	*07/21/23 09:00*	*07/25/23 17:33*	*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		07/18/23 10:59	07/19/23 20:20	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		07/18/23 10:59	07/19/23 20:20	1
Benzoic acid	ND		30	7.3	ug/L		07/18/23 10:59	07/19/23 20:20	1
Benzyl alcohol	ND		10	2.0	ug/L		07/18/23 10:59	07/19/23 20:20	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/18/23 10:59	07/19/23 20:20	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/18/23 10:59	07/19/23 20:20	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/18/23 10:59	07/19/23 20:20	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/18/23 10:59	07/19/23 20:20	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/18/23 10:59	07/19/23 20:20	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/18/23 10:59	07/19/23 20:20	1
4-Chloroaniline	ND		10	3.4	ug/L		07/18/23 10:59	07/19/23 20:20	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/18/23 10:59	07/19/23 20:20	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/18/23 10:59	07/19/23 20:20	1
2-Chlorophenol	ND		10	2.2	ug/L		07/18/23 10:59	07/19/23 20:20	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/18/23 10:59	07/19/23 20:20	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 20:20	1
Dibenzofuran	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 20:20	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/18/23 10:59	07/19/23 20:20	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/18/23 10:59	07/19/23 20:20	1
Diethyl phthalate	ND		10	0.24	ug/L		07/18/23 10:59	07/19/23 20:20	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/18/23 10:59	07/19/23 20:20	1

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

Job ID: 400-240426-1

Client Sample ID: MW6A-ROX-071123
Date Collected: 07/11/23 12:00
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-5
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		07/18/23 10:59	07/19/23 20:20	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/18/23 10:59	07/19/23 20:20	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/18/23 10:59	07/19/23 20:20	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/18/23 10:59	07/19/23 20:20	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/18/23 10:59	07/19/23 20:20	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/18/23 10:59	07/19/23 20:20	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 20:20	1
1,4-Dioxane	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 20:20	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 20:20	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 20:20	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/18/23 10:59	07/19/23 20:20	1
Hexachloroethane	ND		10	4.2	ug/L		07/18/23 10:59	07/19/23 20:20	1
Indene	ND	*+	10	1.0	ug/L		07/18/23 10:59	07/19/23 20:20	1
Isophorone	ND		10	0.14	ug/L		07/18/23 10:59	07/19/23 20:20	1
2-Methylphenol	ND		10	1.8	ug/L		07/18/23 10:59	07/19/23 20:20	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/18/23 10:59	07/19/23 20:20	1
2-Nitroaniline	ND		10	2.2	ug/L		07/18/23 10:59	07/19/23 20:20	1
3-Nitroaniline	ND		10	1.8	ug/L		07/18/23 10:59	07/19/23 20:20	1
4-Nitroaniline	ND		10	1.5	ug/L		07/18/23 10:59	07/19/23 20:20	1
Nitrobenzene	ND		10	0.13	ug/L		07/18/23 10:59	07/19/23 20:20	1
2-Nitrophenol	ND		10	5.2	ug/L		07/18/23 10:59	07/19/23 20:20	1
4-Nitrophenol	ND		10	2.1	ug/L		07/18/23 10:59	07/19/23 20:20	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/18/23 10:59	07/19/23 20:20	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/18/23 10:59	07/19/23 20:20	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/18/23 10:59	07/19/23 20:20	1
Pentachlorophenol	ND		20	1.4	ug/L		07/18/23 10:59	07/19/23 20:20	1
Phenol	ND		10	2.6	ug/L		07/18/23 10:59	07/19/23 20:20	1
Pyridine	ND		10	3.2	ug/L		07/18/23 10:59	07/19/23 20:20	1
Quinoline	ND		10	4.5	ug/L		07/18/23 10:59	07/19/23 20:20	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/18/23 10:59	07/19/23 20:20	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/18/23 10:59	07/19/23 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*46 - 124*	*07/18/23 10:59*	*07/19/23 20:20*	*1*
2-Fluorophenol	*25*		*13 - 113*	*07/18/23 10:59*	*07/19/23 20:20*	*1*
Nitrobenzene-d5	*59*		*36 - 126*	*07/18/23 10:59*	*07/19/23 20:20*	*1*
Phenol-d5	*51*		*17 - 127*	*07/18/23 10:59*	*07/19/23 20:20*	*1*
Terphenyl-d14	*77*		*44 - 149*	*07/18/23 10:59*	*07/19/23 20:20*	*1*
2,4,6-Tribromophenol	*88*		*26 - 150*	*07/18/23 10:59*	*07/19/23 20:20*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.028	0.016	ug/L		07/18/23 08:10	07/19/23 00:36	1
1,2-D bromoethane	ND		0.019	0.014	ug/L		07/18/23 08:10	07/19/23 00:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*07/18/23 08:10*	*07/19/23 00:36*	*1*

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

Job ID: 400-240426-1

Client Sample ID: MW6B-ROX-071123
Date Collected: 07/11/23 13:20
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-6
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			07/25/23 13:02	1
Acrolein	ND		20	3.3	ug/L			07/25/23 13:02	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 13:02	1
Benzene	ND		1.0	0.50	ug/L			07/25/23 13:02	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 13:02	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 13:02	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 13:02	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 13:02	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 13:02	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/25/23 13:02	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 13:02	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 13:02	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 13:02	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 13:02	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 13:02	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 13:02	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 13:02	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 13:02	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 13:02	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 13:02	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 13:02	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 13:02	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 13:02	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 13:02	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 13:02	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 13:02	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 13:02	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 13:02	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 13:02	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 13:02	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 13:02	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 13:02	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 13:02	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 13:02	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 13:02	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 13:02	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/25/23 13:02	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 13:02	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 13:02	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 13:02	1
Methyl tert-butyl ether	**0.34**	**J**	1.0	0.22	ug/L			07/25/23 13:02	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 13:02	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 13:02	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 13:02	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 13:02	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 13:02	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 13:02	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 13:02	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 13:02	1

Client Sample ID: MW6B-ROX-071123
Date Collected: 07/11/23 13:20
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-6
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			07/25/23 13:02	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 13:02	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 13:02	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 13:02	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 13:02	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 13:02	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 13:02	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 13:02	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 13:02	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 13:02	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 13:02	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 13:02	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 13:02	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 13:02	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 13:02	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 13:02	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/25/23 13:02	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/25/23 13:02	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 13:02	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 13:02	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 13:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*07/25/23 13:02*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*07/25/23 13:02*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*07/25/23 13:02*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.10	ug/L		07/18/23 10:59	07/20/23 02:24	1
Acenaphthylene	ND		0.21	0.045	ug/L		07/18/23 10:59	07/20/23 02:24	1
Anthracene	ND		0.21	0.049	ug/L		07/18/23 10:59	07/20/23 02:24	1
Benzo[a]anthracene	**0.056**	**J**	0.21	0.035	ug/L		07/18/23 10:59	07/20/23 02:24	1
Benzo[a]pyrene	ND		0.21	0.066	ug/L		07/18/23 10:59	07/20/23 02:24	1
Benzo[b]fluoranthene	**0.053**	**J**	0.21	0.038	ug/L		07/18/23 10:59	07/20/23 02:24	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		07/18/23 10:59	07/20/23 02:24	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		07/18/23 10:59	07/20/23 02:24	1
Chrysene	ND		0.21	0.034	ug/L		07/18/23 10:59	07/20/23 02:24	1
Dibenz(a,h)anthracene	ND		0.21	0.050	ug/L		07/18/23 10:59	07/20/23 02:24	1
Fluoranthene	ND		0.21	0.035	ug/L		07/18/23 10:59	07/20/23 02:24	1
Fluorene	ND		0.21	0.092	ug/L		07/18/23 10:59	07/20/23 02:24	1
Indeno[1,2,3-cd]pyrene	**0.057**	**J**	0.21	0.035	ug/L		07/18/23 10:59	07/20/23 02:24	1
Phenanthrene	ND		0.21	0.093	ug/L		07/18/23 10:59	07/20/23 02:24	1
Pyrene	ND		0.21	0.040	ug/L		07/18/23 10:59	07/20/23 02:24	1
1-Methylnaphthalene	ND		0.21	0.083	ug/L		07/18/23 10:59	07/20/23 02:24	1
2-Methylnaphthalene	ND		0.21	0.068	ug/L		07/18/23 10:59	07/20/23 02:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*87*		*18 - 147*	*07/18/23 10:59*	*07/20/23 02:24*	*1*
2-Fluorobiphenyl	*84*		*15 - 128*	*07/18/23 10:59*	*07/20/23 02:24*	*1*

Client Sample ID: MW6B-ROX-071123
Date Collected: 07/11/23 13:20
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-6
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*	*07/18/23 10:59*	*07/20/23 02:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.21	0.11	ug/L		07/21/23 09:00	07/25/23 17:54	1
Acenaphthylene	ND	H	0.21	0.047	ug/L		07/21/23 09:00	07/25/23 17:54	1
Anthracene	ND	H	0.21	0.050	ug/L		07/21/23 09:00	07/25/23 17:54	1
Benzo[a]anthracene	ND	H	0.21	0.036	ug/L		07/21/23 09:00	07/25/23 17:54	1
Benzo[a]pyrene	ND	H	0.21	0.069	ug/L		07/21/23 09:00	07/25/23 17:54	1
Benzo[b]fluoranthene	ND	H	0.21	0.040	ug/L		07/21/23 09:00	07/25/23 17:54	1
Benzo[g,h,i]perylene	ND	H	0.21	0.029	ug/L		07/21/23 09:00	07/25/23 17:54	1
Benzo[k]fluoranthene	ND	H	0.21	0.067	ug/L		07/21/23 09:00	07/25/23 17:54	1
Chrysene	ND	H	0.21	0.035	ug/L		07/21/23 09:00	07/25/23 17:54	1
Dibenz(a,h)anthracene	ND	H	0.21	0.052	ug/L		07/21/23 09:00	07/25/23 17:54	1
Fluoranthene	ND	H	0.21	0.036	ug/L		07/21/23 09:00	07/25/23 17:54	1
Fluorene	ND	H	0.21	0.095	ug/L		07/21/23 09:00	07/25/23 17:54	1
Indeno[1,2,3-cd]pyrene	ND	H	0.21	0.036	ug/L		07/21/23 09:00	07/25/23 17:54	1
Phenanthrene	ND	H	0.21	0.097	ug/L		07/21/23 09:00	07/25/23 17:54	1
Pyrene	ND	H	0.21	0.042	ug/L		07/21/23 09:00	07/25/23 17:54	1
1-Methylnaphthalene	ND	H	0.21	0.086	ug/L		07/21/23 09:00	07/25/23 17:54	1
2-Methylnaphthalene	ND	H	0.21	0.071	ug/L		07/21/23 09:00	07/25/23 17:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*90*		*18 - 147*	*07/21/23 09:00*	*07/25/23 17:54*	*1*
2-Fluorobiphenyl	*80*		*15 - 128*	*07/21/23 09:00*	*07/25/23 17:54*	*1*
Nitrobenzene-d5	*76*		*10 - 144*	*07/21/23 09:00*	*07/25/23 17:54*	*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		07/18/23 10:59	07/19/23 20:42	1
Benzenethiol	ND	*- *1	10	1.8	ug/L		07/18/23 10:59	07/19/23 20:42	1
Benzoic acid	ND		31	7.5	ug/L		07/18/23 10:59	07/19/23 20:42	1
Benzyl alcohol	ND		10	2.1	ug/L		07/18/23 10:59	07/19/23 20:42	1
Bis(2-chloroethoxy)methane	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 20:42	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		07/18/23 10:59	07/19/23 20:42	1
bis (2-chloroisopropyl) ether	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 20:42	1
Bis(2-ethylhexyl) phthalate	ND		10	5.2	ug/L		07/18/23 10:59	07/19/23 20:42	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/18/23 10:59	07/19/23 20:42	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		07/18/23 10:59	07/19/23 20:42	1
4-Chloroaniline	ND		10	3.5	ug/L		07/18/23 10:59	07/19/23 20:42	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/18/23 10:59	07/19/23 20:42	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/18/23 10:59	07/19/23 20:42	1
2-Chlorophenol	ND		10	2.3	ug/L		07/18/23 10:59	07/19/23 20:42	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/18/23 10:59	07/19/23 20:42	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 20:42	1
Dibenzofuran	ND		10	0.18	ug/L		07/18/23 10:59	07/19/23 20:42	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/18/23 10:59	07/19/23 20:42	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/18/23 10:59	07/19/23 20:42	1
Diethyl phthalate	ND		10	0.25	ug/L		07/18/23 10:59	07/19/23 20:42	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/18/23 10:59	07/19/23 20:42	1

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

Job ID: 400-240426-1

Client Sample ID: MW6B-ROX-071123
Date Collected: 07/11/23 13:20
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-6
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	0.18	ug/L		07/18/23 10:59	07/19/23 20:42	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/18/23 10:59	07/19/23 20:42	1
4,6-Dinitro-ortho-cresol	ND		10	1.7	ug/L		07/18/23 10:59	07/19/23 20:42	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/18/23 10:59	07/19/23 20:42	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/18/23 10:59	07/19/23 20:42	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/18/23 10:59	07/19/23 20:42	1
Di-n-octyl phthalate	ND		10	0.18	ug/L		07/18/23 10:59	07/19/23 20:42	1
1,4-Dioxane	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 20:42	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 20:42	1
Hexachlorobenzene	ND		10	0.18	ug/L		07/18/23 10:59	07/19/23 20:42	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/18/23 10:59	07/19/23 20:42	1
Hexachloroethane	ND		10	4.3	ug/L		07/18/23 10:59	07/19/23 20:42	1
Indene	ND	*+	10	1.0	ug/L		07/18/23 10:59	07/19/23 20:42	1
Isophorone	ND		10	0.14	ug/L		07/18/23 10:59	07/19/23 20:42	1
2-Methylphenol	ND		10	1.9	ug/L		07/18/23 10:59	07/19/23 20:42	1
3 & 4 Methylphenol	ND		21	0.40	ug/L		07/18/23 10:59	07/19/23 20:42	1
2-Nitroaniline	ND		10	2.3	ug/L		07/18/23 10:59	07/19/23 20:42	1
3-Nitroaniline	ND		10	1.9	ug/L		07/18/23 10:59	07/19/23 20:42	1
4-Nitroaniline	ND		10	1.5	ug/L		07/18/23 10:59	07/19/23 20:42	1
Nitrobenzene	ND		10	0.13	ug/L		07/18/23 10:59	07/19/23 20:42	1
2-Nitrophenol	ND		10	5.4	ug/L		07/18/23 10:59	07/19/23 20:42	1
4-Nitrophenol	ND		10	2.2	ug/L		07/18/23 10:59	07/19/23 20:42	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/18/23 10:59	07/19/23 20:42	1
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/18/23 10:59	07/19/23 20:42	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		07/18/23 10:59	07/19/23 20:42	1
Pentachlorophenol	ND		21	1.4	ug/L		07/18/23 10:59	07/19/23 20:42	1
Phenol	ND		10	2.7	ug/L		07/18/23 10:59	07/19/23 20:42	1
Pyridine	ND		10	3.3	ug/L		07/18/23 10:59	07/19/23 20:42	1
Quinoline	ND		10	4.6	ug/L		07/18/23 10:59	07/19/23 20:42	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/18/23 10:59	07/19/23 20:42	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/18/23 10:59	07/19/23 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*46 - 124*	*07/18/23 10:59*	*07/19/23 20:42*	*1*
2-Fluorophenol	*6*	*S1-*	*13 - 113*	*07/18/23 10:59*	*07/19/23 20:42*	*1*
Nitrobenzene-d5	*57*		*36 - 126*	*07/18/23 10:59*	*07/19/23 20:42*	*1*
Phenol-d5	*28*		*17 - 127*	*07/18/23 10:59*	*07/19/23 20:42*	*1*
Terphenyl-d14	*83*		*44 - 149*	*07/18/23 10:59*	*07/19/23 20:42*	*1*
2,4,6-Tribromophenol	*66*		*26 - 150*	*07/18/23 10:59*	*07/19/23 20:42*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.029	0.017	ug/L		07/18/23 08:10	07/19/23 00:57	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/18/23 08:10	07/19/23 00:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*51 - 149*	*07/18/23 08:10*	*07/19/23 00:57*	*1*

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

Job ID: 400-240426-1

Client Sample ID: MW6B-ROX-071123-DUP
Date Collected: 07/11/23 13:20
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-7
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			07/25/23 13:29	1
Acrolein	ND		20	3.3	ug/L			07/25/23 13:29	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 13:29	1
Benzene	ND		1.0	0.50	ug/L			07/25/23 13:29	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 13:29	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 13:29	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 13:29	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 13:29	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 13:29	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/25/23 13:29	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 13:29	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 13:29	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 13:29	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 13:29	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 13:29	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 13:29	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 13:29	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 13:29	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 13:29	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 13:29	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 13:29	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 13:29	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 13:29	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 13:29	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 13:29	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 13:29	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 13:29	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 13:29	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 13:29	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 13:29	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 13:29	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 13:29	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 13:29	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 13:29	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 13:29	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 13:29	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/25/23 13:29	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 13:29	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 13:29	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 13:29	1
Methyl tert-butyl ether	**0.31**	**J**	1.0	0.22	ug/L			07/25/23 13:29	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 13:29	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 13:29	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 13:29	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 13:29	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 13:29	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 13:29	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 13:29	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 13:29	1

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

Job ID: 400-240426-1

Client Sample ID: MW6B-ROX-071123-DUP

Lab Sample ID: 400-240426-7

Date Collected: 07/11/23 13:20

Matrix: Water

Date Received: 07/13/23 08:19

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			07/25/23 13:29	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 13:29	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 13:29	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 13:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 13:29	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 13:29	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 13:29	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 13:29	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 13:29	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 13:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 13:29	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 13:29	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 13:29	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 13:29	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 13:29	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 13:29	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/25/23 13:29	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/25/23 13:29	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 13:29	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 13:29	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 13:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*07/25/23 13:29*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/25/23 13:29*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*07/25/23 13:29*	*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		07/18/23 10:59	07/20/23 02:45	1
Acenaphthylene	ND		0.21	0.045	ug/L		07/18/23 10:59	07/20/23 02:45	1
Anthracene	ND		0.21	0.049	ug/L		07/18/23 10:59	07/20/23 02:45	1
Benzo[a]anthracene	ND		0.21	0.035	ug/L		07/18/23 10:59	07/20/23 02:45	1
Benzo[a]pyrene	ND		0.21	0.066	ug/L		07/18/23 10:59	07/20/23 02:45	1
Benzo[b]fluoranthene	ND		0.21	0.038	ug/L		07/18/23 10:59	07/20/23 02:45	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		07/18/23 10:59	07/20/23 02:45	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		07/18/23 10:59	07/20/23 02:45	1
Chrysene	ND		0.21	0.034	ug/L		07/18/23 10:59	07/20/23 02:45	1
Dibenz(a,h)anthracene	ND		0.21	0.050	ug/L		07/18/23 10:59	07/20/23 02:45	1
Fluoranthene	ND		0.21	0.035	ug/L		07/18/23 10:59	07/20/23 02:45	1
Fluorene	ND		0.21	0.092	ug/L		07/18/23 10:59	07/20/23 02:45	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.035	ug/L		07/18/23 10:59	07/20/23 02:45	1
Phenanthrene	ND		0.21	0.093	ug/L		07/18/23 10:59	07/20/23 02:45	1
Pyrene	ND		0.21	0.040	ug/L		07/18/23 10:59	07/20/23 02:45	1
1-Methylnaphthalene	ND		0.21	0.083	ug/L		07/18/23 10:59	07/20/23 02:45	1
2-Methylnaphthalene	ND		0.21	0.068	ug/L		07/18/23 10:59	07/20/23 02:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*80*		*18 - 147*	*07/18/23 10:59*	*07/20/23 02:45*	*1*
2-Fluorobiphenyl	*77*		*15 - 128*	*07/18/23 10:59*	*07/20/23 02:45*	*1*

Client Sample ID: MW6B-ROX-071123-DUP
Date Collected: 07/11/23 13:20
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-7
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*	*07/18/23 10:59*	*07/20/23 02:45*	*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		07/18/23 10:59	07/19/23 21:05	1
Benzenethiol	ND	*- *1	10	1.8	ug/L		07/18/23 10:59	07/19/23 21:05	1
Benzoic acid	ND		31	7.5	ug/L		07/18/23 10:59	07/19/23 21:05	1
Benzyl alcohol	ND		10	2.1	ug/L		07/18/23 10:59	07/19/23 21:05	1
Bis(2-chloroethoxy)methane	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 21:05	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		07/18/23 10:59	07/19/23 21:05	1
bis (2-chloroisopropyl) ether	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 21:05	1
Bis(2-ethylhexyl) phthalate	ND		10	5.2	ug/L		07/18/23 10:59	07/19/23 21:05	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/18/23 10:59	07/19/23 21:05	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		07/18/23 10:59	07/19/23 21:05	1
4-Chloroaniline	ND		10	3.5	ug/L		07/18/23 10:59	07/19/23 21:05	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/18/23 10:59	07/19/23 21:05	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/18/23 10:59	07/19/23 21:05	1
2-Chlorophenol	ND		10	2.3	ug/L		07/18/23 10:59	07/19/23 21:05	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/18/23 10:59	07/19/23 21:05	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 21:05	1
Dibenzofuran	ND		10	0.18	ug/L		07/18/23 10:59	07/19/23 21:05	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/18/23 10:59	07/19/23 21:05	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/18/23 10:59	07/19/23 21:05	1
Diethyl phthalate	ND		10	0.25	ug/L		07/18/23 10:59	07/19/23 21:05	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/18/23 10:59	07/19/23 21:05	1
Dimethyl phthalate	ND		10	0.18	ug/L		07/18/23 10:59	07/19/23 21:05	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/18/23 10:59	07/19/23 21:05	1
4,6-Dinitro-ortho-cresol	ND		10	1.7	ug/L		07/18/23 10:59	07/19/23 21:05	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/18/23 10:59	07/19/23 21:05	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/18/23 10:59	07/19/23 21:05	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/18/23 10:59	07/19/23 21:05	1
Di-n-octyl phthalate	ND		10	0.18	ug/L		07/18/23 10:59	07/19/23 21:05	1
1,4-Dioxane	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 21:05	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 21:05	1
Hexachlorobenzene	ND		10	0.18	ug/L		07/18/23 10:59	07/19/23 21:05	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/18/23 10:59	07/19/23 21:05	1
Hexachloroethane	ND		10	4.3	ug/L		07/18/23 10:59	07/19/23 21:05	1
Indene	ND	*+	10	1.0	ug/L		07/18/23 10:59	07/19/23 21:05	1
Isophorone	ND		10	0.14	ug/L		07/18/23 10:59	07/19/23 21:05	1
2-Methylphenol	ND		10	1.9	ug/L		07/18/23 10:59	07/19/23 21:05	1
3 & 4 Methylphenol	ND		21	0.40	ug/L		07/18/23 10:59	07/19/23 21:05	1
2-Nitroaniline	ND		10	2.3	ug/L		07/18/23 10:59	07/19/23 21:05	1
3-Nitroaniline	ND		10	1.9	ug/L		07/18/23 10:59	07/19/23 21:05	1
4-Nitroaniline	ND		10	1.5	ug/L		07/18/23 10:59	07/19/23 21:05	1
Nitrobenzene	ND		10	0.13	ug/L		07/18/23 10:59	07/19/23 21:05	1
2-Nitrophenol	ND		10	5.4	ug/L		07/18/23 10:59	07/19/23 21:05	1
4-Nitrophenol	ND		10	2.2	ug/L		07/18/23 10:59	07/19/23 21:05	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/18/23 10:59	07/19/23 21:05	1

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

Job ID: 400-240426-1

Client Sample ID: MW6B-ROX-071123-DUP

Lab Sample ID: 400-240426-7

Date Collected: 07/11/23 13:20

Matrix: Water

Date Received: 07/13/23 08:19

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		07/18/23 10:59	07/19/23 21:05	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		07/18/23 10:59	07/19/23 21:05	1
Pentachlorophenol	ND		21	1.4	ug/L		07/18/23 10:59	07/19/23 21:05	1
Phenol	ND		10	2.7	ug/L		07/18/23 10:59	07/19/23 21:05	1
Pyridine	ND		10	3.3	ug/L		07/18/23 10:59	07/19/23 21:05	1
Quinoline	ND		10	4.6	ug/L		07/18/23 10:59	07/19/23 21:05	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/18/23 10:59	07/19/23 21:05	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/18/23 10:59	07/19/23 21:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*46 - 124*	*07/18/23 10:59*	*07/19/23 21:05*	*1*
2-Fluorophenol	*3*	*S1-*	*13 - 113*	*07/18/23 10:59*	*07/19/23 21:05*	*1*
Nitrobenzene-d5	*56*		*36 - 126*	*07/18/23 10:59*	*07/19/23 21:05*	*1*
Phenol-d5	*22*		*17 - 127*	*07/18/23 10:59*	*07/19/23 21:05*	*1*
Terphenyl-d14	*83*		*44 - 149*	*07/18/23 10:59*	*07/19/23 21:05*	*1*
2,4,6-Tribromophenol	*65*		*26 - 150*	*07/18/23 10:59*	*07/19/23 21:05*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.029	0.016	ug/L		07/18/23 08:10	07/21/23 10:17	1
1,2-D bromoethane	ND		0.019	0.014	ug/L		07/18/23 08:10	07/21/23 10:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*51 - 149*	*07/18/23 08:10*	*07/21/23 10:17*	*1*

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

Job ID: 400-240426-1

Client Sample ID: TB-ROX-071123-8260-B
Date Collected: 07/11/23 12:00
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-8
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			07/25/23 16:11	1
Acrolein	ND		20	3.3	ug/L			07/25/23 16:11	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 16:11	1
Benzene	ND		1.0	0.50	ug/L			07/25/23 16:11	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 16:11	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 16:11	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 16:11	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 16:11	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 16:11	1
2-Butanone (MEK)	**2.7**	**J**	25	2.6	ug/L			07/25/23 16:11	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 16:11	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 16:11	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 16:11	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 16:11	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 16:11	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 16:11	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 16:11	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 16:11	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 16:11	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 16:11	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 16:11	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 16:11	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 16:11	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 16:11	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 16:11	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 16:11	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 16:11	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 16:11	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 16:11	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 16:11	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 16:11	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 16:11	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 16:11	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 16:11	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 16:11	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 16:11	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/25/23 16:11	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 16:11	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 16:11	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 16:11	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/25/23 16:11	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 16:11	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 16:11	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 16:11	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 16:11	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 16:11	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 16:11	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 16:11	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 16:11	1

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

Job ID: 400-240426-1

Client Sample ID: TB-ROX-071123-8260-B

Date Collected: 07/11/23 12:00
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-8

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			07/25/23 16:11	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 16:11	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 16:11	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 16:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 16:11	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 16:11	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 16:11	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 16:11	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 16:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 16:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 16:11	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 16:11	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 16:11	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 16:11	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 16:11	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 16:11	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/25/23 16:11	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/25/23 16:11	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 16:11	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 16:11	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*07/25/23 16:11*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/25/23 16:11*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/25/23 16:11*	*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)	ND	H	25	2.6	ug/L			07/26/23 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/26/23 18:05*	*1*
Dibromofluoromethane	*115*		*75 - 126*		*07/26/23 18:05*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/26/23 18:05*	*1*

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

Job ID: 400-240426-1

Client Sample ID: TB-ROX-071123-8011-B
Date Collected: 07/11/23 12:00
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-9
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-D bromo-3-Chloropropane	ND		0.029	0.016	ug/L		07/18/23 08:10	07/21/23 10:38	1
1,2-D bromoethane	ND		0.019	0.014	ug/L		07/18/23 08:10	07/21/23 10:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*51 - 149*	*07/18/23 08:10*	*07/21/23 10:38*	*1*

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

Job ID: 400-240426-1

Client Sample ID: P93A-ROX-071123-EB
Date Collected: 07/11/23 08:35
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-10
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			07/25/23 16:38	1
Acrolein	ND		20	3.3	ug/L			07/25/23 16:38	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 16:38	1
Benzene	ND		1.0	0.50	ug/L			07/25/23 16:38	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 16:38	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 16:38	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 16:38	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 16:38	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 16:38	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/25/23 16:38	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 16:38	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 16:38	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 16:38	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 16:38	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 16:38	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 16:38	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 16:38	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 16:38	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 16:38	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 16:38	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 16:38	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 16:38	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 16:38	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 16:38	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 16:38	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 16:38	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 16:38	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 16:38	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 16:38	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 16:38	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 16:38	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 16:38	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 16:38	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 16:38	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 16:38	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 16:38	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/25/23 16:38	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 16:38	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 16:38	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 16:38	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/25/23 16:38	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 16:38	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 16:38	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 16:38	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 16:38	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 16:38	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 16:38	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 16:38	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 16:38	1

Client Sample ID: P93A-ROX-071123-EB

Lab Sample ID: 400-240426-10

Date Collected: 07/11/23 08:35

Matrix: Water

Date Received: 07/13/23 08:19

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			07/25/23 16:38	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 16:38	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 16:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 16:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 16:38	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 16:38	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 16:38	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 16:38	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 16:38	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 16:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 16:38	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 16:38	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 16:38	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 16:38	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 16:38	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 16:38	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/25/23 16:38	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/25/23 16:38	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 16:38	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 16:38	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*07/25/23 16:38*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/25/23 16:38*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*07/25/23 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		0.20	0.10	ug/L		07/18/23 10:59	07/20/23 10:47	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/18/23 10:59	07/20/23 10:47	1
Anthracene	ND		0.20	0.048	ug/L		07/18/23 10:59	07/20/23 10:47	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/18/23 10:59	07/20/23 10:47	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		07/18/23 10:59	07/20/23 10:47	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/18/23 10:59	07/20/23 10:47	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/18/23 10:59	07/20/23 10:47	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		07/18/23 10:59	07/20/23 10:47	1
Chrysene	ND		0.20	0.033	ug/L		07/18/23 10:59	07/20/23 10:47	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		07/18/23 10:59	07/20/23 10:47	1
Fluoranthene	ND		0.20	0.034	ug/L		07/18/23 10:59	07/20/23 10:47	1
Fluorene	ND		0.20	0.090	ug/L		07/18/23 10:59	07/20/23 10:47	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/18/23 10:59	07/20/23 10:47	1
Phenanthrene	ND		0.20	0.091	ug/L		07/18/23 10:59	07/20/23 10:47	1
Pyrene	ND		0.20	0.039	ug/L		07/18/23 10:59	07/20/23 10:47	1
1-Methylnaphthalene	ND		0.20	0.081	ug/L		07/18/23 10:59	07/20/23 10:47	1
2-Methylnaphthalene	ND		0.20	0.067	ug/L		07/18/23 10:59	07/20/23 10:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*84*		*18 - 147*	*07/18/23 10:59*	*07/20/23 10:47*	*1*
2-Fluorobiphenyl	*76*		*15 - 128*	*07/18/23 10:59*	*07/20/23 10:47*	*1*

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

Job ID: 400-240426-1

Client Sample ID: P93A-ROX-071123-EB

Date Collected: 07/11/23 08:35
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-10

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*	*07/18/23 10:59*	*07/20/23 10:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/18/23 10:59	07/19/23 21:28	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		07/18/23 10:59	07/19/23 21:28	1
Benzoic acid	ND		30	7.4	ug/L		07/18/23 10:59	07/19/23 21:28	1
Benzyl alcohol	ND		10	2.0	ug/L		07/18/23 10:59	07/19/23 21:28	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/18/23 10:59	07/19/23 21:28	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/18/23 10:59	07/19/23 21:28	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/18/23 10:59	07/19/23 21:28	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/18/23 10:59	07/19/23 21:28	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/18/23 10:59	07/19/23 21:28	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/18/23 10:59	07/19/23 21:28	1
4-Chloroaniline	ND		10	3.4	ug/L		07/18/23 10:59	07/19/23 21:28	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/18/23 10:59	07/19/23 21:28	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/18/23 10:59	07/19/23 21:28	1
2-Chlorophenol	ND		10	2.2	ug/L		07/18/23 10:59	07/19/23 21:28	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/18/23 10:59	07/19/23 21:28	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 21:28	1
Dibenzofuran	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 21:28	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/18/23 10:59	07/19/23 21:28	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/18/23 10:59	07/19/23 21:28	1
Diethyl phthalate	**0.35**	**J**	10	0.24	ug/L		07/18/23 10:59	07/19/23 21:28	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/18/23 10:59	07/19/23 21:28	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 21:28	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/18/23 10:59	07/19/23 21:28	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/18/23 10:59	07/19/23 21:28	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/18/23 10:59	07/19/23 21:28	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/18/23 10:59	07/19/23 21:28	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/18/23 10:59	07/19/23 21:28	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 21:28	1
1,4-Dioxane	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 21:28	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 21:28	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 21:28	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/18/23 10:59	07/19/23 21:28	1
Hexachloroethane	ND		10	4.2	ug/L		07/18/23 10:59	07/19/23 21:28	1
Indene	ND	*+	10	1.0	ug/L		07/18/23 10:59	07/19/23 21:28	1
Isophorone	ND		10	0.14	ug/L		07/18/23 10:59	07/19/23 21:28	1
2-Methylphenol	ND		10	1.8	ug/L		07/18/23 10:59	07/19/23 21:28	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/18/23 10:59	07/19/23 21:28	1
2-Nitroaniline	ND		10	2.2	ug/L		07/18/23 10:59	07/19/23 21:28	1
3-Nitroaniline	ND		10	1.8	ug/L		07/18/23 10:59	07/19/23 21:28	1
4-Nitroaniline	ND		10	1.5	ug/L		07/18/23 10:59	07/19/23 21:28	1
Nitrobenzene	ND		10	0.13	ug/L		07/18/23 10:59	07/19/23 21:28	1
2-Nitrophenol	ND		10	5.3	ug/L		07/18/23 10:59	07/19/23 21:28	1
4-Nitrophenol	ND		10	2.1	ug/L		07/18/23 10:59	07/19/23 21:28	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/18/23 10:59	07/19/23 21:28	1

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

Job ID: 400-240426-1

Client Sample ID: P93A-ROX-071123-EB

Date Collected: 07/11/23 08:35
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-10

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	3.3	ug/L		07/18/23 10:59	07/19/23 21:28	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/18/23 10:59	07/19/23 21:28	1
Pentachlorophenol	ND		20	1.4	ug/L		07/18/23 10:59	07/19/23 21:28	1
Phenol	ND		10	2.6	ug/L		07/18/23 10:59	07/19/23 21:28	1
Pyridine	ND		10	3.2	ug/L		07/18/23 10:59	07/19/23 21:28	1
Quinoline	ND		10	4.6	ug/L		07/18/23 10:59	07/19/23 21:28	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/18/23 10:59	07/19/23 21:28	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/18/23 10:59	07/19/23 21:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*46 - 124*	*07/18/23 10:59*	*07/19/23 21:28*	*1*
2-Fluorophenol	*10*	*S1-*	*13 - 113*	*07/18/23 10:59*	*07/19/23 21:28*	*1*
Nitrobenzene-d5	*56*		*36 - 126*	*07/18/23 10:59*	*07/19/23 21:28*	*1*
Phenol-d5	*32*		*17 - 127*	*07/18/23 10:59*	*07/19/23 21:28*	*1*
Terphenyl-d14	*83*		*44 - 149*	*07/18/23 10:59*	*07/19/23 21:28*	*1*
2,4,6-Tribromophenol	*65*		*26 - 150*	*07/18/23 10:59*	*07/19/23 21:28*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.029	0.016	ug/L		07/17/23 14:59	07/18/23 08:20	1
1,2-D bromoethane	ND		0.019	0.014	ug/L		07/17/23 14:59	07/18/23 08:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*74*		*51 - 149*	*07/17/23 14:59*	*07/18/23 08:20*	*1*

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

Job ID: 400-240426-1

Client Sample ID: P93A-ROX-071123
Date Collected: 07/11/23 10:15
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-11
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			07/25/23 13:56	1
Acrolein	ND		20	3.3	ug/L			07/25/23 13:56	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 13:56	1
Benzene	**5.3**		1.0	0.50	ug/L			07/25/23 13:56	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 13:56	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 13:56	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 13:56	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 13:56	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 13:56	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/25/23 13:56	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 13:56	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 13:56	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 13:56	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 13:56	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			07/25/23 13:56	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 13:56	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 13:56	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 13:56	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 13:56	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 13:56	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 13:56	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 13:56	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 13:56	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 13:56	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 13:56	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 13:56	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 13:56	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 13:56	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 13:56	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 13:56	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 13:56	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 13:56	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 13:56	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 13:56	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 13:56	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 13:56	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/25/23 13:56	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 13:56	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 13:56	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 13:56	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/25/23 13:56	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 13:56	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 13:56	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 13:56	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 13:56	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 13:56	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 13:56	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 13:56	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 13:56	1

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

Job ID: 400-240426-1

Client Sample ID: P93A-ROX-071123
Date Collected: 07/11/23 10:15
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-11
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			07/25/23 13:56	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 13:56	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 13:56	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 13:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 13:56	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 13:56	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 13:56	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 13:56	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 13:56	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 13:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 13:56	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 13:56	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 13:56	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 13:56	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 13:56	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 13:56	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/25/23 13:56	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/25/23 13:56	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 13:56	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 13:56	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*07/25/23 13:56*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*07/25/23 13:56*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*07/25/23 13:56*	*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		07/18/23 10:59	07/20/23 11:08	1
Acenaphthylene	ND		0.21	0.046	ug/L		07/18/23 10:59	07/20/23 11:08	1
Anthracene	ND		0.21	0.049	ug/L		07/18/23 10:59	07/20/23 11:08	1
Benzo[a]anthracene	ND		0.21	0.036	ug/L		07/18/23 10:59	07/20/23 11:08	1
Benzo[a]pyrene	ND		0.21	0.067	ug/L		07/18/23 10:59	07/20/23 11:08	1
Benzo[b]fluoranthene	ND		0.21	0.039	ug/L		07/18/23 10:59	07/20/23 11:08	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		07/18/23 10:59	07/20/23 11:08	1
Benzo[k]fluoranthene	ND		0.21	0.065	ug/L		07/18/23 10:59	07/20/23 11:08	1
Chrysene	ND		0.21	0.035	ug/L		07/18/23 10:59	07/20/23 11:08	1
Dibenz(a,h)anthracene	ND		0.21	0.050	ug/L		07/18/23 10:59	07/20/23 11:08	1
Fluoranthene	ND		0.21	0.036	ug/L		07/18/23 10:59	07/20/23 11:08	1
Fluorene	ND		0.21	0.093	ug/L		07/18/23 10:59	07/20/23 11:08	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.036	ug/L		07/18/23 10:59	07/20/23 11:08	1
Phenanthrene	ND		0.21	0.094	ug/L		07/18/23 10:59	07/20/23 11:08	1
Pyrene	ND		0.21	0.041	ug/L		07/18/23 10:59	07/20/23 11:08	1
1-Methylnaphthalene	ND		0.21	0.084	ug/L		07/18/23 10:59	07/20/23 11:08	1
2-Methylnaphthalene	ND		0.21	0.069	ug/L		07/18/23 10:59	07/20/23 11:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*93*		*18 - 147*	*07/18/23 10:59*	*07/20/23 11:08*	*1*
2-Fluorobiphenyl	*87*		*15 - 128*	*07/18/23 10:59*	*07/20/23 11:08*	*1*

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

Job ID: 400-240426-1

Client Sample ID: P93A-ROX-071123
Date Collected: 07/11/23 10:15
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-11
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*	*07/18/23 10:59*	*07/20/23 11:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	4.0	ug/L		07/18/23 10:59	07/19/23 21:50	1
Benzenethiol	ND	*- *1	10	1.8	ug/L		07/18/23 10:59	07/19/23 21:50	1
Benzoic acid	ND		31	7.6	ug/L		07/18/23 10:59	07/19/23 21:50	1
Benzyl alcohol	ND		10	2.1	ug/L		07/18/23 10:59	07/19/23 21:50	1
Bis(2-chloroethoxy)methane	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 21:50	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		07/18/23 10:59	07/19/23 21:50	1
bis (2-chloroisopropyl) ether	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 21:50	1
Bis(2-ethylhexyl) phthalate	ND		10	5.2	ug/L		07/18/23 10:59	07/19/23 21:50	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/18/23 10:59	07/19/23 21:50	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		07/18/23 10:59	07/19/23 21:50	1
4-Chloroaniline	ND		10	3.6	ug/L		07/18/23 10:59	07/19/23 21:50	1
4-Chloro-3-methylphenol	ND		10	4.0	ug/L		07/18/23 10:59	07/19/23 21:50	1
2-Chloronaphthalene	ND		10	0.15	ug/L		07/18/23 10:59	07/19/23 21:50	1
2-Chlorophenol	ND		10	2.3	ug/L		07/18/23 10:59	07/19/23 21:50	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/18/23 10:59	07/19/23 21:50	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 21:50	1
Dibenzofuran	ND		10	0.18	ug/L		07/18/23 10:59	07/19/23 21:50	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/18/23 10:59	07/19/23 21:50	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/18/23 10:59	07/19/23 21:50	1
Diethyl phthalate	ND		10	0.25	ug/L		07/18/23 10:59	07/19/23 21:50	1
2,4-Dimethylphenol	ND		10	3.7	ug/L		07/18/23 10:59	07/19/23 21:50	1
Dimethyl phthalate	ND		10	0.18	ug/L		07/18/23 10:59	07/19/23 21:50	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/18/23 10:59	07/19/23 21:50	1
4,6-Dinitro-ortho-cresol	ND		10	1.7	ug/L		07/18/23 10:59	07/19/23 21:50	1
2,4-Dinitrophenol	ND		31	3.6	ug/L		07/18/23 10:59	07/19/23 21:50	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/18/23 10:59	07/19/23 21:50	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/18/23 10:59	07/19/23 21:50	1
Di-n-octyl phthalate	ND		10	0.18	ug/L		07/18/23 10:59	07/19/23 21:50	1
1,4-Dioxane	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 21:50	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 21:50	1
Hexachlorobenzene	ND		10	0.18	ug/L		07/18/23 10:59	07/19/23 21:50	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/18/23 10:59	07/19/23 21:50	1
Hexachloroethane	ND		10	4.4	ug/L		07/18/23 10:59	07/19/23 21:50	1
Indene	ND	*+	10	1.0	ug/L		07/18/23 10:59	07/19/23 21:50	1
Isophorone	ND		10	0.15	ug/L		07/18/23 10:59	07/19/23 21:50	1
2-Methylphenol	ND		10	1.9	ug/L		07/18/23 10:59	07/19/23 21:50	1
3 & 4 Methylphenol	ND		21	0.41	ug/L		07/18/23 10:59	07/19/23 21:50	1
2-Nitroaniline	ND		10	2.3	ug/L		07/18/23 10:59	07/19/23 21:50	1
3-Nitroaniline	ND		10	1.9	ug/L		07/18/23 10:59	07/19/23 21:50	1
4-Nitroaniline	ND		10	1.6	ug/L		07/18/23 10:59	07/19/23 21:50	1
Nitrobenzene	ND		10	0.14	ug/L		07/18/23 10:59	07/19/23 21:50	1
2-Nitrophenol	ND		10	5.4	ug/L		07/18/23 10:59	07/19/23 21:50	1
4-Nitrophenol	ND		10	2.2	ug/L		07/18/23 10:59	07/19/23 21:50	1
N-Nitrosodimethylamine	ND		10	3.7	ug/L		07/18/23 10:59	07/19/23 21:50	1

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

Job ID: 400-240426-1

Client Sample ID: P93A-ROX-071123
Date Collected: 07/11/23 10:15
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-11
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	3.5	ug/L		07/18/23 10:59	07/19/23 21:50	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		07/18/23 10:59	07/19/23 21:50	1
Pentachlorophenol	ND		21	1.5	ug/L		07/18/23 10:59	07/19/23 21:50	1
Phenol	ND		10	2.7	ug/L		07/18/23 10:59	07/19/23 21:50	1
Pyridine	ND		10	3.3	ug/L		07/18/23 10:59	07/19/23 21:50	1
Quinoline	ND		10	4.7	ug/L		07/18/23 10:59	07/19/23 21:50	1
2,4,5-Trichlorophenol	ND		10	3.9	ug/L		07/18/23 10:59	07/19/23 21:50	1
2,4,6-Trichlorophenol	ND		10	3.7	ug/L		07/18/23 10:59	07/19/23 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*46 - 124*	*07/18/23 10:59*	*07/19/23 21:50*	*1*
2-Fluorophenol	*30*		*13 - 113*	*07/18/23 10:59*	*07/19/23 21:50*	*1*
Nitrobenzene-d5	*56*		*36 - 126*	*07/18/23 10:59*	*07/19/23 21:50*	*1*
Phenol-d5	*53*		*17 - 127*	*07/18/23 10:59*	*07/19/23 21:50*	*1*
Terphenyl-d14	*82*		*44 - 149*	*07/18/23 10:59*	*07/19/23 21:50*	*1*
2,4,6-Tribromophenol	*69*		*26 - 150*	*07/18/23 10:59*	*07/19/23 21:50*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.028	0.016	ug/L		07/17/23 14:59	07/18/23 08:41	1
1,2-D bromoethane	ND		0.019	0.014	ug/L		07/17/23 14:59	07/18/23 08:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*	*p*	*51 - 149*	*07/17/23 14:59*	*07/18/23 08:41*	*1*

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

Job ID: 400-240426-1

Client Sample ID: P93D-ROX-071123
Date Collected: 07/11/23 11:15
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-12
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			07/24/23 12:08	1
Acrolein	ND		20	3.3	ug/L			07/24/23 12:08	1
Acrylonitrile	ND		10	2.8	ug/L			07/24/23 12:08	1
Benzene	ND		1.0	0.50	ug/L			07/24/23 12:08	1
Bromobenzene	ND		1.0	0.54	ug/L			07/24/23 12:08	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/24/23 12:08	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/24/23 12:08	1
Bromoform	ND		5.0	0.25	ug/L			07/24/23 12:08	1
Bromomethane	ND		1.0	0.98	ug/L			07/24/23 12:08	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/24/23 12:08	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/24/23 12:08	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/24/23 12:08	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/24/23 12:08	1
Chloroethane	ND		1.0	0.76	ug/L			07/24/23 12:08	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			07/24/23 12:08	1
Chloroform	ND		1.0	0.90	ug/L			07/24/23 12:08	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/24/23 12:08	1
Chloromethane	ND	F1 *+	1.0	0.90	ug/L			07/24/23 12:08	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/24/23 12:08	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/24/23 12:08	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/24/23 12:08	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/24/23 12:08	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/24/23 12:08	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/24/23 12:08	1
Dichlorodifluoromethane	ND	F1	1.0	0.85	ug/L			07/24/23 12:08	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/24/23 12:08	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/24/23 12:08	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/24/23 12:08	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/24/23 12:08	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/24/23 12:08	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/24/23 12:08	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/24/23 12:08	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/24/23 12:08	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/24/23 12:08	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/24/23 12:08	1
2-Hexanone	ND		25	1.4	ug/L			07/24/23 12:08	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/24/23 12:08	1
Methylene bromide	ND		5.0	0.22	ug/L			07/24/23 12:08	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/24/23 12:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/24/23 12:08	1
Methyl tert-butyl ether	**0.72**	**J**	1.0	0.22	ug/L			07/24/23 12:08	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/24/23 12:08	1
Naphthalene	ND		5.0	3.0	ug/L			07/24/23 12:08	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/24/23 12:08	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/24/23 12:08	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/24/23 12:08	1
o-Xylene	ND		5.0	0.60	ug/L			07/24/23 12:08	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/24/23 12:08	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/24/23 12:08	1

Client Sample ID: P93D-ROX-071123
Date Collected: 07/11/23 11:15
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-12
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			07/24/23 12:08	1
Styrene	ND		1.0	1.0	ug/L			07/24/23 12:08	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/24/23 12:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/24/23 12:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/24/23 12:08	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/24/23 12:08	1
Toluene	ND		1.0	0.90	ug/L			07/24/23 12:08	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/24/23 12:08	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/24/23 12:08	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/24/23 12:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/24/23 12:08	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/24/23 12:08	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/24/23 12:08	1
Trichloroethene	ND		1.0	0.15	ug/L			07/24/23 12:08	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/24/23 12:08	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/24/23 12:08	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/24/23 12:08	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/24/23 12:08	1
Vinyl acetate	ND		25	0.93	ug/L			07/24/23 12:08	1
Vinyl chloride	ND	F1 *+	1.0	0.50	ug/L			07/24/23 12:08	1
Xylenes, Total	ND		10	1.6	ug/L			07/24/23 12:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*07/24/23 12:08*	*1*
Dibromofluoromethane	*98*		*75 - 126*		*07/24/23 12:08*	*1*
Toluene-d8 (Surr)	*105*		*64 - 132*		*07/24/23 12:08*	*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		07/18/23 10:59	07/20/23 01:20	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/18/23 10:59	07/20/23 01:20	1
Anthracene	ND		0.20	0.047	ug/L		07/18/23 10:59	07/20/23 01:20	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/18/23 10:59	07/20/23 01:20	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		07/18/23 10:59	07/20/23 01:20	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/18/23 10:59	07/20/23 01:20	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/18/23 10:59	07/20/23 01:20	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		07/18/23 10:59	07/20/23 01:20	1
Chrysene	ND		0.20	0.033	ug/L		07/18/23 10:59	07/20/23 01:20	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/18/23 10:59	07/20/23 01:20	1
Fluoranthene	ND		0.20	0.034	ug/L		07/18/23 10:59	07/20/23 01:20	1
Fluorene	ND		0.20	0.090	ug/L		07/18/23 10:59	07/20/23 01:20	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/18/23 10:59	07/20/23 01:20	1
Phenanthrene	ND		0.20	0.091	ug/L		07/18/23 10:59	07/20/23 01:20	1
Pyrene	ND		0.20	0.039	ug/L		07/18/23 10:59	07/20/23 01:20	1
1-Methylnaphthalene	ND	F1	0.20	0.081	ug/L		07/18/23 10:59	07/20/23 01:20	1
2-Methylnaphthalene	ND	F1	0.20	0.067	ug/L		07/18/23 10:59	07/20/23 01:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*96*		*18 - 147*	*07/18/23 10:59*	*07/20/23 01:20*	*1*
2-Fluorobiphenyl	*86*		*15 - 128*	*07/18/23 10:59*	*07/20/23 01:20*	*1*

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

Job ID: 400-240426-1

Client Sample ID: P93D-ROX-071123
Date Collected: 07/11/23 11:15
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-12
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*	*07/18/23 10:59*	*07/20/23 01:20*	*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		07/18/23 10:59	07/19/23 22:13	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		07/18/23 10:59	07/19/23 22:13	1
Benzoic acid	ND		30	7.4	ug/L		07/18/23 10:59	07/19/23 22:13	1
Benzyl alcohol	ND		10	2.0	ug/L		07/18/23 10:59	07/19/23 22:13	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/18/23 10:59	07/19/23 22:13	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/18/23 10:59	07/19/23 22:13	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/18/23 10:59	07/19/23 22:13	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/18/23 10:59	07/19/23 22:13	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/18/23 10:59	07/19/23 22:13	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/18/23 10:59	07/19/23 22:13	1
4-Chloroaniline	ND		10	3.4	ug/L		07/18/23 10:59	07/19/23 22:13	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/18/23 10:59	07/19/23 22:13	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/18/23 10:59	07/19/23 22:13	1
2-Chlorophenol	ND		10	2.2	ug/L		07/18/23 10:59	07/19/23 22:13	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/18/23 10:59	07/19/23 22:13	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 22:13	1
Dibenzofuran	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 22:13	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/18/23 10:59	07/19/23 22:13	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/18/23 10:59	07/19/23 22:13	1
Diethyl phthalate	ND		10	0.24	ug/L		07/18/23 10:59	07/19/23 22:13	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/18/23 10:59	07/19/23 22:13	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 22:13	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/18/23 10:59	07/19/23 22:13	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/18/23 10:59	07/19/23 22:13	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/18/23 10:59	07/19/23 22:13	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/18/23 10:59	07/19/23 22:13	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/18/23 10:59	07/19/23 22:13	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 22:13	1
1,4-Dioxane	ND	F1	10	1.0	ug/L		07/18/23 10:59	07/19/23 22:13	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 22:13	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 22:13	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/18/23 10:59	07/19/23 22:13	1
Hexachloroethane	ND		10	4.2	ug/L		07/18/23 10:59	07/19/23 22:13	1
Indene	ND	*+ F1	10	1.0	ug/L		07/18/23 10:59	07/19/23 22:13	1
Isophorone	ND		10	0.14	ug/L		07/18/23 10:59	07/19/23 22:13	1
2-Methylphenol	ND		10	1.8	ug/L		07/18/23 10:59	07/19/23 22:13	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/18/23 10:59	07/19/23 22:13	1
2-Nitroaniline	ND		10	2.2	ug/L		07/18/23 10:59	07/19/23 22:13	1
3-Nitroaniline	ND		10	1.8	ug/L		07/18/23 10:59	07/19/23 22:13	1
4-Nitroaniline	ND		10	1.5	ug/L		07/18/23 10:59	07/19/23 22:13	1
Nitrobenzene	ND		10	0.13	ug/L		07/18/23 10:59	07/19/23 22:13	1
2-Nitrophenol	ND		10	5.3	ug/L		07/18/23 10:59	07/19/23 22:13	1
4-Nitrophenol	ND		10	2.1	ug/L		07/18/23 10:59	07/19/23 22:13	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/18/23 10:59	07/19/23 22:13	1

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

Job ID: 400-240426-1

Client Sample ID: P93D-ROX-071123

Date Collected: 07/11/23 11:15
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-12

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	3.3	ug/L		07/18/23 10:59	07/19/23 22:13	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/18/23 10:59	07/19/23 22:13	1
Pentachlorophenol	ND		20	1.4	ug/L		07/18/23 10:59	07/19/23 22:13	1
Phenol	ND		10	2.6	ug/L		07/18/23 10:59	07/19/23 22:13	1
Pyridine	ND		10	3.2	ug/L		07/18/23 10:59	07/19/23 22:13	1
Quinoline	ND		10	4.5	ug/L		07/18/23 10:59	07/19/23 22:13	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/18/23 10:59	07/19/23 22:13	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/18/23 10:59	07/19/23 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*46 - 124*	*07/18/23 10:59*	*07/19/23 22:13*	*1*
2-Fluorophenol	*9*	*S1-*	*13 - 113*	*07/18/23 10:59*	*07/19/23 22:13*	*1*
Nitrobenzene-d5	*63*		*36 - 126*	*07/18/23 10:59*	*07/19/23 22:13*	*1*
Phenol-d5	*37*		*17 - 127*	*07/18/23 10:59*	*07/19/23 22:13*	*1*
Terphenyl-d14	*92*		*44 - 149*	*07/18/23 10:59*	*07/19/23 22:13*	*1*
2,4,6-Tribromophenol	*76*		*26 - 150*	*07/18/23 10:59*	*07/19/23 22:13*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.028	0.016	ug/L		07/18/23 08:10	07/21/23 11:21	1
1,2-D bromoethane	ND		0.019	0.014	ug/L		07/18/23 08:10	07/21/23 11:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*116*		*51 - 149*	*07/18/23 08:10*	*07/21/23 11:21*	*1*

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

Job ID: 400-240426-1

Client Sample ID: ROST4PZC-ROX-071123
Date Collected: 07/11/23 13:05
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-13
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			07/24/23 14:13	1
Acrolein	ND		20	3.3	ug/L			07/24/23 14:13	1
Acrylonitrile	ND		10	2.8	ug/L			07/24/23 14:13	1
Benzene	**2.2**		1.0	0.50	ug/L			07/24/23 14:13	1
Bromobenzene	ND		1.0	0.54	ug/L			07/24/23 14:13	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/24/23 14:13	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/24/23 14:13	1
Bromoform	ND		5.0	0.25	ug/L			07/24/23 14:13	1
Bromomethane	ND		1.0	0.98	ug/L			07/24/23 14:13	1
2-Butanone (MEK)	**16**	**J**	25	2.6	ug/L			07/24/23 14:13	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/24/23 14:13	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/24/23 14:13	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/24/23 14:13	1
Chloroethane	ND		1.0	0.76	ug/L			07/24/23 14:13	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/24/23 14:13	1
Chloroform	ND		1.0	0.90	ug/L			07/24/23 14:13	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/24/23 14:13	1
Chloromethane	ND	*+	1.0	0.90	ug/L			07/24/23 14:13	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/24/23 14:13	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/24/23 14:13	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/24/23 14:13	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/24/23 14:13	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/24/23 14:13	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/24/23 14:13	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/24/23 14:13	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/24/23 14:13	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/24/23 14:13	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/24/23 14:13	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/24/23 14:13	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/24/23 14:13	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/24/23 14:13	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/24/23 14:13	1
Ethylbenzene	**2.0**		1.0	0.50	ug/L			07/24/23 14:13	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/24/23 14:13	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/24/23 14:13	1
2-Hexanone	ND		25	1.4	ug/L			07/24/23 14:13	1
Isopropylbenzene	**3.0**		1.0	0.53	ug/L			07/24/23 14:13	1
Methylene bromide	ND		5.0	0.22	ug/L			07/24/23 14:13	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/24/23 14:13	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/24/23 14:13	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/24/23 14:13	1
m-Xylene & p-Xylene	**23**		5.0	0.63	ug/L			07/24/23 14:13	1
Naphthalene	**35**		5.0	3.0	ug/L			07/24/23 14:13	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/24/23 14:13	1
N-Propylbenzene	**5.6**		1.0	0.69	ug/L			07/24/23 14:13	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/24/23 14:13	1
o-Xylene	**1.7**	**J**	5.0	0.60	ug/L			07/24/23 14:13	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/24/23 14:13	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/24/23 14:13	1

Client Sample ID: ROST4PZC-ROX-071123
Date Collected: 07/11/23 13:05
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-13
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			07/24/23 14:13	1
Styrene	ND		1.0	1.0	ug/L			07/24/23 14:13	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/24/23 14:13	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/24/23 14:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/24/23 14:13	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/24/23 14:13	1
Toluene	**6.4**		1.0	0.90	ug/L			07/24/23 14:13	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/24/23 14:13	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/24/23 14:13	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/24/23 14:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/24/23 14:13	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/24/23 14:13	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/24/23 14:13	1
Trichloroethene	ND		1.0	0.15	ug/L			07/24/23 14:13	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/24/23 14:13	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/24/23 14:13	1
1,2,4-Trimethylbenzene	**5.7**		1.0	0.82	ug/L			07/24/23 14:13	1
1,3,5-Trimethylbenzene	**0.67**	**J**	1.0	0.56	ug/L			07/24/23 14:13	1
Vinyl acetate	ND		25	0.93	ug/L			07/24/23 14:13	1
Vinyl chloride	ND	*+	1.0	0.50	ug/L			07/24/23 14:13	1
Xylenes, Total	**24**		10	1.6	ug/L			07/24/23 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*07/24/23 14:13*	*1*
Dibromofluoromethane	*96*		*75 - 126*		*07/24/23 14:13*	*1*
Toluene-d8 (Surr)	*108*		*64 - 132*		*07/24/23 14:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.69**		0.21	0.10	ug/L		07/18/23 10:59	07/20/23 11:29	1
Acenaphthylene	ND		0.21	0.046	ug/L		07/18/23 10:59	07/20/23 11:29	1
Anthracene	**0.32**		0.21	0.049	ug/L		07/18/23 10:59	07/20/23 11:29	1
Benzo[a]anthracene	**0.036**	**J**	0.21	0.035	ug/L		07/18/23 10:59	07/20/23 11:29	1
Benzo[a]pyrene	ND		0.21	0.067	ug/L		07/18/23 10:59	07/20/23 11:29	1
Benzo[b]fluoranthene	ND		0.21	0.038	ug/L		07/18/23 10:59	07/20/23 11:29	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		07/18/23 10:59	07/20/23 11:29	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		07/18/23 10:59	07/20/23 11:29	1
Chrysene	ND		0.21	0.034	ug/L		07/18/23 10:59	07/20/23 11:29	1
Dibenz(a,h)anthracene	ND		0.21	0.050	ug/L		07/18/23 10:59	07/20/23 11:29	1
Fluoranthene	**0.11**	**J**	0.21	0.035	ug/L		07/18/23 10:59	07/20/23 11:29	1
Fluorene	**0.59**		0.21	0.093	ug/L		07/18/23 10:59	07/20/23 11:29	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.035	ug/L		07/18/23 10:59	07/20/23 11:29	1
Phenanthrene	**1.5**		0.21	0.094	ug/L		07/18/23 10:59	07/20/23 11:29	1
Pyrene	**0.070**	**J**	0.21	0.041	ug/L		07/18/23 10:59	07/20/23 11:29	1
1-Methylnaphthalene	**14**		0.21	0.083	ug/L		07/18/23 10:59	07/20/23 11:29	1
2-Methylnaphthalene	**1.6**		0.21	0.069	ug/L		07/18/23 10:59	07/20/23 11:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*89*		*18 - 147*	*07/18/23 10:59*	*07/20/23 11:29*	*1*
2-Fluorobiphenyl	*67*		*15 - 128*	*07/18/23 10:59*	*07/20/23 11:29*	*1*

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

Job ID: 400-240426-1

Client Sample ID: ROST4PZC-ROX-071123
Date Collected: 07/11/23 13:05
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-13
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	07/18/23 10:59	07/20/23 11:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	4.0	ug/L		07/18/23 10:59	07/19/23 22:35	1
Benzenethiol	ND	*- *1	10	1.8	ug/L		07/18/23 10:59	07/19/23 22:35	1
Benzoic acid	ND		31	7.6	ug/L		07/18/23 10:59	07/19/23 22:35	1
Benzyl alcohol	ND		10	2.1	ug/L		07/18/23 10:59	07/19/23 22:35	1
Bis(2-chloroethoxy)methane	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 22:35	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		07/18/23 10:59	07/19/23 22:35	1
bis (2-chloroisopropyl) ether	ND		10	0.17	ug/L		07/18/23 10:59	07/19/23 22:35	1
Bis(2-ethylhexyl) phthalate	ND		10	5.2	ug/L		07/18/23 10:59	07/19/23 22:35	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/18/23 10:59	07/19/23 22:35	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		07/18/23 10:59	07/19/23 22:35	1
4-Chloroaniline	ND		10	3.5	ug/L		07/18/23 10:59	07/19/23 22:35	1
4-Chloro-3-methylphenol	ND		10	4.0	ug/L		07/18/23 10:59	07/19/23 22:35	1
2-Chloronaphthalene	ND		10	0.15	ug/L		07/18/23 10:59	07/19/23 22:35	1
2-Chlorophenol	ND		10	2.3	ug/L		07/18/23 10:59	07/19/23 22:35	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/18/23 10:59	07/19/23 22:35	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 22:35	1
Dibenzofuran	**0.60**	**J**	10	0.18	ug/L		07/18/23 10:59	07/19/23 22:35	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/18/23 10:59	07/19/23 22:35	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/18/23 10:59	07/19/23 22:35	1
Diethyl phthalate	ND		10	0.25	ug/L		07/18/23 10:59	07/19/23 22:35	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/18/23 10:59	07/19/23 22:35	1
Dimethyl phthalate	ND		10	0.18	ug/L		07/18/23 10:59	07/19/23 22:35	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/18/23 10:59	07/19/23 22:35	1
4,6-Dinitro-ortho-cresol	ND		10	1.7	ug/L		07/18/23 10:59	07/19/23 22:35	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/18/23 10:59	07/19/23 22:35	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/18/23 10:59	07/19/23 22:35	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/18/23 10:59	07/19/23 22:35	1
Di-n-octyl phthalate	ND		10	0.18	ug/L		07/18/23 10:59	07/19/23 22:35	1
1,4-Dioxane	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 22:35	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/18/23 10:59	07/19/23 22:35	1
Hexachlorobenzene	ND		10	0.18	ug/L		07/18/23 10:59	07/19/23 22:35	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/18/23 10:59	07/19/23 22:35	1
Hexachloroethane	ND		10	4.4	ug/L		07/18/23 10:59	07/19/23 22:35	1
Indene	ND	*+	10	1.0	ug/L		07/18/23 10:59	07/19/23 22:35	1
Isophorone	ND		10	0.15	ug/L		07/18/23 10:59	07/19/23 22:35	1
2-Methylphenol	ND		10	1.9	ug/L		07/18/23 10:59	07/19/23 22:35	1
3 & 4 Methylphenol	ND		21	0.41	ug/L		07/18/23 10:59	07/19/23 22:35	1
2-Nitroaniline	ND		10	2.3	ug/L		07/18/23 10:59	07/19/23 22:35	1
3-Nitroaniline	ND		10	1.9	ug/L		07/18/23 10:59	07/19/23 22:35	1
4-Nitroaniline	ND		10	1.6	ug/L		07/18/23 10:59	07/19/23 22:35	1
Nitrobenzene	ND		10	0.14	ug/L		07/18/23 10:59	07/19/23 22:35	1
2-Nitrophenol	ND		10	5.4	ug/L		07/18/23 10:59	07/19/23 22:35	1
4-Nitrophenol	ND		10	2.2	ug/L		07/18/23 10:59	07/19/23 22:35	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/18/23 10:59	07/19/23 22:35	1

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

Job ID: 400-240426-1

Client Sample ID: ROST4PZC-ROX-071123
Date Collected: 07/11/23 13:05
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-13
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		10	3.4	ug/L		07/18/23 10:59	07/19/23 22:35	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		07/18/23 10:59	07/19/23 22:35	1
Pentachlorophenol	ND		21	1.5	ug/L		07/18/23 10:59	07/19/23 22:35	1
Phenol	ND		10	2.7	ug/L		07/18/23 10:59	07/19/23 22:35	1
Pyridine	ND		10	3.3	ug/L		07/18/23 10:59	07/19/23 22:35	1
Quinoline	ND		10	4.7	ug/L		07/18/23 10:59	07/19/23 22:35	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/18/23 10:59	07/19/23 22:35	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/18/23 10:59	07/19/23 22:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*46 - 124*	*07/18/23 10:59*	*07/19/23 22:35*	*1*
2-Fluorophenol	*6*	*S1-*	*13 - 113*	*07/18/23 10:59*	*07/19/23 22:35*	*1*
Nitrobenzene-d5	*57*		*36 - 126*	*07/18/23 10:59*	*07/19/23 22:35*	*1*
Phenol-d5	*30*		*17 - 127*	*07/18/23 10:59*	*07/19/23 22:35*	*1*
Terphenyl-d14	*80*		*44 - 149*	*07/18/23 10:59*	*07/19/23 22:35*	*1*
2,4,6-Tribromophenol	*74*		*26 - 150*	*07/18/23 10:59*	*07/19/23 22:35*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.028	0.016	ug/L		07/18/23 08:10	07/21/23 12:25	1
1,2-D bromoethane	ND		0.019	0.014	ug/L		07/18/23 08:10	07/21/23 12:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*51 - 149*	*07/18/23 08:10*	*07/21/23 12:25*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
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/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery 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
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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: 400-240426-1

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)
400-240426-1	TB-ROX-071123-8260-A	103	102	101
400-240426-3	MW16-ROX-071123	102	103	103
400-240426-4	MW6C-ROX-071123	101	100	103
400-240426-4 MS	MW6C-ROX-071123	98	101	102
400-240426-4 MSD	MW6C-ROX-071123	100	101	103
400-240426-5	MW6A-ROX-071123	103	104	100
400-240426-6	MW6B-ROX-071123	101	104	102
400-240426-7	MW6B-ROX-071123-DUP	103	103	102
400-240426-8	TB-ROX-071123-8260-B	102	101	101
400-240426-8 - RA	TB-ROX-071123-8260-B	98	115	101
400-240426-10	P93A-ROX-071123-EB	104	101	103
400-240426-11	P93A-ROX-071123	103	105	103
400-240426-11 MS	P93A-ROX-071123	99	102	101
400-240426-11 MSD	P93A-ROX-071123	100	101	102
400-240426-12	P93D-ROX-071123	104	98	105
400-240426-12 MS	P93D-ROX-071123	101	96	101
400-240426-12 MSD	P93D-ROX-071123	102	97	101
400-240426-13	ROST4PZC-ROX-071123	104	96	108
LCS 400-634255/1002	Lab Control Sample	101	100	100
LCS 400-634255/1003	Lab Control Sample	104	104	111
LCS 400-634255/1006	Lab Control Sample	101	107	104
LCS 400-634257/1002	Lab Control Sample	98	100	101
LCS 400-634257/1005	Lab Control Sample	101	99	105
LCS 400-634409/1002	Lab Control Sample	96	100	103
LCS 400-634580/1002	Lab Control Sample	100	106	102
MB 400-634255/5	Method Blank	106	101	108
MB 400-634257/4	Method Blank	100	101	101
MB 400-634409/4	Method Blank	102	104	103
MB 400-634580/5	Method Blank	98	114	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)
400-240426-3	MW16-ROX-071123	67	22	57	52	84	72
400-240426-4	MW6C-ROX-071123	74	8 S1-	60	32	86	77
400-240426-4 MS	MW6C-ROX-071123	73	17	71	52	86	94
400-240426-4 MSD	MW6C-ROX-071123	67	32	61	59	75	93
400-240426-5	MW6A-ROX-071123	72	25	59	51	77	88
400-240426-6	MW6B-ROX-071123	69	6 S1-	57	28	83	66
400-240426-7	MW6B-ROX-071123-DUP	69	3 S1-	56	22	83	65
400-240426-10	P93A-ROX-071123-EB	65	10 S1-	56	32	83	65
400-240426-11	P93A-ROX-071123	67	30	56	53	82	69

Surrogate Summary

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

Job ID: 400-240426-1

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)
400-240426-12	P93D-ROX-071123	76	9 S1-	63	37	92	76
400-240426-12 MS	P93D-ROX-071123	60	27	57	47	69	78
400-240426-12 MSD	P93D-ROX-071123	73	29	67	60	81	97
400-240426-13	ROST4PZC-ROX-071123	67	6 S1-	57	30	80	74
LCS 400-633574/16-A	Lab Control Sample	73	33	60	56	85	74
LCS 400-633574/2-A	Lab Control Sample	73	42	64	63	83	95
LCSD 400-633574/17-A	Lab Control Sample Dup	71	43	57	62	91	79
MB 400-633574/1-A	Method Blank	75	16	64	50	87	73

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)
400-240426-3	MW16-ROX-071123	88	80	60
400-240426-4	MW6C-ROX-071123	87	90	68
400-240426-4 MS	MW6C-ROX-071123	83	85	40
400-240426-4 MSD	MW6C-ROX-071123	75	75	39
400-240426-5	MW6A-ROX-071123	78	75	66
400-240426-5 - RE	MW6A-ROX-071123	83	79	90
400-240426-6	MW6B-ROX-071123	87	84	64
400-240426-6 - RE	MW6B-ROX-071123	90	80	76
400-240426-7	MW6B-ROX-071123-DUP	80	77	62
400-240426-10	P93A-ROX-071123-EB	84	76	59
400-240426-11	P93A-ROX-071123	93	87	63
400-240426-12	P93D-ROX-071123	96	86	70
400-240426-12 MS	P93D-ROX-071123	64	68	36
400-240426-12 MSD	P93D-ROX-071123	74	81	40
400-240426-13	ROST4PZC-ROX-071123	89	67	65
LCS 400-633574/18-A	Lab Control Sample	81	81	66
LCS 400-633899/6-A	Lab Control Sample	134	134 S1+	107
LCSD 400-633574/19-A	Lab Control Sample Dup	85	86	67
LCSD 400-633899/7-A	Lab Control Sample Dup	140	141 S1+	112
MB 400-633574/1-A	Method Blank	90	87	69
MB 400-633899/1-A	Method Blank	68	67	50

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: 400-240426-1

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)								
400-240426-10	P93A-ROX-071123-EB	74								
400-240426-11	P93A-ROX-071123	97 p								
LCS 400-633461/2-A	Lab Control Sample	85								
LCSD 400-633461/3-A	Lab Control Sample Dup	92								
MB 400-633461/1-A	Method Blank	65								

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)								
Lab Sample ID	Client Sample ID	BFB1 (51-149)								
400-240426-2	TB-ROX-071123-8011-A	106								
400-240426-3	MW16-ROX-071123	89								
400-240426-4	MW6C-ROX-071123	98								
400-240426-4 MS	MW6C-ROX-071123	98								
400-240426-4 MSD	MW6C-ROX-071123	97								
400-240426-5	MW6A-ROX-071123	99								
400-240426-6	MW6B-ROX-071123	85								
400-240426-7	MW6B-ROX-071123-DUP	112								
400-240426-9	TB-ROX-071123-8011-B	114								
400-240426-12	P93D-ROX-071123	116								
400-240426-12 MS	P93D-ROX-071123	110								
400-240426-12 MSD	P93D-ROX-071123	99								
400-240426-13	ROST4PZC-ROX-071123	102								
LCS 400-633516/2-A	Lab Control Sample	86								
LCSD 400-633516/3-A	Lab Control Sample Dup	87								
MB 400-633516/1-A	Method Blank	92								

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-240426-1

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 QUARTERLY GW

Job ID: 400-240426-1

Client Sample ID: TB-ROX-071123-8260-A
Lab Sample ID: 400-240426-1
Date Collected: 07/11/23 12:00
Matrix: Water
Date Received: 07/13/23 08:19

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	634257	07/24/23 16:24	BPO	EET PEN

Client Sample ID: TB-ROX-071123-8011-A
Lab Sample ID: 400-240426-2
Date Collected: 07/11/23 12:00
Matrix: Water
Date Received: 07/13/23 08:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			37.2 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			633678	07/18/23 22:50	DS	EET PEN

Client Sample ID: MW16-ROX-071123
Lab Sample ID: 400-240426-3
Date Collected: 07/11/23 09:25
Matrix: Water
Date Received: 07/13/23 08:19

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	634409	07/25/23 12:08	BPO	EET PEN
Total/NA	Prep	3520C			252.4 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 19:34	S1B	EET PEN
Total/NA	Prep	3520C			252.4 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633883	07/20/23 10:26	KJA	EET PEN
Total/NA	Prep	8011			36.5 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			633678	07/18/23 23:11	DS	EET PEN

Client Sample ID: MW6C-ROX-071123
Lab Sample ID: 400-240426-4
Date Collected: 07/11/23 10:55
Matrix: Water
Date Received: 07/13/23 08:19

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	634257	07/24/23 11:54	BPO	EET PEN
Total/NA	Prep	3520C			245.8 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 19:57	S1B	EET PEN
Total/NA	Prep	3520C			245.8 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633763	07/20/23 01:41	KJA	EET PEN
Total/NA	Prep	8011			36.8 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			633678	07/18/23 23:32	DS	EET PEN

Client Sample ID: MW6A-ROX-071123
Lab Sample ID: 400-240426-5
Date Collected: 07/11/23 12:00
Matrix: Water
Date Received: 07/13/23 08:19

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	634409	07/25/23 12:35	BPO	EET PEN
Total/NA	Prep	3520C			250.8 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 20:20	S1B	EET PEN

Client Sample ID: MW6A-ROX-071123

Lab Sample ID: 400-240426-5

Date Collected: 07/11/23 12:00

Matrix: Water

Date Received: 07/13/23 08:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250.8 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633763	07/20/23 02:03	KJA	EET PEN
Total/NA	Prep	3520C	RE		247.4 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RE	1	0.4 mL	0.4 mL	634436	07/25/23 17:33	S1B	EET PEN
Total/NA	Prep	8011			36.9 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			633678	07/19/23 00:36	DS	EET PEN

Client Sample ID: MW6B-ROX-071123

Lab Sample ID: 400-240426-6

Date Collected: 07/11/23 13:20

Matrix: Water

Date Received: 07/13/23 08:19

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	634409	07/25/23 13:02	BPO	EET PEN
Total/NA	Prep	3520C			242 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 20:42	S1B	EET PEN
Total/NA	Prep	3520C			242 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633763	07/20/23 02:24	KJA	EET PEN
Total/NA	Prep	3520C	RE		233 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RE	1	0.4 mL	0.4 mL	634436	07/25/23 17:54	S1B	EET PEN
Total/NA	Prep	8011			35.7 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			633678	07/19/23 00:57	DS	EET PEN

Client Sample ID: MW6B-ROX-071123-DUP

Lab Sample ID: 400-240426-7

Date Collected: 07/11/23 13:20

Matrix: Water

Date Received: 07/13/23 08:19

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	634409	07/25/23 13:29	BPO	EET PEN
Total/NA	Prep	3520C			242.2 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 21:05	S1B	EET PEN
Total/NA	Prep	3520C			242.2 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633763	07/20/23 02:45	KJA	EET PEN
Total/NA	Prep	8011			36.7 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			634065	07/21/23 10:17	PG	EET PEN

Client Sample ID: TB-ROX-071123-8260-B

Lab Sample ID: 400-240426-8

Date Collected: 07/11/23 12:00

Matrix: Water

Date Received: 07/13/23 08:19

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	634580	07/26/23 18:05	CH	EET PEN
Total/NA	Analysis	8260D		1	5 mL	5 mL	634409	07/25/23 16:11	BPO	EET PEN

Lab Chronicle

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

Job ID: 400-240426-1

Client Sample ID: TB-ROX-071123-8011-B

Lab Sample ID: 400-240426-9

Date Collected: 07/11/23 12:00
Date Received: 07/13/23 08:19

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			36.7 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			634065	07/21/23 10:38	PG	EET PEN

Client Sample ID: P93A-ROX-071123-EB

Lab Sample ID: 400-240426-10

Date Collected: 07/11/23 08:35
Date Received: 07/13/23 08:19

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	634409	07/25/23 16:38	BPO	EET PEN
Total/NA	Prep	3520C			247.2 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 21:28	S1B	EET PEN
Total/NA	Prep	3520C			247.2 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633883	07/20/23 10:47	KJA	EET PEN
Total/NA	Prep	8011			36.4 mL	35 mL	633461	07/17/23 14:59	PG	EET PEN
Total/NA	Analysis	8011		1			633483	07/18/23 08:20	DS	EET PEN

Client Sample ID: P93A-ROX-071123

Lab Sample ID: 400-240426-11

Date Collected: 07/11/23 10:15
Date Received: 07/13/23 08:19

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	634409	07/25/23 13:56	BPO	EET PEN
Total/NA	Prep	3520C			239 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 21:50	S1B	EET PEN
Total/NA	Prep	3520C			239 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633883	07/20/23 11:08	KJA	EET PEN
Total/NA	Prep	8011			36.9 mL	35 mL	633461	07/17/23 14:59	PG	EET PEN
Total/NA	Analysis	8011		1			633483	07/18/23 08:41	DS	EET PEN

Client Sample ID: P93D-ROX-071123

Lab Sample ID: 400-240426-12

Date Collected: 07/11/23 11:15
Date Received: 07/13/23 08:19

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	634255	07/24/23 12:08	BPO	EET PEN
Total/NA	Prep	3520C			247.6 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 22:13	S1B	EET PEN
Total/NA	Prep	3520C			247.6 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633763	07/20/23 01:20	KJA	EET PEN
Total/NA	Prep	8011			37 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			634065	07/21/23 11:21	PG	EET PEN

Lab Chronicle

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

Job ID: 400-240426-1

Client Sample ID: ROST4PZC-ROX-071123

Lab Sample ID: 400-240426-13

Date Collected: 07/11/23 13:05

Matrix: Water

Date Received: 07/13/23 08:19

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	634255	07/24/23 14:13	BPO	EET PEN
Total/NA	Prep	3520C			240.4 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 22:35	S1B	EET PEN
Total/NA	Prep	3520C			240.4 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633883	07/20/23 11:29	KJA	EET PEN
Total/NA	Prep	8011			36.9 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			634065	07/21/23 12:25	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-633461/1-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	633461	07/17/23 14:59	PG	EET PEN
Total/NA	Analysis	8011		1			633483	07/18/23 00:08	DS	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-633516/1-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	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			633678	07/18/23 21:46	DS	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-633574/1-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	633574	07/18/23 10:58	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 16:32	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	633574	07/18/23 10:58	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633763	07/19/23 22:53	KJA	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-633899/1-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 19:54	KJA	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-634255/5
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	634255	07/24/23 11:18	BPO	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-634257/4
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	634257	07/24/23 11:00	BPO	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-634409/4
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	634409	07/25/23 10:20	BPO	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-634580/5
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	634580	07/26/23 17:19	CH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-633461/2-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	633461	07/17/23 14:59	PG	EET PEN
Total/NA	Analysis	8011		1			633483	07/18/23 00:30	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-633516/2-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	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			633678	07/18/23 22:07	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-633574/16-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	3520C			250 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 16:55	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-633574/18-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633763	07/19/23 23:14	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-633574/2-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	633574	07/18/23 10:58	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 17:41	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-633899/6-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 20:15	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634255/1002
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	634255	07/24/23 09:48	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634255/1003
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	634255	07/24/23 10:13	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634255/1006
Date Collected: N/A
Matrix: Water
Date Received: 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	634255	07/24/23 11:43	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634257/1002
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	634257	07/24/23 09:49	BPO	EET PEN

Lab Chronicle

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

Job ID: 400-240426-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634257/1005
Date Collected: N/A
Matrix: Water
Date Received: 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	634257	07/24/23 11:27	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634409/1002
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	634409	07/25/23 09:09	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634580/1002
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	634580	07/26/23 16:10	CH	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633461/3-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	633461	07/17/23 14:59	PG	EET PEN
Total/NA	Analysis	8011		1			633483	07/18/23 00:51	DS	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633516/3-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	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			633678	07/18/23 22:28	DS	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633574/17-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 17:18	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633574/19-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	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633763	07/19/23 23:35	KJA	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633899/7-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	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 20:37	KJA	EET PEN

Client Sample ID: MW6C-ROX-071123
Lab Sample ID: 400-240426-4 MS
Date Collected: 07/11/23 10:55
Matrix: Water
Date Received: 07/13/23 08:19

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	634257	07/24/23 12:48	BPO	EET PEN
Total/NA	Prep	3520C			253.4 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 18:03	S1B	EET PEN
Total/NA	Prep	3520C			253.4 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E SIM		50	0.4 mL	0.4 mL	633763	07/19/23 23:56	KJA	EET PEN
Total/NA	Prep	8011			37.6 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			633678	07/18/23 23:53	DS	EET PEN

Client Sample ID: MW6C-ROX-071123
Lab Sample ID: 400-240426-4 MSD
Date Collected: 07/11/23 10:55
Matrix: Water
Date Received: 07/13/23 08:19

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	634257	07/24/23 13:15	BPO	EET PEN
Total/NA	Prep	3520C			246.4 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 18:26	S1B	EET PEN
Total/NA	Prep	3520C			246.4 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E SIM		50	0.4 mL	0.4 mL	633763	07/20/23 00:17	KJA	EET PEN
Total/NA	Prep	8011			35.9 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			633678	07/19/23 00:15	DS	EET PEN

Client Sample ID: P93A-ROX-071123
Lab Sample ID: 400-240426-11 MS
Date Collected: 07/11/23 10:15
Matrix: Water
Date Received: 07/13/23 08:19

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	634409	07/25/23 17:05	BPO	EET PEN

Lab Chronicle

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

Job ID: 400-240426-1

Client Sample ID: P93A-ROX-071123
Date Collected: 07/11/23 10:15
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-11 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	634409	07/25/23 17:32	BPO	EET PEN

Client Sample ID: P93D-ROX-071123
Date Collected: 07/11/23 11:15
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-12 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	634255	07/24/23 12:58	BPO	EET PEN
Total/NA	Prep	3520C			241.8 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 18:49	S1B	EET PEN
Total/NA	Prep	3520C			241.8 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E SIM		50	0.4 mL	0.4 mL	633763	07/20/23 00:38	KJA	EET PEN
Total/NA	Prep	8011			37 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			634065	07/21/23 11:42	PG	EET PEN

Client Sample ID: P93D-ROX-071123
Date Collected: 07/11/23 11:15
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240426-12 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	634255	07/24/23 13:23	BPO	EET PEN
Total/NA	Prep	3520C			246.6 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 19:12	S1B	EET PEN
Total/NA	Prep	3520C			246.6 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E SIM		50	0.4 mL	0.4 mL	633763	07/20/23 00:59	KJA	EET PEN
Total/NA	Prep	8011			36.4 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			634065	07/21/23 12:04	PG	EET PEN

Laboratory References:
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 634255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240426-12	P93D-ROX-071123	Total/NA	Water	8260D	
400-240426-13	ROST4PZC-ROX-071123	Total/NA	Water	8260D	
MB 400-634255/5	Method Blank	Total/NA	Water	8260D	
LCS 400-634255/1002	Lab Control Sample	Total/NA	Water	8260D	
LCS 400-634255/1003	Lab Control Sample	Total/NA	Water	8260D	
LCS 400-634255/1006	Lab Control Sample	Total/NA	Water	8260D	
400-240426-12 MS	P93D-ROX-071123	Total/NA	Water	8260D	
400-240426-12 MSD	P93D-ROX-071123	Total/NA	Water	8260D	

Analysis Batch: 634257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240426-1	TB-ROX-071123-8260-A	Total/NA	Water	8260D	
400-240426-4	MW6C-ROX-071123	Total/NA	Water	8260D	
MB 400-634257/4	Method Blank	Total/NA	Water	8260D	
LCS 400-634257/1002	Lab Control Sample	Total/NA	Water	8260D	
LCS 400-634257/1005	Lab Control Sample	Total/NA	Water	8260D	
400-240426-4 MS	MW6C-ROX-071123	Total/NA	Water	8260D	
400-240426-4 MSD	MW6C-ROX-071123	Total/NA	Water	8260D	

Analysis Batch: 634409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240426-3	MW16-ROX-071123	Total/NA	Water	8260D	
400-240426-5	MW6A-ROX-071123	Total/NA	Water	8260D	
400-240426-6	MW6B-ROX-071123	Total/NA	Water	8260D	
400-240426-7	MW6B-ROX-071123-DUP	Total/NA	Water	8260D	
400-240426-8	TB-ROX-071123-8260-B	Total/NA	Water	8260D	
400-240426-10	P93A-ROX-071123-EB	Total/NA	Water	8260D	
400-240426-11	P93A-ROX-071123	Total/NA	Water	8260D	
MB 400-634409/4	Method Blank	Total/NA	Water	8260D	
LCS 400-634409/1002	Lab Control Sample	Total/NA	Water	8260D	
400-240426-11 MS	P93A-ROX-071123	Total/NA	Water	8260D	
400-240426-11 MSD	P93A-ROX-071123	Total/NA	Water	8260D	

Analysis Batch: 634580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240426-8 - RA	TB-ROX-071123-8260-B	Total/NA	Water	8260D	
MB 400-634580/5	Method Blank	Total/NA	Water	8260D	
LCS 400-634580/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 633574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240426-3	MW16-ROX-071123	Total/NA	Water	3520C	
400-240426-4	MW6C-ROX-071123	Total/NA	Water	3520C	
400-240426-5	MW6A-ROX-071123	Total/NA	Water	3520C	
400-240426-6	MW6B-ROX-071123	Total/NA	Water	3520C	
400-240426-7	MW6B-ROX-071123-DUP	Total/NA	Water	3520C	
400-240426-10	P93A-ROX-071123-EB	Total/NA	Water	3520C	
400-240426-11	P93A-ROX-071123	Total/NA	Water	3520C	
400-240426-12	P93D-ROX-071123	Total/NA	Water	3520C	

GC/MS Semi VOA (Continued)

Prep Batch: 633574 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240426-13	ROST4PZC-ROX-071123	Total/NA	Water	3520C	
MB 400-633574/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-633574/16-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-633574/18-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-633574/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-633574/17-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-633574/19-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-240426-4 MS	MW6C-ROX-071123	Total/NA	Water	3520C	
400-240426-4 MSD	MW6C-ROX-071123	Total/NA	Water	3520C	
400-240426-12 MS	P93D-ROX-071123	Total/NA	Water	3520C	
400-240426-12 MSD	P93D-ROX-071123	Total/NA	Water	3520C	

Analysis Batch: 633763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240426-4	MW6C-ROX-071123	Total/NA	Water	8270E SIM	633574
400-240426-5	MW6A-ROX-071123	Total/NA	Water	8270E SIM	633574
400-240426-6	MW6B-ROX-071123	Total/NA	Water	8270E SIM	633574
400-240426-7	MW6B-ROX-071123-DUP	Total/NA	Water	8270E SIM	633574
400-240426-12	P93D-ROX-071123	Total/NA	Water	8270E SIM	633574
MB 400-633574/1-A	Method Blank	Total/NA	Water	8270E SIM	633574
LCS 400-633574/18-A	Lab Control Sample	Total/NA	Water	8270E SIM	633574
LCSD 400-633574/19-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	633574
400-240426-4 MS	MW6C-ROX-071123	Total/NA	Water	8270E SIM	633574
400-240426-4 MSD	MW6C-ROX-071123	Total/NA	Water	8270E SIM	633574
400-240426-12 MS	P93D-ROX-071123	Total/NA	Water	8270E SIM	633574
400-240426-12 MSD	P93D-ROX-071123	Total/NA	Water	8270E SIM	633574

Analysis Batch: 633800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240426-3	MW16-ROX-071123	Total/NA	Water	8270E	633574
400-240426-4	MW6C-ROX-071123	Total/NA	Water	8270E	633574
400-240426-5	MW6A-ROX-071123	Total/NA	Water	8270E	633574
400-240426-6	MW6B-ROX-071123	Total/NA	Water	8270E	633574
400-240426-7	MW6B-ROX-071123-DUP	Total/NA	Water	8270E	633574
400-240426-10	P93A-ROX-071123-EB	Total/NA	Water	8270E	633574
400-240426-11	P93A-ROX-071123	Total/NA	Water	8270E	633574
400-240426-12	P93D-ROX-071123	Total/NA	Water	8270E	633574
400-240426-13	ROST4PZC-ROX-071123	Total/NA	Water	8270E	633574
MB 400-633574/1-A	Method Blank	Total/NA	Water	8270E	633574
LCS 400-633574/16-A	Lab Control Sample	Total/NA	Water	8270E	633574
LCS 400-633574/2-A	Lab Control Sample	Total/NA	Water	8270E	633574
LCSD 400-633574/17-A	Lab Control Sample Dup	Total/NA	Water	8270E	633574
400-240426-4 MS	MW6C-ROX-071123	Total/NA	Water	8270E	633574
400-240426-4 MSD	MW6C-ROX-071123	Total/NA	Water	8270E	633574
400-240426-12 MS	P93D-ROX-071123	Total/NA	Water	8270E	633574
400-240426-12 MSD	P93D-ROX-071123	Total/NA	Water	8270E	633574

Analysis Batch: 633883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240426-3	MW16-ROX-071123	Total/NA	Water	8270E SIM	633574
400-240426-10	P93A-ROX-071123-EB	Total/NA	Water	8270E SIM	633574

GC/MS Semi VOA (Continued)

Analysis Batch: 633883 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240426-11	P93A-ROX-071123	Total/NA	Water	8270E SIM	633574
400-240426-13	ROST4PZC-ROX-071123	Total/NA	Water	8270E SIM	633574

Prep Batch: 633899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240426-5 - RE	MW6A-ROX-071123	Total/NA	Water	3520C	
400-240426-6 - RE	MW6B-ROX-071123	Total/NA	Water	3520C	
MB 400-633899/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-633899/6-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-633899/7-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 634089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-633899/1-A	Method Blank	Total/NA	Water	8270E SIM	633899
LCS 400-633899/6-A	Lab Control Sample	Total/NA	Water	8270E SIM	633899
LCSD 400-633899/7-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	633899

Analysis Batch: 634436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240426-5 - RE	MW6A-ROX-071123	Total/NA	Water	8270E SIM	633899
400-240426-6 - RE	MW6B-ROX-071123	Total/NA	Water	8270E SIM	633899

GC Semi VOA

Prep Batch: 633461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240426-10	P93A-ROX-071123-EB	Total/NA	Water	8011	
400-240426-11	P93A-ROX-071123	Total/NA	Water	8011	
MB 400-633461/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-633461/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-633461/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 633483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240426-10	P93A-ROX-071123-EB	Total/NA	Water	8011	633461
400-240426-11	P93A-ROX-071123	Total/NA	Water	8011	633461
MB 400-633461/1-A	Method Blank	Total/NA	Water	8011	633461
LCS 400-633461/2-A	Lab Control Sample	Total/NA	Water	8011	633461
LCSD 400-633461/3-A	Lab Control Sample Dup	Total/NA	Water	8011	633461

Prep Batch: 633516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240426-2	TB-ROX-071123-8011-A	Total/NA	Water	8011	
400-240426-3	MW16-ROX-071123	Total/NA	Water	8011	
400-240426-4	MW6C-ROX-071123	Total/NA	Water	8011	
400-240426-5	MW6A-ROX-071123	Total/NA	Water	8011	
400-240426-6	MW6B-ROX-071123	Total/NA	Water	8011	
400-240426-7	MW6B-ROX-071123-DUP	Total/NA	Water	8011	
400-240426-9	TB-ROX-071123-8011-B	Total/NA	Water	8011	
400-240426-12	P93D-ROX-071123	Total/NA	Water	8011	
400-240426-13	ROST4PZC-ROX-071123	Total/NA	Water	8011	

GC Semi VOA (Continued)

Prep Batch: 633516 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-633516/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-633516/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-633516/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-240426-4 MS	MW6C-ROX-071123	Total/NA	Water	8011	
400-240426-4 MSD	MW6C-ROX-071123	Total/NA	Water	8011	
400-240426-12 MS	P93D-ROX-071123	Total/NA	Water	8011	
400-240426-12 MSD	P93D-ROX-071123	Total/NA	Water	8011	

Analysis Batch: 633678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240426-2	TB-ROX-071123-8011-A	Total/NA	Water	8011	633516
400-240426-3	MW16-ROX-071123	Total/NA	Water	8011	633516
400-240426-4	MW6C-ROX-071123	Total/NA	Water	8011	633516
400-240426-5	MW6A-ROX-071123	Total/NA	Water	8011	633516
400-240426-6	MW6B-ROX-071123	Total/NA	Water	8011	633516
MB 400-633516/1-A	Method Blank	Total/NA	Water	8011	633516
LCS 400-633516/2-A	Lab Control Sample	Total/NA	Water	8011	633516
LCSD 400-633516/3-A	Lab Control Sample Dup	Total/NA	Water	8011	633516
400-240426-4 MS	MW6C-ROX-071123	Total/NA	Water	8011	633516
400-240426-4 MSD	MW6C-ROX-071123	Total/NA	Water	8011	633516

Analysis Batch: 634065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240426-7	MW6B-ROX-071123-DUP	Total/NA	Water	8011	633516
400-240426-9	TB-ROX-071123-8011-B	Total/NA	Water	8011	633516
400-240426-12	P93D-ROX-071123	Total/NA	Water	8011	633516
400-240426-13	ROST4PZC-ROX-071123	Total/NA	Water	8011	633516
400-240426-12 MS	P93D-ROX-071123	Total/NA	Water	8011	633516
400-240426-12 MSD	P93D-ROX-071123	Total/NA	Water	8011	633516

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

Lab Sample ID: MB 400-634255/5
Matrix: Water
Analysis Batch: 634255

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/24/23 11:18	1
Acrolein	ND		20	3.3	ug/L			07/24/23 11:18	1
Acrylonitrile	ND		10	2.8	ug/L			07/24/23 11:18	1
Benzene	ND		1.0	0.50	ug/L			07/24/23 11:18	1
Bromobenzene	ND		1.0	0.54	ug/L			07/24/23 11:18	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/24/23 11:18	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/24/23 11:18	1
Bromoform	ND		5.0	0.25	ug/L			07/24/23 11:18	1
Bromomethane	ND		1.0	0.98	ug/L			07/24/23 11:18	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/24/23 11:18	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/24/23 11:18	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/24/23 11:18	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/24/23 11:18	1
Chloroethane	ND		1.0	0.76	ug/L			07/24/23 11:18	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/24/23 11:18	1
Chloroform	ND		1.0	0.90	ug/L			07/24/23 11:18	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/24/23 11:18	1
Chloromethane	ND		1.0	0.90	ug/L			07/24/23 11:18	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/24/23 11:18	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/24/23 11:18	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/24/23 11:18	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/24/23 11:18	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/24/23 11:18	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/24/23 11:18	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/24/23 11:18	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/24/23 11:18	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/24/23 11:18	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/24/23 11:18	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/24/23 11:18	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/24/23 11:18	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/24/23 11:18	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/24/23 11:18	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/24/23 11:18	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/24/23 11:18	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/24/23 11:18	1
2-Hexanone	ND		25	1.4	ug/L			07/24/23 11:18	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/24/23 11:18	1
Methylene bromide	ND		5.0	0.22	ug/L			07/24/23 11:18	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/24/23 11:18	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/24/23 11:18	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/24/23 11:18	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/24/23 11:18	1
Naphthalene	ND		5.0	3.0	ug/L			07/24/23 11:18	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/24/23 11:18	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/24/23 11:18	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/24/23 11:18	1
o-Xylene	ND		5.0	0.60	ug/L			07/24/23 11:18	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/24/23 11:18	1

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

Lab Sample ID: MB 400-634255/5
Matrix: Water
Analysis Batch: 634255

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/24/23 11:18	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/24/23 11:18	1
Styrene	ND		1.0	1.0	ug/L			07/24/23 11:18	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/24/23 11:18	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/24/23 11:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/24/23 11:18	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/24/23 11:18	1
Toluene	ND		1.0	0.90	ug/L			07/24/23 11:18	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/24/23 11:18	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/24/23 11:18	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/24/23 11:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/24/23 11:18	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/24/23 11:18	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/24/23 11:18	1
Trichloroethene	ND		1.0	0.15	ug/L			07/24/23 11:18	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/24/23 11:18	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/24/23 11:18	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/24/23 11:18	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/24/23 11:18	1
Vinyl acetate	ND		25	0.93	ug/L			07/24/23 11:18	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/24/23 11:18	1
Xylenes, Total	ND		10	1.6	ug/L			07/24/23 11:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*07/24/23 11:18*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/24/23 11:18*	*1*
Toluene-d8 (Surr)	*108*		*64 - 132*		*07/24/23 11:18*	*1*

Lab Sample ID: LCS 400-634255/1002
Matrix: Water
Analysis Batch: 634255

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acrolein	500	384		ug/L		77	38 - 160
Acrylonitrile	500	548		ug/L		110	64 - 142
Benzene	50.0	52.6		ug/L		105	70 - 130
Bromobenzene	50.0	47.1		ug/L		94	70 - 132
Bromochloromethane	50.0	44.5		ug/L		89	70 - 130
Bromodichloromethane	50.0	55.1		ug/L		110	67 - 133
Bromoform	50.0	44.2		ug/L		88	57 - 140
Bromomethane	50.0	70.6		ug/L		141	10 - 160
Carbon disulfide	50.0	45.9		ug/L		92	61 - 137
Carbon tetrachloride	50.0	51.6		ug/L		103	61 - 137
Chlorobenzene	50.0	51.9		ug/L		104	70 - 130
Chloroethane	50.0	41.9		ug/L		84	55 - 141
2-Chloroethyl vinyl ether	50.0	55.3		ug/L		111	10 - 160
Chloroform	50.0	52.7		ug/L		105	69 - 130
1-Chlorohexane	50.0	59.6		ug/L		119	69 - 130

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

Lab Sample ID: LCS 400-634255/1002
Matrix: Water
Analysis Batch: 634255

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
cis-1,2-Dichloroethene	50.0	52.4		ug/L		105	68 - 130
cis-1,3-Dichloropropene	50.0	52.6		ug/L		105	69 - 132
Dibromochloromethane	50.0	49.9		ug/L		100	67 - 135
1,2-Dichlorobenzene	50.0	53.3		ug/L		107	67 - 130
1,3-Dichlorobenzene	50.0	51.6		ug/L		103	70 - 130
1,4-Dichlorobenzene	50.0	52.8		ug/L		106	70 - 130
1,1-Dichloroethane	50.0	52.6		ug/L		105	70 - 130
1,2-Dichloroethane	50.0	56.7		ug/L		113	69 - 130
1,1-Dichloroethene	50.0	47.6		ug/L		95	63 - 134
1,2-Dichloropropane	50.0	56.3		ug/L		113	70 - 130
1,3-Dichloropropane	50.0	55.2		ug/L		110	70 - 130
2,2-Dichloropropane	50.0	47.7		ug/L		95	52 - 135
1,1-Dichloropropene	50.0	52.6		ug/L		105	70 - 130
Ethylbenzene	50.0	54.1		ug/L		108	70 - 130
Ethyl methacrylate	50.0	50.9		ug/L		102	68 - 130
Hexachlorobutadiene	50.0	55.5		ug/L		111	53 - 140
Isopropy benzene	50.0	53.4		ug/L		107	70 - 130
Methylene bromide	50.0	55.8		ug/L		112	70 - 130
Methylene Chloride	50.0	48.4		ug/L		97	66 - 135
Methyl tert-butyl ether	50.0	48.1		ug/L		96	66 - 130
m-Xylene & p-Xylene	50.0	53.6		ug/L		107	70 - 130
Naphthalene	50.0	51.9		ug/L		104	47 - 149
n-Butylbenzene	50.0	64.9		ug/L		130	67 - 130
N-Propylbenzene	50.0	54.5		ug/L		109	70 - 130
o-Chlorotoluene	50.0	56.0		ug/L		112	70 - 130
o-Xylene	50.0	52.4		ug/L		105	70 - 130
p-Chlorotoluene	50.0	56.7		ug/L		113	70 - 130
p-Isopropyltoluene	50.0	57.0		ug/L		114	65 - 130
sec-Butylbenzene	50.0	57.6		ug/L		115	66 - 130
Styrene	50.0	49.9		ug/L		100	70 - 130
tert-Butylbenzene	50.0	56.5		ug/L		113	64 - 139
1,1,1,2-Tetrachloroethane	50.0	50.2		ug/L		100	67 - 131
1,1,2,2-Tetrachloroethane	50.0	43.1		ug/L		86	70 - 131
Tetrachloroethene	50.0	63.6		ug/L		127	65 - 130
Toluene	50.0	51.0		ug/L		102	70 - 130
trans-1,2-Dichloroethene	50.0	48.1		ug/L		96	70 - 130
trans-1,3-Dichloropropene	50.0	51.4		ug/L		103	63 - 130
1,2,3-Trichlorobenzene	50.0	50.0		ug/L		100	60 - 138
1,2,4-Trichlorobenzene	50.0	50.1		ug/L		100	60 - 140
1,1,1-Trichloroethane	50.0	51.0		ug/L		102	68 - 130
1,1,2-Trichloroethane	50.0	54.5		ug/L		109	70 - 130
Trichloroethene	50.0	54.6		ug/L		109	70 - 130
Trichlorofluoromethane	50.0	34.7		ug/L		69	65 - 138
1,2,3-Trichloropropane	50.0	53.7		ug/L		107	70 - 130
1,2,4-Trimethy benzene	50.0	55.9		ug/L		112	70 - 130
1,3,5-Trimethy benzene	50.0	54.6		ug/L		109	69 - 130
Vinyl acetate	100	89.5		ug/L		90	26 - 160
Xylenes, Total	100	106		ug/L		106	70 - 130

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

Lab Sample ID: LCS 400-634255/1002
Matrix: Water
Analysis Batch: 634255

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	101		72 - 130
Dibromofluoromethane	100		75 - 126
Toluene-d8 (Surr)	100		64 - 132

Lab Sample ID: LCS 400-634255/1003
Matrix: Water
Analysis Batch: 634255

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	269		ug/L		134	43 - 160
2-Butanone (MEK)	200	216		ug/L		108	61 - 145
2-Hexanone	200	242		ug/L		121	65 - 137
4-Methyl-2-pentanone (MIBK)	200	226		ug/L		113	69 - 138

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	104		72 - 130
Dibromofluoromethane	104		75 - 126
Toluene-d8 (Surr)	111		64 - 132

Lab Sample ID: LCS 400-634255/1006
Matrix: Water
Analysis Batch: 634255

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloromethane	1.00	1.82	*+	ug/L		182	58 - 137
Dichlorodifluoromethane	1.00	1.33		ug/L		133	41 - 146
Vinyl chloride	1.00	1.57	*+	ug/L		157	59 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	101		72 - 130
Dibromofluoromethane	107		75 - 126
Toluene-d8 (Surr)	104		64 - 132

Lab Sample ID: 400-240426-12 MS
Matrix: Water
Analysis Batch: 634255

Client Sample ID: P93D-ROX-071123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND		200	251		ug/L		125	43 - 150
Acrolein	ND		500	408		ug/L		82	38 - 150
Acrylonitrile	ND		500	584		ug/L		117	62 - 149
Benzene	ND		50.0	51.4		ug/L		103	56 - 142
Bromobenzene	ND		50.0	43.3		ug/L		87	59 - 136
Bromochloromethane	ND		50.0	46.2		ug/L		92	64 - 140
Bromodichloromethane	ND		50.0	55.5		ug/L		111	59 - 143
Bromoform	ND		50.0	42.8		ug/L		86	50 - 140
Bromomethane	ND		50.0	69.6		ug/L		139	10 - 150
2-Butanone (MEK)	ND		200	219		ug/L		109	55 - 150

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

Lab Sample ID: 400-240426-12 MS
Matrix: Water
Analysis Batch: 634255

Client Sample ID: P93D-ROX-071123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon disulfide	ND		50.0	45.9		ug/L		92	48 - 150
Carbon tetrachloride	ND		50.0	48.9		ug/L		98	55 - 145
Chlorobenzene	ND		50.0	48.2		ug/L		96	64 - 130
Chloroethane	ND		50.0	38.9		ug/L		78	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	54.5		ug/L		109	60 - 141
1-Chlorohexane	ND		50.0	50.4		ug/L		101	56 - 136
Chloromethane	ND	F1 *+	50.0	16.6	F1	ug/L		33	49 - 148
cis-1,2-Dichloroethene	ND		50.0	54.3		ug/L		109	59 - 143
cis-1,3-Dichloropropene	ND		50.0	51.3		ug/L		103	57 - 140
Dibromochloromethane	ND		50.0	49.1		ug/L		98	56 - 143
1,2-Dichlorobenzene	ND		50.0	46.8		ug/L		94	52 - 137
1,3-Dichlorobenzene	ND		50.0	44.2		ug/L		88	54 - 135
1,4-Dichlorobenzene	ND		50.0	44.8		ug/L		90	53 - 135
Dichlorodifluoromethane	ND	F1	50.0	2.16	F1	ug/L		4	16 - 150
1,1-Dichloroethane	ND		50.0	55.1		ug/L		110	61 - 144
1,2-Dichloroethane	ND		50.0	57.7		ug/L		115	60 - 141
1,1-Dichloroethene	ND		50.0	48.0		ug/L		96	54 - 147
1,2-Dichloropropane	ND		50.0	57.2		ug/L		114	66 - 137
1,3-Dichloropropane	ND		50.0	55.4		ug/L		111	66 - 133
2,2-Dichloropropane	ND		50.0	48.6		ug/L		97	42 - 144
1,1-Dichloropropene	ND		50.0	49.0		ug/L		98	65 - 136
Ethylbenzene	ND		50.0	48.5		ug/L		97	58 - 131
Ethyl methacrylate	ND		50.0	51.5		ug/L		103	64 - 130
Hexachlorobutadiene	ND		50.0	40.0		ug/L		80	31 - 149
2-Hexanone	ND		200	235		ug/L		117	65 - 140
Isopropy benzene	ND		50.0	45.8		ug/L		92	56 - 133
Methylene bromide	ND		50.0	57.9		ug/L		116	63 - 138
Methylene Chloride	ND		50.0	51.3		ug/L		103	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	246		ug/L		123	63 - 146
Methyl tert-butyl ether	0.72	J	50.0	52.3		ug/L		103	59 - 137
m-Xylene & p-Xylene	ND		50.0	47.4		ug/L		95	57 - 130
Naphthalene	ND		50.0	48.7		ug/L		97	25 - 150
n-Butylbenzene	ND		50.0	48.5		ug/L		97	41 - 142
N-Propylbenzene	ND		50.0	44.1		ug/L		88	51 - 138
o-Chlorotoluene	ND		50.0	48.5		ug/L		97	53 - 134
o-Xylene	ND		50.0	47.8		ug/L		96	61 - 130
p-Chlorotoluene	ND		50.0	48.7		ug/L		97	54 - 133
p-Isopropyltoluene	ND		50.0	44.8		ug/L		90	48 - 139
sec-Butylbenzene	ND		50.0	45.4		ug/L		91	50 - 138
Styrene	ND		50.0	45.6		ug/L		91	58 - 131
tert-Butylbenzene	ND		50.0	47.1		ug/L		94	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	47.5		ug/L		95	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	47.6		ug/L		95	66 - 135
Tetrachloroethene	ND		50.0	49.6		ug/L		99	52 - 133
Toluene	ND		50.0	48.6		ug/L		97	65 - 130
trans-1,2-Dichloroethene	ND		50.0	48.0		ug/L		96	61 - 143
trans-1,3-Dichloropropene	ND		50.0	50.0		ug/L		100	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	44.1		ug/L		88	43 - 145

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

Lab Sample ID: 400-240426-12 MS
Matrix: Water
Analysis Batch: 634255

Client Sample ID: P93D-ROX-071123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	ND		50.0	42.2		ug/L		84	39 - 148
1,1,1-Trichloroethane	ND		50.0	48.8		ug/L		98	57 - 142
1,1,2-Trichloroethane	ND		50.0	55.0		ug/L		110	66 - 131
Trichloroethene	ND		50.0	50.2		ug/L		100	64 - 136
Trichlorofluoromethane	ND		50.0	32.1		ug/L		64	54 - 150
1,2,3-Trichloropropane	ND		50.0	52.5		ug/L		105	65 - 133
1,2,4-Trimethy benzene	ND		50.0	47.1		ug/L		94	50 - 139
1,3,5-Trimethy benzene	ND		50.0	45.7		ug/L		91	52 - 135
Vinyl acetate	ND		100	90.7		ug/L		91	26 - 150
Vinyl chloride	ND	F1 *+	50.0	20.6	F1	ug/L		41	46 - 150
Xylenes, Total	ND		100	95.1		ug/L		95	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*72 - 130*
Dibromofluoromethane	*96*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

Lab Sample ID: 400-240426-12 MSD
Matrix: Water
Analysis Batch: 634255

Client Sample ID: P93D-ROX-071123
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	250		ug/L		125	43 - 150	0	30
Acrolein	ND		500	418		ug/L		84	38 - 150	2	31
Acrylonitrile	ND		500	592		ug/L		118	62 - 149	1	30
Benzene	ND		50.0	49.9		ug/L		100	56 - 142	3	30
Bromobenzene	ND		50.0	40.5		ug/L		81	59 - 136	7	30
Bromochloromethane	ND		50.0	44.2		ug/L		88	64 - 140	4	30
Bromodichloromethane	ND		50.0	54.9		ug/L		110	59 - 143	1	30
Bromoform	ND		50.0	41.2		ug/L		82	50 - 140	4	30
Bromomethane	ND		50.0	65.3		ug/L		131	10 - 150	6	50
2-Butanone (MEK)	ND		200	215		ug/L		108	55 - 150	2	30
Carbon disulfide	ND		50.0	45.1		ug/L		90	48 - 150	2	30
Carbon tetrachloride	ND		50.0	48.0		ug/L		96	55 - 145	2	30
Chlorobenzene	ND		50.0	44.1		ug/L		88	64 - 130	9	30
Chloroethane	ND		50.0	43.8		ug/L		88	50 - 150	12	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	52.3		ug/L		105	60 - 141	4	30
1-Chlorohexane	ND		50.0	43.8		ug/L		88	56 - 136	14	30
Chloromethane	ND	F1 *+	50.0	19.6	F1	ug/L		39	49 - 148	17	31
cis-1,2-Dichloroethene	ND		50.0	52.4		ug/L		105	59 - 143	4	30
cis-1,3-Dichloropropene	ND		50.0	50.9		ug/L		102	57 - 140	1	30
Dibromochloromethane	ND		50.0	47.4		ug/L		95	56 - 143	4	30
1,2-Dichlorobenzene	ND		50.0	42.8		ug/L		86	52 - 137	9	30
1,3-Dichlorobenzene	ND		50.0	40.3		ug/L		81	54 - 135	9	30
1,4-Dichlorobenzene	ND		50.0	40.2		ug/L		80	53 - 135	11	30
Dichlorodifluoromethane	ND	F1	50.0	2.55	F1	ug/L		5	16 - 150	17	31
1,1-Dichloroethane	ND		50.0	55.6		ug/L		111	61 - 144	1	30

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

Lab Sample ID: 400-240426-12 MSD
Matrix: Water
Analysis Batch: 634255

Client Sample ID: P93D-ROX-071123
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-Dichloroethane	ND		50.0	56.1		ug/L		112	60 - 141	3	30
1,1-Dichloroethene	ND		50.0	49.2		ug/L		98	54 - 147	2	30
1,2-Dichloropropane	ND		50.0	56.9		ug/L		114	66 - 137	1	30
1,3-Dichloropropane	ND		50.0	53.3		ug/L		107	66 - 133	4	30
2,2-Dichloropropane	ND		50.0	47.5		ug/L		95	42 - 144	2	31
1,1-Dichloropropene	ND		50.0	48.2		ug/L		96	65 - 136	2	30
Ethylbenzene	ND		50.0	43.7		ug/L		87	58 - 131	10	30
Ethyl methacrylate	ND		50.0	51.0		ug/L		102	64 - 130	1	30
Hexachlorobutadiene	ND		50.0	31.4		ug/L		63	31 - 149	24	36
2-Hexanone	ND		200	233		ug/L		116	65 - 140	1	30
Isopropy benzene	ND		50.0	40.3		ug/L		81	56 - 133	13	30
Methylene bromide	ND		50.0	56.6		ug/L		113	63 - 138	2	30
Methylene Chloride	ND		50.0	51.6		ug/L		103	60 - 146	1	32
4-Methyl-2-pentanone (MIBK)	ND		200	248		ug/L		124	63 - 146	1	30
Methyl tert-butyl ether	0.72	J	50.0	53.6		ug/L		106	59 - 137	2	30
m-Xylene & p-Xylene	ND		50.0	42.6		ug/L		85	57 - 130	11	30
Naphthalene	ND		50.0	49.5		ug/L		99	25 - 150	1	30
n-Butylbenzene	ND		50.0	39.4		ug/L		79	41 - 142	21	31
N-Propylbenzene	ND		50.0	38.3		ug/L		77	51 - 138	14	30
o-Chlorotoluene	ND		50.0	43.0		ug/L		86	53 - 134	12	30
o-Xylene	ND		50.0	43.0		ug/L		86	61 - 130	11	30
p-Chlorotoluene	ND		50.0	42.7		ug/L		85	54 - 133	13	30
p-Isopropyltoluene	ND		50.0	37.7		ug/L		75	48 - 139	17	30
sec-Butylbenzene	ND		50.0	38.9		ug/L		78	50 - 138	16	30
Styrene	ND		50.0	41.3		ug/L		83	58 - 131	10	30
tert-Butylbenzene	ND		50.0	41.3		ug/L		83	54 - 146	13	30
1,1,1,2-Tetrachloroethane	ND		50.0	45.1		ug/L		90	59 - 137	5	30
1,1,2,2-Tetrachloroethane	ND		50.0	47.4		ug/L		95	66 - 135	0	30
Tetrachloroethene	ND		50.0	45.2		ug/L		90	52 - 133	9	30
Toluene	ND		50.0	45.3		ug/L		91	65 - 130	7	30
trans-1,2-Dichloroethene	ND		50.0	48.2		ug/L		96	61 - 143	0	30
trans-1,3-Dichloropropene	ND		50.0	48.4		ug/L		97	53 - 133	3	30
1,2,3-Trichlorobenzene	ND		50.0	41.6		ug/L		83	43 - 145	6	30
1,2,4-Trichlorobenzene	ND		50.0	39.1		ug/L		78	39 - 148	8	30
1,1,1-Trichloroethane	ND		50.0	48.8		ug/L		98	57 - 142	0	30
1,1,2-Trichloroethane	ND		50.0	53.2		ug/L		106	66 - 131	3	30
Trichloroethene	ND		50.0	48.2		ug/L		96	64 - 136	4	30
Trichlorofluoromethane	ND		50.0	34.2		ug/L		68	54 - 150	6	30
1,2,3-Trichloropropane	ND		50.0	52.7		ug/L		105	65 - 133	0	30
1,2,4-Trimethy benzene	ND		50.0	40.9		ug/L		82	50 - 139	14	30
1,3,5-Trimethy benzene	ND		50.0	39.9		ug/L		80	52 - 135	14	30
Vinyl acetate	ND		100	96.7		ug/L		97	26 - 150	6	33
Vinyl chloride	ND	F1 *+	50.0	22.9		ug/L		46	46 - 150	11	30
Xylenes, Total	ND		100	85.5		ug/L		86	59 - 130	11	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*72 - 130*
Dibromofluoromethane	*97*		*75 - 126*

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

Lab Sample ID: 400-240426-12 MSD
Matrix: Water
Analysis Batch: 634255

Client Sample ID: P93D-ROX-071123
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	*101*		*64 - 132*

Lab Sample ID: MB 400-634257/4
Matrix: Water
Analysis Batch: 634257

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/24/23 11:00	1
Acrolein	ND		20	3.3	ug/L			07/24/23 11:00	1
Acrylonitrile	ND		10	2.8	ug/L			07/24/23 11:00	1
Benzene	ND		1.0	0.50	ug/L			07/24/23 11:00	1
Bromobenzene	ND		1.0	0.54	ug/L			07/24/23 11:00	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/24/23 11:00	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/24/23 11:00	1
Bromoform	ND		5.0	0.25	ug/L			07/24/23 11:00	1
Bromomethane	ND		1.0	0.98	ug/L			07/24/23 11:00	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/24/23 11:00	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/24/23 11:00	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/24/23 11:00	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/24/23 11:00	1
Chloroethane	ND		1.0	0.76	ug/L			07/24/23 11:00	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/24/23 11:00	1
Chloroform	ND		1.0	0.90	ug/L			07/24/23 11:00	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/24/23 11:00	1
Chloromethane	ND		1.0	0.90	ug/L			07/24/23 11:00	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/24/23 11:00	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/24/23 11:00	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/24/23 11:00	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/24/23 11:00	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/24/23 11:00	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/24/23 11:00	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/24/23 11:00	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/24/23 11:00	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/24/23 11:00	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/24/23 11:00	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/24/23 11:00	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/24/23 11:00	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/24/23 11:00	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/24/23 11:00	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/24/23 11:00	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/24/23 11:00	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/24/23 11:00	1
2-Hexanone	ND		25	1.4	ug/L			07/24/23 11:00	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/24/23 11:00	1
Methylene bromide	ND		5.0	0.22	ug/L			07/24/23 11:00	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/24/23 11:00	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/24/23 11:00	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/24/23 11:00	1

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

Lab Sample ID: MB 400-634257/4
Matrix: Water
Analysis Batch: 634257

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			07/24/23 11:00	1
Naphthalene	ND		5.0	3.0	ug/L			07/24/23 11:00	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/24/23 11:00	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/24/23 11:00	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/24/23 11:00	1
o-Xylene	ND		5.0	0.60	ug/L			07/24/23 11:00	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/24/23 11:00	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/24/23 11:00	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/24/23 11:00	1
Styrene	ND		1.0	1.0	ug/L			07/24/23 11:00	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/24/23 11:00	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/24/23 11:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/24/23 11:00	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/24/23 11:00	1
Toluene	ND		1.0	0.90	ug/L			07/24/23 11:00	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/24/23 11:00	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/24/23 11:00	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/24/23 11:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/24/23 11:00	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/24/23 11:00	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/24/23 11:00	1
Trichloroethene	ND		1.0	0.15	ug/L			07/24/23 11:00	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/24/23 11:00	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/24/23 11:00	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/24/23 11:00	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/24/23 11:00	1
Vinyl acetate	ND		25	0.93	ug/L			07/24/23 11:00	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/24/23 11:00	1
Xylenes, Total	ND		10	1.6	ug/L			07/24/23 11:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*72 - 130*		*07/24/23 11:00*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/24/23 11:00*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/24/23 11:00*	*1*

Lab Sample ID: LCS 400-634257/1002
Matrix: Water
Analysis Batch: 634257

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	173		ug/L		86	43 - 160
Acrolein	500	437		ug/L		87	38 - 160
Acrylonitrile	500	454		ug/L		91	64 - 142
Benzene	50.0	47.8		ug/L		96	70 - 130
Bromobenzene	50.0	45.3		ug/L		91	70 - 132
Bromochloromethane	50.0	45.7		ug/L		91	70 - 130
Bromodichloromethane	50.0	47.0		ug/L		94	67 - 133
Bromoform	50.0	44.0		ug/L		88	57 - 140

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

Lab Sample ID: LCS 400-634257/1002
Matrix: Water
Analysis Batch: 634257

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	50.0	25.0		ug/L		50	10 - 160
2-Butanone (MEK)	200	182		ug/L		91	61 - 145
Carbon disulfide	50.0	46.3		ug/L		93	61 - 137
Carbon tetrachloride	50.0	47.4		ug/L		95	61 - 137
Chlorobenzene	50.0	47.5		ug/L		95	70 - 130
Chloroethane	50.0	36.6		ug/L		73	55 - 141
2-Chloroethyl vinyl ether	50.0	45.4		ug/L		91	10 - 160
Chloroform	50.0	47.3		ug/L		95	69 - 130
1-Chlorohexane	50.0	50.9		ug/L		102	69 - 130
cis-1,2-Dichloroethene	50.0	48.6		ug/L		97	68 - 130
cis-1,3-Dichloropropene	50.0	46.8		ug/L		94	69 - 132
Dibromochloromethane	50.0	45.4		ug/L		91	67 - 135
1,2-Dichlorobenzene	50.0	47.3		ug/L		95	67 - 130
1,3-Dichlorobenzene	50.0	47.0		ug/L		94	70 - 130
1,4-Dichlorobenzene	50.0	46.6		ug/L		93	70 - 130
1,1-Dichloroethane	50.0	47.3		ug/L		95	70 - 130
1,2-Dichloroethane	50.0	48.1		ug/L		96	69 - 130
1,1-Dichloroethene	50.0	41.8		ug/L		84	63 - 134
1,2-Dichloropropane	50.0	46.7		ug/L		93	70 - 130
1,3-Dichloropropane	50.0	47.6		ug/L		95	70 - 130
2,2-Dichloropropane	50.0	47.7		ug/L		95	52 - 135
1,1-Dichloropropene	50.0	48.4		ug/L		97	70 - 130
Ethylbenzene	50.0	48.7		ug/L		97	70 - 130
Ethyl methacrylate	50.0	46.9		ug/L		94	68 - 130
Hexachlorobutadiene	50.0	49.1		ug/L		98	53 - 140
2-Hexanone	200	193		ug/L		97	65 - 137
Isopropy benzene	50.0	48.6		ug/L		97	70 - 130
Methylene bromide	50.0	46.3		ug/L		93	70 - 130
Methylene Chloride	50.0	44.7		ug/L		89	66 - 135
4-Methyl-2-pentanone (MIBK)	200	187		ug/L		93	69 - 138
Methyl tert-butyl ether	50.0	45.1		ug/L		90	66 - 130
m-Xylene & p-Xylene	50.0	48.8		ug/L		98	70 - 130
Naphthalene	50.0	45.7		ug/L		91	47 - 149
n-Butylbenzene	50.0	51.5		ug/L		103	67 - 130
N-Propylbenzene	50.0	47.1		ug/L		94	70 - 130
o-Chlorotoluene	50.0	48.2		ug/L		96	70 - 130
o-Xylene	50.0	47.8		ug/L		96	70 - 130
p-Chlorotoluene	50.0	48.8		ug/L		98	70 - 130
p-Isopropyltoluene	50.0	48.8		ug/L		98	65 - 130
sec-Butylbenzene	50.0	49.2		ug/L		98	66 - 130
Styrene	50.0	46.9		ug/L		94	70 - 130
tert-Butylbenzene	50.0	48.4		ug/L		97	64 - 139
1,1,1,2-Tetrachloroethane	50.0	47.0		ug/L		94	67 - 131
1,1,2,2-Tetrachloroethane	50.0	44.5		ug/L		89	70 - 131
Tetrachloroethene	50.0	50.3		ug/L		101	65 - 130
Toluene	50.0	47.9		ug/L		96	70 - 130
trans-1,2-Dichloroethene	50.0	47.2		ug/L		94	70 - 130
trans-1,3-Dichloropropene	50.0	48.2		ug/L		96	63 - 130
1,2,3-Trichlorobenzene	50.0	47.0		ug/L		94	60 - 138

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

Lab Sample ID: LCS 400-634257/1002
Matrix: Water
Analysis Batch: 634257

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	50.0	47.1		ug/L		94	60 - 140
1,1,1-Trichloroethane	50.0	47.7		ug/L		95	68 - 130
1,1,2-Trichloroethane	50.0	47.1		ug/L		94	70 - 130
Trichloroethene	50.0	47.0		ug/L		94	70 - 130
Trichlorofluoromethane	50.0	37.0		ug/L		74	65 - 138
1,2,3-Trichloropropane	50.0	44.9		ug/L		90	70 - 130
1,2,4-Trimethy benzene	50.0	48.3		ug/L		97	70 - 130
1,3,5-Trimethy benzene	50.0	47.5		ug/L		95	69 - 130
Vinyl acetate	100	90.5		ug/L		91	26 - 160
Xylenes, Total	100	96.7		ug/L		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 130*
Dibromofluoromethane	*100*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

Lab Sample ID: LCS 400-634257/1005
Matrix: Water
Analysis Batch: 634257

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloromethane	1.00	1.49	*+	ug/L		149	58 - 137
Dichlorodifluoromethane	1.00	1.24		ug/L		124	41 - 146
Vinyl chloride	1.00	1.39	*+	ug/L		139	59 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*72 - 130*
Dibromofluoromethane	*99*		*75 - 126*
Toluene-d8 (Surr)	*105*		*64 - 132*

Lab Sample ID: 400-240426-4 MS
Matrix: Water
Analysis Batch: 634257

Client Sample ID: MW6C-ROX-071123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND	*+	200	206		ug/L		103	43 - 150
Acrolein	ND		500	515		ug/L		103	38 - 150
Acrylonitrile	ND	*+	500	643		ug/L		129	62 - 149
Benzene	ND	*+	50.0	60.0		ug/L		120	56 - 142
Bromobenzene	ND	*+	50.0	55.1		ug/L		110	59 - 136
Bromochloromethane	ND	*+	50.0	60.7		ug/L		121	64 - 140
Bromodichloromethane	ND	*+	50.0	60.0		ug/L		120	59 - 143
Bromoform	ND	*+	50.0	57.4		ug/L		115	50 - 140
Bromomethane	ND		50.0	28.5		ug/L		57	10 - 150
2-Butanone (MEK)	ND	*+	200	238		ug/L		119	55 - 150
Carbon disulfide	ND	*+	50.0	56.5		ug/L		113	48 - 150
Carbon tetrachloride	ND	*+	50.0	58.1		ug/L		116	55 - 145
Chlorobenzene	ND	*+	50.0	58.0		ug/L		116	64 - 130

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

Lab Sample ID: 400-240426-4 MS
Matrix: Water
Analysis Batch: 634257

Client Sample ID: MW6C-ROX-071123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroethane	ND	*+	50.0	42.2		ug/L		84	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND	*+	50.0	60.7		ug/L		121	60 - 141
1-Chlorohexane	ND	*+	50.0	58.6		ug/L		117	56 - 136
Chloromethane	ND	F1 *+	50.0	12.3	F1	ug/L		25	49 - 148
cis-1,2-Dichloroethene	ND	*+	50.0	60.8		ug/L		122	59 - 143
cis-1,3-Dichloropropene	ND	*+	50.0	59.4		ug/L		119	57 - 140
Dibromochloromethane	ND	*+	50.0	58.9		ug/L		118	56 - 143
1,2-Dichlorobenzene	ND	*+	50.0	56.8		ug/L		114	52 - 137
1,3-Dichlorobenzene	ND	*+	50.0	53.6		ug/L		107	54 - 135
1,4-Dichlorobenzene	ND	*+	50.0	53.9		ug/L		108	53 - 135
Dichlorodifluoromethane	ND	F1	50.0	2.22	F1	ug/L		4	16 - 150
1,1-Dichloroethane	ND	*+	50.0	60.3		ug/L		121	61 - 144
1,2-Dichloroethane	ND	*+	50.0	62.8		ug/L		126	60 - 141
1,1-Dichloroethene	ND	*+	50.0	57.0		ug/L		114	54 - 147
1,2-Dichloropropane	ND	*+	50.0	61.3		ug/L		123	66 - 137
1,3-Dichloropropane	ND	*+	50.0	61.7		ug/L		123	66 - 133
2,2-Dichloropropane	ND	*+	50.0	58.3		ug/L		117	42 - 144
1,1-Dichloropropene	ND	*+	50.0	59.2		ug/L		118	65 - 136
Ethylbenzene	ND	*+	50.0	58.0		ug/L		116	58 - 131
Ethyl methacrylate	ND	*+	50.0	63.6		ug/L		127	64 - 130
Hexachlorobutadiene	ND		50.0	49.1		ug/L		98	31 - 149
2-Hexanone	ND	*+	200	258		ug/L		129	65 - 140
Isopropy benzene	ND	*+	50.0	56.8		ug/L		114	56 - 133
Methylene bromide	ND	*+	50.0	61.8		ug/L		124	63 - 138
Methylene Chloride	ND	*+	50.0	58.1		ug/L		116	60 - 146
4-Methyl-2-pentanone (MIBK)	ND	*+	200	261		ug/L		131	63 - 146
Methyl tert-butyl ether	ND	*+	50.0	59.8		ug/L		120	59 - 137
m-Xylene & p-Xylene	ND	*+	50.0	57.3		ug/L		115	57 - 130
Naphthalene	ND	*+	50.0	58.7		ug/L		117	25 - 150
n-Butylbenzene	ND		50.0	51.4		ug/L		103	41 - 142
N-Propylbenzene	ND	*+	50.0	52.4		ug/L		105	51 - 138
o-Chlorotoluene	ND	*+	50.0	52.8		ug/L		106	53 - 134
o-Xylene	ND	*+	50.0	57.7		ug/L		115	61 - 130
p-Chlorotoluene	ND	*+	50.0	54.8		ug/L		110	54 - 133
p-Isopropyltoluene	ND	*+	50.0	52.4		ug/L		105	48 - 139
sec-Butylbenzene	ND	*+	50.0	53.5		ug/L		107	50 - 138
Styrene	ND		50.0	57.2		ug/L		114	58 - 131
tert-Butylbenzene	ND		50.0	54.7		ug/L		109	54 - 146
1,1,1,2-Tetrachloroethane	ND	*+	50.0	58.9		ug/L		118	59 - 137
1,1,2,2-Tetrachloroethane	ND	*+	50.0	60.2		ug/L		120	66 - 135
Tetrachloroethene	ND	*+	50.0	55.4		ug/L		111	52 - 133
Toluene	ND	*+	50.0	59.7		ug/L		119	65 - 130
trans-1,2-Dichloroethene	ND	*+	50.0	60.2		ug/L		120	61 - 143
trans-1,3-Dichloropropene	ND	*+	50.0	61.8		ug/L		124	53 - 133
1,2,3-Trichlorobenzene	ND	*+	50.0	54.3		ug/L		109	43 - 145
1,2,4-Trichlorobenzene	ND	*+	50.0	53.0		ug/L		106	39 - 148
1,1,1-Trichloroethane	ND	*+	50.0	59.1		ug/L		118	57 - 142
1,1,2-Trichloroethane	ND	*+	50.0	62.2		ug/L		124	66 - 131

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

Lab Sample ID: 400-240426-4 MS
Matrix: Water
Analysis Batch: 634257

Client Sample ID: MW6C-ROX-071123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Trichloroethene	ND	*+	50.0	58.0		ug/L		116	64 - 136
Trichlorofluoromethane	ND		50.0	41.6		ug/L		83	54 - 150
1,2,3-Trichloropropane	ND	*+	50.0	60.3		ug/L		121	65 - 133
1,2,4-Trimethy benzene	ND	*+	50.0	54.4		ug/L		109	50 - 139
1,3,5-Trimethy benzene	ND	*+	50.0	52.7		ug/L		105	52 - 135
Vinyl acetate	ND		100	99.0		ug/L		99	26 - 150
Vinyl chloride	ND	F1 *+	50.0	22.0	F1	ug/L		44	46 - 150
Xylenes, Total	ND	*+	100	115		ug/L		115	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 130*
Dibromofluoromethane	*101*		*75 - 126*
Toluene-d8 (Surr)	*102*		*64 - 132*

Lab Sample ID: 400-240426-4 MSD
Matrix: Water
Analysis Batch: 634257

Client Sample ID: MW6C-ROX-071123
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	193		ug/L		97	43 - 150	6	30
Acrolein	ND		500	525		ug/L		105	38 - 150	2	31
Acrylonitrile	ND	*+	500	607		ug/L		121	62 - 149	6	30
Benzene	ND	*+	50.0	54.8		ug/L		110	56 - 142	9	30
Bromobenzene	ND	*+	50.0	48.8		ug/L		98	59 - 136	12	30
Bromochloromethane	ND	*+	50.0	55.9		ug/L		112	64 - 140	8	30
Bromodichloromethane	ND	*+	50.0	55.5		ug/L		111	59 - 143	8	30
Bromoform	ND	*+	50.0	54.3		ug/L		109	50 - 140	6	30
Bromomethane	ND		50.0	28.2		ug/L		56	10 - 150	1	50
2-Butanone (MEK)	ND	*+	200	229		ug/L		114	55 - 150	4	30
Carbon disulfide	ND	*+	50.0	51.1		ug/L		102	48 - 150	10	30
Carbon tetrachloride	ND	*+	50.0	53.1		ug/L		106	55 - 145	9	30
Chlorobenzene	ND	*+	50.0	51.0		ug/L		102	64 - 130	13	30
Chloroethane	ND	*+	50.0	35.4		ug/L		71	50 - 150	17	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND	*+	50.0	56.8		ug/L		114	60 - 141	7	30
1-Chlorohexane	ND	*+	50.0	49.2		ug/L		98	56 - 136	18	30
Chloromethane	ND	F1 *+	50.0	12.2	F1	ug/L		24	49 - 148	1	31
cis-1,2-Dichloroethene	ND	*+	50.0	56.2		ug/L		112	59 - 143	8	30
cis-1,3-Dichloropropene	ND	*+	50.0	54.0		ug/L		108	57 - 140	9	30
Dibromochloromethane	ND	*+	50.0	55.6		ug/L		111	56 - 143	6	30
1,2-Dichlorobenzene	ND	*+	50.0	49.0		ug/L		98	52 - 137	15	30
1,3-Dichlorobenzene	ND	*+	50.0	46.2		ug/L		92	54 - 135	15	30
1,4-Dichlorobenzene	ND	*+	50.0	45.9		ug/L		92	53 - 135	16	30
Dichlorodifluoromethane	ND	F1	50.0	2.40	F1	ug/L		5	16 - 150	8	31
1,1-Dichloroethane	ND	*+	50.0	55.9		ug/L		112	61 - 144	8	30
1,2-Dichloroethane	ND	*+	50.0	59.1		ug/L		118	60 - 141	6	30
1,1-Dichloroethene	ND	*+	50.0	52.4		ug/L		105	54 - 147	8	30
1,2-Dichloropropane	ND	*+	50.0	55.8		ug/L		112	66 - 137	9	30

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

Lab Sample ID: 400-240426-4 MSD
Matrix: Water
Analysis Batch: 634257

Client Sample ID: MW6C-ROX-071123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3-Dichloropropane	ND	*+	50.0	58.0		ug/L		116	66 - 133	6	30
2,2-Dichloropropane	ND	*+	50.0	54.0		ug/L		108	42 - 144	8	31
1,1-Dichloropropene	ND	*+	50.0	53.2		ug/L		106	65 - 136	11	30
Ethylbenzene	ND	*+	50.0	49.2		ug/L		98	58 - 131	16	30
Ethyl methacrylate	ND	*+	50.0	60.5		ug/L		121	64 - 130	5	30
Hexachlorobutadiene	ND		50.0	38.5		ug/L		77	31 - 149	24	36
2-Hexanone	ND	*+	200	253		ug/L		126	65 - 140	2	30
Isopropy benzene	ND	*+	50.0	46.9		ug/L		94	56 - 133	19	30
Methylene bromide	ND	*+	50.0	57.2		ug/L		114	63 - 138	8	30
Methylene Chloride	ND	*+	50.0	53.6		ug/L		107	60 - 146	8	32
4-Methyl-2-pentanone (MIBK)	ND	*+	200	255		ug/L		127	63 - 146	3	30
Methyl tert-butyl ether	ND	*+	50.0	57.1		ug/L		114	59 - 137	5	30
m-Xylene & p-Xylene	ND	*+	50.0	49.1		ug/L		98	57 - 130	16	30
Naphthalene	ND	*+	50.0	55.2		ug/L		110	25 - 150	6	30
n-Butylbenzene	ND		50.0	41.1		ug/L		82	41 - 142	22	31
N-Propylbenzene	ND	*+	50.0	43.4		ug/L		87	51 - 138	19	30
o-Chlorotoluene	ND	*+	50.0	45.3		ug/L		91	53 - 134	15	30
o-Xylene	ND	*+	50.0	49.5		ug/L		99	61 - 130	15	30
p-Chlorotoluene	ND	*+	50.0	46.8		ug/L		94	54 - 133	16	30
p-Isopropyltoluene	ND	*+	50.0	43.0		ug/L		86	48 - 139	20	30
sec-Butylbenzene	ND	*+	50.0	43.4		ug/L		87	50 - 138	21	30
Styrene	ND		50.0	49.5		ug/L		99	58 - 131	14	30
tert-Butylbenzene	ND		50.0	45.2		ug/L		90	54 - 146	19	30
1,1,1,2-Tetrachloroethane	ND	*+	50.0	53.2		ug/L		106	59 - 137	10	30
1,1,2,2-Tetrachloroethane	ND	*+	50.0	57.2		ug/L		114	66 - 135	5	30
Tetrachloroethene	ND	*+	50.0	47.2		ug/L		94	52 - 133	16	30
Toluene	ND	*+	50.0	52.6		ug/L		105	65 - 130	13	30
trans-1,2-Dichloroethene	ND	*+	50.0	53.7		ug/L		107	61 - 143	11	30
trans-1,3-Dichloropropene	ND	*+	50.0	57.8		ug/L		116	53 - 133	7	30
1,2,3-Trichlorobenzene	ND	*+	50.0	49.3		ug/L		99	43 - 145	10	30
1,2,4-Trichlorobenzene	ND	*+	50.0	46.4		ug/L		93	39 - 148	13	30
1,1,1-Trichloroethane	ND	*+	50.0	54.8		ug/L		110	57 - 142	8	30
1,1,2-Trichloroethane	ND	*+	50.0	59.0		ug/L		118	66 - 131	5	30
Trichloroethene	ND	*+	50.0	51.3		ug/L		103	64 - 136	12	30
Trichlorofluoromethane	ND		50.0	41.7		ug/L		83	54 - 150	0	30
1,2,3-Trichloropropane	ND	*+	50.0	57.4		ug/L		115	65 - 133	5	30
1,2,4-Trimethy benzene	ND	*+	50.0	45.5		ug/L		91	50 - 139	18	30
1,3,5-Trimethy benzene	ND	*+	50.0	44.9		ug/L		90	52 - 135	16	30
Vinyl acetate	ND		100	102		ug/L		102	26 - 150	3	33
Vinyl chloride	ND	F1 *+	50.0	23.1		ug/L		46	46 - 150	5	30
Xylenes, Total	ND	*+	100	98.5		ug/L		99	59 - 130	15	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*72 - 130*
Dibromofluoromethane	*101*		*75 - 126*
Toluene-d8 (Surr)	*103*		*64 - 132*

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

Lab Sample ID: MB 400-634409/4
Matrix: Water
Analysis Batch: 634409

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/25/23 10:20	1
Acrolein	ND		20	3.3	ug/L			07/25/23 10:20	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 10:20	1
Benzene	ND		1.0	0.50	ug/L			07/25/23 10:20	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 10:20	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 10:20	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 10:20	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 10:20	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 10:20	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/25/23 10:20	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 10:20	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 10:20	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 10:20	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 10:20	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 10:20	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 10:20	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 10:20	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 10:20	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 10:20	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 10:20	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 10:20	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 10:20	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 10:20	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 10:20	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 10:20	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 10:20	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 10:20	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 10:20	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 10:20	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 10:20	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 10:20	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 10:20	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 10:20	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 10:20	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 10:20	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 10:20	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/25/23 10:20	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 10:20	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 10:20	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 10:20	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/25/23 10:20	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 10:20	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 10:20	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 10:20	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 10:20	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 10:20	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 10:20	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 10:20	1

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

Lab Sample ID: MB 400-634409/4
Matrix: Water
Analysis Batch: 634409

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 10:20	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/25/23 10:20	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 10:20	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 10:20	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 10:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 10:20	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 10:20	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 10:20	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 10:20	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 10:20	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 10:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 10:20	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 10:20	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 10:20	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 10:20	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 10:20	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 10:20	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/25/23 10:20	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/25/23 10:20	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 10:20	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 10:20	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 10:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*07/25/23 10:20*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*07/25/23 10:20*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*07/25/23 10:20*	*1*

Lab Sample ID: LCS 400-634409/1002
Matrix: Water
Analysis Batch: 634409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	191		ug/L		96	43 - 160
Acrolein	500	474		ug/L		95	38 - 160
Acrylonitrile	500	543		ug/L		109	64 - 142
Benzene	50.0	51.3		ug/L		103	70 - 130
Bromobenzene	50.0	48.3		ug/L		97	70 - 132
Bromochloromethane	50.0	50.4		ug/L		101	70 - 130
Bromodichloromethane	50.0	51.4		ug/L		103	67 - 133
Bromoform	50.0	48.9		ug/L		98	57 - 140
Bromomethane	50.0	50.0		ug/L		100	10 - 160
2-Butanone (MEK)	200	213		ug/L		107	61 - 145
Carbon disulfide	50.0	47.6		ug/L		95	61 - 137
Carbon tetrachloride	50.0	50.2		ug/L		100	61 - 137
Chlorobenzene	50.0	51.3		ug/L		103	70 - 130
Chloroethane	50.0	55.3		ug/L		111	55 - 141
2-Chloroethyl vinyl ether	50.0	47.5		ug/L		95	10 - 160

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

Lab Sample ID: LCS 400-634409/1002
Matrix: Water
Analysis Batch: 634409

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	50.8		ug/L		102	69 - 130
1-Chlorohexane	50.0	54.1		ug/L		108	69 - 130
Chloromethane	50.0	40.1		ug/L		80	58 - 137
cis-1,2-Dichloroethene	50.0	51.5		ug/L		103	68 - 130
cis-1,3-Dichloropropene	50.0	50.9		ug/L		102	69 - 132
Dibromochloromethane	50.0	51.2		ug/L		102	67 - 135
1,2-Dichlorobenzene	50.0	51.6		ug/L		103	67 - 130
1,3-Dichlorobenzene	50.0	49.8		ug/L		100	70 - 130
1,4-Dichlorobenzene	50.0	50.2		ug/L		100	70 - 130
Dichlorodifluoromethane	50.0	29.1		ug/L		58	41 - 146
1,1-Dichloroethane	50.0	50.8		ug/L		102	70 - 130
1,2-Dichloroethane	50.0	53.5		ug/L		107	69 - 130
1,1-Dichloroethene	50.0	42.1		ug/L		84	63 - 134
1,2-Dichloropropane	50.0	51.6		ug/L		103	70 - 130
1,3-Dichloropropane	50.0	53.1		ug/L		106	70 - 130
2,2-Dichloropropane	50.0	49.4		ug/L		99	52 - 135
1,1-Dichloropropene	50.0	51.8		ug/L		104	70 - 130
Ethylbenzene	50.0	52.0		ug/L		104	70 - 130
Ethyl methacrylate	50.0	52.9		ug/L		106	68 - 130
Hexachlorobutadiene	50.0	49.4		ug/L		99	53 - 140
2-Hexanone	200	229		ug/L		115	65 - 137
Isopropy benzene	50.0	51.3		ug/L		103	70 - 130
Methylene bromide	50.0	51.1		ug/L		102	70 - 130
Methylene Chloride	50.0	54.1		ug/L		108	66 - 135
4-Methyl-2-pentanone (MIBK)	200	219		ug/L		109	69 - 138
Methyl tert-butyl ether	50.0	49.8		ug/L		100	66 - 130
m-Xylene & p-Xylene	50.0	51.2		ug/L		102	70 - 130
Naphthalene	50.0	50.2		ug/L		100	47 - 149
n-Butylbenzene	50.0	55.1		ug/L		110	67 - 130
N-Propylbenzene	50.0	49.0		ug/L		98	70 - 130
o-Chlorotoluene	50.0	51.7		ug/L		103	70 - 130
o-Xylene	50.0	51.2		ug/L		102	70 - 130
p-Chlorotoluene	50.0	51.4		ug/L		103	70 - 130
p-Isopropyltoluene	50.0	51.4		ug/L		103	65 - 130
sec-Butylbenzene	50.0	51.1		ug/L		102	66 - 130
Styrene	50.0	51.3		ug/L		103	70 - 130
tert-Butylbenzene	50.0	51.3		ug/L		103	64 - 139
1,1,1,2-Tetrachloroethane	50.0	50.9		ug/L		102	67 - 131
1,1,2,2-Tetrachloroethane	50.0	50.5		ug/L		101	70 - 131
Tetrachloroethene	50.0	49.7		ug/L		99	65 - 130
Toluene	50.0	51.7		ug/L		103	70 - 130
trans-1,2-Dichloroethene	50.0	50.7		ug/L		101	70 - 130
trans-1,3-Dichloropropene	50.0	53.9		ug/L		108	63 - 130
1,2,3-Trichlorobenzene	50.0	48.7		ug/L		97	60 - 138
1,2,4-Trichlorobenzene	50.0	49.5		ug/L		99	60 - 140
1,1,1-Trichloroethane	50.0	50.3		ug/L		101	68 - 130
1,1,2-Trichloroethane	50.0	53.7		ug/L		107	70 - 130
Trichloroethene	50.0	49.8		ug/L		100	70 - 130
Trichlorofluoromethane	50.0	43.1		ug/L		86	65 - 138

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

Lab Sample ID: LCS 400-634409/1002
Matrix: Water
Analysis Batch: 634409

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	51.1		ug/L		102	70 - 130
1,2,4-Trimethy benzene	50.0	51.3		ug/L		103	70 - 130
1,3,5-Trimethy benzene	50.0	50.0		ug/L		100	69 - 130
Vinyl acetate	100	98.5		ug/L		98	26 - 160
Vinyl chloride	50.0	40.4		ug/L		81	59 - 136
Xylenes, Total	100	102		ug/L		102	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*72 - 130*
Dibromofluoromethane	*100*		*75 - 126*
Toluene-d8 (Surr)	*103*		*64 - 132*

Lab Sample ID: 400-240426-11 MS
Matrix: Water
Analysis Batch: 634409

Client Sample ID: P93A-ROX-071123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND		200	189		ug/L		95	43 - 150
Acrolein	ND		500	554		ug/L		111	38 - 150
Acrylonitrile	ND		500	589		ug/L		118	62 - 149
Benzene	5.3		50.0	63.8		ug/L		117	56 - 142
Bromobenzene	ND		50.0	51.7		ug/L		103	59 - 136
Bromochloromethane	ND		50.0	55.0		ug/L		110	64 - 140
Bromodichloromethane	ND		50.0	55.2		ug/L		110	59 - 143
Bromoform	ND		50.0	53.0		ug/L		106	50 - 140
Bromomethane	ND		50.0	42.3		ug/L		85	10 - 150
2-Butanone (MEK)	ND		200	219		ug/L		109	55 - 150
Carbon disulfide	ND		50.0	46.4		ug/L		93	48 - 150
Carbon tetrachloride	ND		50.0	53.6		ug/L		107	55 - 145
Chlorobenzene	ND		50.0	53.9		ug/L		108	64 - 130
Chloroethane	ND		50.0	60.9		ug/L		122	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	55.6		ug/L		111	60 - 141
1-Chlorohexane	ND		50.0	56.5		ug/L		113	56 - 136
Chloromethane	ND		50.0	45.3		ug/L		91	49 - 148
cis-1,2-Dichloroethene	ND		50.0	55.6		ug/L		111	59 - 143
cis-1,3-Dichloropropene	ND		50.0	54.9		ug/L		110	57 - 140
Dibromochloromethane	ND		50.0	53.4		ug/L		107	56 - 143
1,2-Dichlorobenzene	ND		50.0	53.9		ug/L		108	52 - 137
1,3-Dichlorobenzene	ND		50.0	52.1		ug/L		104	54 - 135
1,4-Dichlorobenzene	ND		50.0	52.0		ug/L		104	53 - 135
Dichlorodifluoromethane	ND		50.0	50.2		ug/L		100	16 - 150
1,1-Dichloroethane	ND		50.0	54.2		ug/L		108	61 - 144
1,2-Dichloroethane	ND		50.0	58.9		ug/L		118	60 - 141
1,1-Dichloroethene	ND		50.0	50.9		ug/L		102	54 - 147
1,2-Dichloropropane	ND		50.0	54.5		ug/L		109	66 - 137
1,3-Dichloropropane	ND		50.0	56.5		ug/L		113	66 - 133
2,2-Dichloropropane	ND		50.0	51.7		ug/L		103	42 - 144

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

Lab Sample ID: 400-240426-11 MS
Matrix: Water
Analysis Batch: 634409

Client Sample ID: P93A-ROX-071123
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	54.7		ug/L		109	65 - 136
Ethylbenzene	ND		50.0	54.4		ug/L		109	58 - 131
Ethyl methacrylate	ND		50.0	59.3		ug/L		119	64 - 130
Hexachlorobutadiene	ND		50.0	52.1		ug/L		104	31 - 149
2-Hexanone	ND		200	246		ug/L		123	65 - 140
Isopropy benzene	ND		50.0	53.6		ug/L		107	56 - 133
Methylene bromide	ND		50.0	57.2		ug/L		114	63 - 138
Methylene Chloride	ND		50.0	52.1		ug/L		104	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	250		ug/L		125	63 - 146
Methyl tert-butyl ether	ND		50.0	54.1		ug/L		108	59 - 137
m-Xylene & p-Xylene	ND		50.0	54.0		ug/L		108	57 - 130
Naphthalene	ND		50.0	55.7		ug/L		111	25 - 150
n-Butylbenzene	ND		50.0	54.3		ug/L		109	41 - 142
N-Propylbenzene	ND		50.0	50.7		ug/L		101	51 - 138
o-Chlorotoluene	ND		50.0	52.8		ug/L		106	53 - 134
o-Xylene	ND		50.0	53.5		ug/L		107	61 - 130
p-Chlorotoluene	ND		50.0	53.8		ug/L		108	54 - 133
p-Isopropyltoluene	ND		50.0	52.9		ug/L		106	48 - 139
sec-Butylbenzene	ND		50.0	53.3		ug/L		107	50 - 138
Styrene	ND		50.0	53.4		ug/L		107	58 - 131
tert-Butylbenzene	ND		50.0	53.6		ug/L		107	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	53.8		ug/L		108	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	56.2		ug/L		112	66 - 135
Tetrachloroethene	ND		50.0	50.6		ug/L		101	52 - 133
Toluene	ND		50.0	54.3		ug/L		109	65 - 130
trans-1,2-Dichloroethene	ND		50.0	53.8		ug/L		108	61 - 143
trans-1,3-Dichloropropene	ND		50.0	55.8		ug/L		112	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	52.8		ug/L		106	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	52.1		ug/L		104	39 - 148
1,1,1-Trichloroethane	ND		50.0	54.3		ug/L		109	57 - 142
1,1,2-Trichloroethane	ND		50.0	57.2		ug/L		114	66 - 131
Trichloroethene	ND		50.0	53.3		ug/L		107	64 - 136
Trichlorofluoromethane	ND		50.0	53.6		ug/L		107	54 - 150
1,2,3-Trichloropropane	ND		50.0	56.2		ug/L		112	65 - 133
1,2,4-Trimethy benzene	ND		50.0	52.9		ug/L		106	50 - 139
1,3,5-Trimethy benzene	ND		50.0	51.8		ug/L		104	52 - 135
Vinyl acetate	ND		100	106		ug/L		106	26 - 150
Vinyl chloride	ND		50.0	48.9		ug/L		98	46 - 150
Xylenes, Total	ND		100	108		ug/L		108	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*72 - 130*
Dibromofluoromethane	*102*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

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

Lab Sample ID: 400-240426-11 MSD
Matrix: Water
Analysis Batch: 634409

Client Sample ID: P93A-ROX-071123
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		86	43 - 150	10	30
Acrolein	ND		500	563		ug/L		113	38 - 150	2	31
Acrylonitrile	ND		500	531		ug/L		106	62 - 149	10	30
Benzene	5.3		50.0	59.5		ug/L		108	56 - 142	7	30
Bromobenzene	ND		50.0	47.2		ug/L		94	59 - 136	9	30
Bromochloromethane	ND		50.0	49.4		ug/L		99	64 - 140	11	30
Bromodichloromethane	ND		50.0	49.6		ug/L		99	59 - 143	11	30
Bromoform	ND		50.0	47.4		ug/L		95	50 - 140	11	30
Bromomethane	ND		50.0	43.0		ug/L		86	10 - 150	2	50
2-Butanone (MEK)	ND		200	200		ug/L		100	55 - 150	9	30
Carbon disulfide	ND		50.0	45.7		ug/L		91	48 - 150	1	30
Carbon tetrachloride	ND		50.0	48.3		ug/L		97	55 - 145	10	30
Chlorobenzene	ND		50.0	48.6		ug/L		97	64 - 130	10	30
Chloroethane	ND		50.0	60.1		ug/L		120	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	50.6		ug/L		101	60 - 141	9	30
1-Chlorohexane	ND		50.0	51.4		ug/L		103	56 - 136	9	30
Chloromethane	ND		50.0	48.1		ug/L		96	49 - 148	6	31
cis-1,2-Dichloroethene	ND		50.0	50.7		ug/L		101	59 - 143	9	30
cis-1,3-Dichloropropene	ND		50.0	49.4		ug/L		99	57 - 140	11	30
Dibromochloromethane	ND		50.0	49.1		ug/L		98	56 - 143	8	30
1,2-Dichlorobenzene	ND		50.0	48.7		ug/L		97	52 - 137	10	30
1,3-Dichlorobenzene	ND		50.0	46.6		ug/L		93	54 - 135	11	30
1,4-Dichlorobenzene	ND		50.0	46.7		ug/L		93	53 - 135	11	30
Dichlorodifluoromethane	ND		50.0	54.4		ug/L		109	16 - 150	8	31
1,1-Dichloroethane	ND		50.0	49.9		ug/L		100	61 - 144	8	30
1,2-Dichloroethane	ND		50.0	54.0		ug/L		108	60 - 141	9	30
1,1-Dichloroethene	ND		50.0	45.6		ug/L		91	54 - 147	11	30
1,2-Dichloropropane	ND		50.0	51.3		ug/L		103	66 - 137	6	30
1,3-Dichloropropane	ND		50.0	51.8		ug/L		104	66 - 133	9	30
2,2-Dichloropropane	ND		50.0	47.6		ug/L		95	42 - 144	8	31
1,1-Dichloropropene	ND		50.0	50.1		ug/L		100	65 - 136	9	30
Ethylbenzene	ND		50.0	49.7		ug/L		99	58 - 131	9	30
Ethyl methacrylate	ND		50.0	53.8		ug/L		108	64 - 130	10	30
Hexachlorobutadiene	ND		50.0	46.3		ug/L		93	31 - 149	12	36
2-Hexanone	ND		200	226		ug/L		113	65 - 140	8	30
Isopropy benzene	ND		50.0	48.9		ug/L		98	56 - 133	9	30
Methylene bromide	ND		50.0	51.3		ug/L		103	63 - 138	11	30
Methylene Chloride	ND		50.0	46.7		ug/L		93	60 - 146	11	32
4-Methyl-2-pentanone (MIBK)	ND		200	224		ug/L		112	63 - 146	11	30
Methyl tert-butyl ether	ND		50.0	49.4		ug/L		99	59 - 137	9	30
m-Xylene & p-Xylene	ND		50.0	49.4		ug/L		99	57 - 130	9	30
Naphthalene	ND		50.0	51.4		ug/L		103	25 - 150	8	30
n-Butylbenzene	ND		50.0	49.0		ug/L		98	41 - 142	10	31
N-Propylbenzene	ND		50.0	46.9		ug/L		94	51 - 138	8	30
o-Chlorotoluene	ND		50.0	47.8		ug/L		96	53 - 134	10	30
o-Xylene	ND		50.0	49.3		ug/L		99	61 - 130	8	30
p-Chlorotoluene	ND		50.0	48.5		ug/L		97	54 - 133	10	30

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

Lab Sample ID: 400-240426-11 MSD
Matrix: Water
Analysis Batch: 634409

Client Sample ID: P93A-ROX-071123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
p-Isopropyltoluene	ND		50.0	47.6		ug/L		95	48 - 139	10	30
sec-Butylbenzene	ND		50.0	47.9		ug/L		96	50 - 138	11	30
Styrene	ND		50.0	48.3		ug/L		97	58 - 131	10	30
tert-Butylbenzene	ND		50.0	48.5		ug/L		97	54 - 146	10	30
1,1,1,2-Tetrachloroethane	ND		50.0	48.9		ug/L		98	59 - 137	10	30
1,1,2,2-Tetrachloroethane	ND		50.0	51.5		ug/L		103	66 - 135	9	30
Tetrachloroethene	ND		50.0	46.7		ug/L		93	52 - 133	8	30
Toluene	ND		50.0	50.1		ug/L		100	65 - 130	8	30
trans-1,2-Dichloroethene	ND		50.0	48.2		ug/L		96	61 - 143	11	30
trans-1,3-Dichloropropene	ND		50.0	51.8		ug/L		104	53 - 133	8	30
1,2,3-Trichlorobenzene	ND		50.0	48.5		ug/L		97	43 - 145	9	30
1,2,4-Trichlorobenzene	ND		50.0	47.3		ug/L		95	39 - 148	10	30
1,1,1-Trichloroethane	ND		50.0	49.7		ug/L		99	57 - 142	9	30
1,1,2-Trichloroethane	ND		50.0	52.3		ug/L		105	66 - 131	9	30
Trichloroethene	ND		50.0	47.5		ug/L		95	64 - 136	12	30
Trichlorofluoromethane	ND		50.0	53.6		ug/L		107	54 - 150	0	30
1,2,3-Trichloropropane	ND		50.0	52.0		ug/L		104	65 - 133	8	30
1,2,4-Trimethy benzene	ND		50.0	47.4		ug/L		95	50 - 139	11	30
1,3,5-Trimethy benzene	ND		50.0	47.3		ug/L		95	52 - 135	9	30
Vinyl acetate	ND		100	111		ug/L		111	26 - 150	4	33
Vinyl chloride	ND		50.0	53.9		ug/L		108	46 - 150	10	30
Xylenes, Total	ND		100	98.6		ug/L		99	59 - 130	9	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*72 - 130*
Dibromofluoromethane	*101*		*75 - 126*
Toluene-d8 (Surr)	*102*		*64 - 132*

Lab Sample ID: MB 400-634580/5
Matrix: Water
Analysis Batch: 634580

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		25	2.6	ug/L			07/26/23 17:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/26/23 17:19*	*1*
Dibromofluoromethane	*114*		*75 - 126*		*07/26/23 17:19*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*07/26/23 17:19*	*1*

Lab Sample ID: LCS 400-634580/1002
Matrix: Water
Analysis Batch: 634580

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2-Butanone (MEK)			200	217		ug/L		108	61 - 145		

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

Lab Sample ID: LCS 400-634580/1002
Matrix: Water
Analysis Batch: 634580

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	*100*		*72 - 130*
Dibromofluoromethane	*106*		*75 - 126*
Toluene-d8 (Surr)	*102*		*64 - 132*

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

Lab Sample ID: MB 400-633574/1-A
Matrix: Water
Analysis Batch: 633800

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633574

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/18/23 10:58	07/19/23 16:32	1
Benzenethiol	ND		10	1.7	ug/L		07/18/23 10:58	07/19/23 16:32	1
Benzoic acid	ND		30	7.3	ug/L		07/18/23 10:58	07/19/23 16:32	1
Benzyl alcohol	ND		10	2.0	ug/L		07/18/23 10:58	07/19/23 16:32	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/18/23 10:58	07/19/23 16:32	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/18/23 10:58	07/19/23 16:32	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/18/23 10:58	07/19/23 16:32	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/18/23 10:58	07/19/23 16:32	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/18/23 10:58	07/19/23 16:32	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/18/23 10:58	07/19/23 16:32	1
4-Chloroaniline	ND		10	3.4	ug/L		07/18/23 10:58	07/19/23 16:32	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/18/23 10:58	07/19/23 16:32	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/18/23 10:58	07/19/23 16:32	1
2-Chlorophenol	ND		10	2.2	ug/L		07/18/23 10:58	07/19/23 16:32	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/18/23 10:58	07/19/23 16:32	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/18/23 10:58	07/19/23 16:32	1
Dibenzofuran	ND		10	0.17	ug/L		07/18/23 10:58	07/19/23 16:32	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/18/23 10:58	07/19/23 16:32	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/18/23 10:58	07/19/23 16:32	1
Diethyl phthalate	ND		10	0.24	ug/L		07/18/23 10:58	07/19/23 16:32	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/18/23 10:58	07/19/23 16:32	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/18/23 10:58	07/19/23 16:32	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/18/23 10:58	07/19/23 16:32	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/18/23 10:58	07/19/23 16:32	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/18/23 10:58	07/19/23 16:32	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/18/23 10:58	07/19/23 16:32	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/18/23 10:58	07/19/23 16:32	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/18/23 10:58	07/19/23 16:32	1
1,4-Dioxane	ND		10	1.0	ug/L		07/18/23 10:58	07/19/23 16:32	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/18/23 10:58	07/19/23 16:32	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/18/23 10:58	07/19/23 16:32	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/18/23 10:58	07/19/23 16:32	1
Hexachloroethane	ND		10	4.2	ug/L		07/18/23 10:58	07/19/23 16:32	1
Indene	ND		10	1.0	ug/L		07/18/23 10:58	07/19/23 16:32	1
Isophorone	ND		10	0.14	ug/L		07/18/23 10:58	07/19/23 16:32	1
2-Methylphenol	ND		10	1.8	ug/L		07/18/23 10:58	07/19/23 16:32	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/18/23 10:58	07/19/23 16:32	1

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

Lab Sample ID: MB 400-633574/1-A
Matrix: Water
Analysis Batch: 633800

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633574

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.2	ug/L		07/18/23 10:58	07/19/23 16:32	1
3-Nitroaniline	ND		10	1.8	ug/L		07/18/23 10:58	07/19/23 16:32	1
4-Nitroaniline	ND		10	1.5	ug/L		07/18/23 10:58	07/19/23 16:32	1
Nitrobenzene	ND		10	0.13	ug/L		07/18/23 10:58	07/19/23 16:32	1
2-Nitrophenol	ND		10	5.2	ug/L		07/18/23 10:58	07/19/23 16:32	1
4-Nitrophenol	ND		10	2.1	ug/L		07/18/23 10:58	07/19/23 16:32	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/18/23 10:58	07/19/23 16:32	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/18/23 10:58	07/19/23 16:32	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/18/23 10:58	07/19/23 16:32	1
Pentachlorophenol	ND		20	1.4	ug/L		07/18/23 10:58	07/19/23 16:32	1
Phenol	ND		10	2.6	ug/L		07/18/23 10:58	07/19/23 16:32	1
Pyridine	ND		10	3.2	ug/L		07/18/23 10:58	07/19/23 16:32	1
Quinoline	ND		10	4.5	ug/L		07/18/23 10:58	07/19/23 16:32	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/18/23 10:58	07/19/23 16:32	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/18/23 10:58	07/19/23 16:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*46 - 124*	*07/18/23 10:58*	*07/19/23 16:32*	*1*
2-Fluorophenol	*16*		*13 - 113*	*07/18/23 10:58*	*07/19/23 16:32*	*1*
Nitrobenzene-d5	*64*		*36 - 126*	*07/18/23 10:58*	*07/19/23 16:32*	*1*
Phenol-d5	*50*		*17 - 127*	*07/18/23 10:58*	*07/19/23 16:32*	*1*
Terphenyl-d14	*87*		*44 - 149*	*07/18/23 10:58*	*07/19/23 16:32*	*1*
2,4,6-Tribromophenol	*73*		*26 - 150*	*07/18/23 10:58*	*07/19/23 16:32*	*1*

Lab Sample ID: LCS 400-633574/16-A
Matrix: Water
Analysis Batch: 633800

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	11.6		ug/L		10	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*46 - 124*
2-Fluorophenol	*33*		*13 - 113*
Nitrobenzene-d5	*60*		*36 - 126*
Phenol-d5	*56*		*17 - 127*
Terphenyl-d14	*85*		*44 - 149*
2,4,6-Tribromophenol	*74*		*26 - 150*

Lab Sample ID: LCS 400-633574/2-A
Matrix: Water
Analysis Batch: 633800

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	84.8		ug/L		71	21 - 120
Benzoic acid	522	397		ug/L		76	10 - 144
Benzyl alcohol	120	68.9		ug/L		57	28 - 120
Bis(2-chloroethoxy)methane	120	77.7		ug/L		65	47 - 120

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

Lab Sample ID: LCS 400-633574/2-A
Matrix: Water
Analysis Batch: 633800

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-chloroethyl)ether	120	75.9		ug/L		63	44 - 120
bis (2-chloroisopropyl) ether	120	78.9		ug/L		66	33 - 121
Bis(2-ethylhexyl) phthalate	120	85.8		ug/L		72	52 - 147
4-Bromophenyl phenyl ether	120	89.1		ug/L		74	54 - 122
Butyl benzyl phthalate	120	96.2		ug/L		80	54 - 133
4-Chloroaniline	120	66.5		ug/L		55	26 - 120
4-Chloro-3-methylphenol	120	83.3		ug/L		69	48 - 131
2-Chloronaphthalene	120	88.4		ug/L		74	52 - 121
2-Chlorophenol	120	67.7		ug/L		56	40 - 120
4-Chlorophenyl phenyl ether	120	94.0		ug/L		78	56 - 125
Dibenz[a,h]acridine	110	93.7		ug/L		86	31 - 150
Dibenzofuran	120	95.3		ug/L		79	56 - 122
3,3'-Dichlorobenzidine	160	148		ug/L		92	36 - 132
2,4-Dichlorophenol	120	83.4		ug/L		70	49 - 120
Diethyl phthalate	120	100		ug/L		83	50 - 137
2,4-Dimethylphenol	120	79.2		ug/L		66	48 - 120
Dimethyl phthalate	120	95.3		ug/L		79	57 - 124
Di-n-butyl phthalate	120	95.1		ug/L		79	58 - 126
4,6-Dinitro-ortho-cresol	240	176		ug/L		73	23 - 148
2,4-Dinitrophenol	240	169		ug/L		70	10 - 150
2,4-Dinitrotoluene	120	93.9		ug/L		78	54 - 142
2,6-Dinitrotoluene	120	94.3		ug/L		79	55 - 130
Di-n-octyl phthalate	120	84.4		ug/L		70	57 - 138
1,4-Dioxane	120	51.9		ug/L		43	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	78.0		ug/L		65	45 - 124
Hexachlorobenzene	120	107		ug/L		89	52 - 129
Hexachlorocyclopentadiene	120	66.0		ug/L		55	10 - 134
Hexachloroethane	120	71.4		ug/L		59	20 - 120
Indene	120	179	*+	ug/L		149	49 - 120
Isophorone	120	78.5		ug/L		65	48 - 120
2-Methylphenol	120	80.6		ug/L		67	46 - 124
3 & 4 Methylphenol	120	84.1		ug/L		70	45 - 120
2-Nitroaniline	120	81.8		ug/L		68	51 - 145
3-Nitroaniline	120	81.6		ug/L		68	37 - 127
4-Nitroaniline	120	104		ug/L		87	36 - 137
Nitrobenzene	120	70.0		ug/L		58	45 - 120
2-Nitrophenol	120	80.0		ug/L		67	40 - 124
4-Nitrophenol	240	159		ug/L		66	23 - 146
N-Nitrosodimethylamine	120	65.3		ug/L		54	29 - 137
N-Nitrosodi-n-propylamine	120	83.3		ug/L		69	45 - 120
N-Nitrosodiphenylamine	119	85.1		ug/L		72	54 - 120
Pentachlorophenol	240	194		ug/L		81	31 - 130
Phenol	120	71.2		ug/L		59	11 - 120
Pyridine	240	110		ug/L		46	16 - 120
Quinoline	110	85.6		ug/L		78	49 - 130
2,4,5-Trichlorophenol	120	93.0		ug/L		77	51 - 136
2,4,6-Trichlorophenol	120	92.7		ug/L		77	50 - 127

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

Lab Sample ID: LCS 400-633574/2-A
Matrix: Water
Analysis Batch: 633800

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633574

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	73		46 - 124
2-Fluorophenol	42		13 - 113
Nitrobenzene-d5	64		36 - 126
Phenol-d5	63		17 - 127
Terphenyl-d14	83		44 - 149
2,4,6-Tribromophenol	95		26 - 150

Lab Sample ID: LCSD 400-633574/17-A
Matrix: Water
Analysis Batch: 633800

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633574

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	8.20	J *- *1	ug/L		7	10 - 120	34	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	71		46 - 124
2-Fluorophenol	43		13 - 113
Nitrobenzene-d5	57		36 - 126
Phenol-d5	62		17 - 127
Terphenyl-d14	91		44 - 149
2,4,6-Tribromophenol	79		26 - 150

Lab Sample ID: 400-240426-4 MS
Matrix: Water
Analysis Batch: 633800

Client Sample ID: MW6C-ROX-071123
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	ND		118	92.6		ug/L		78	10 - 120
Benzoic acid	ND		515	701		ug/L		136	10 - 149
Benzyl alcohol	ND		118	77.4		ug/L		65	33 - 120
Bis(2-chloroethoxy)methane	ND		118	82.9		ug/L		70	26 - 120
Bis(2-chloroethyl)ether	ND		118	78.2		ug/L		66	42 - 120
bis (2-chloroisopropyl) ether	ND		118	84.3		ug/L		71	28 - 120
Bis(2-ethylhexyl) phthalate	ND		118	89.8		ug/L		76	39 - 120
4-Bromophenyl phenyl ether	ND		118	87.6		ug/L		74	40 - 120
Butyl benzyl phthalate	ND		118	98.9		ug/L		84	45 - 120
4-Chloroaniline	ND		118	72.1		ug/L		61	10 - 120
4-Chloro-3-methylphenol	ND		118	82.6		ug/L		70	34 - 120
2-Chloronaphthalene	ND		118	94.5		ug/L		80	39 - 120
2-Chlorophenol	ND		118	45.8		ug/L		39	25 - 120
4-Chlorophenyl phenyl ether	ND		118	101		ug/L		85	44 - 120
Dibenz[a,h]acridine	ND		108	90.1		ug/L		83	50 - 150
Dibenzofuran	ND		118	100		ug/L		84	25 - 130
3,3'-Dichlorobenzidine	ND		158	134		ug/L		85	10 - 120
2,4-Dichlorophenol	ND		118	76.8		ug/L		65	31 - 120
Diethyl phthalate	ND		118	106		ug/L		90	46 - 120
2,4-Dimethylphenol	ND		118	85.6		ug/L		72	21 - 120
Dimethyl phthalate	ND		118	98.6		ug/L		83	38 - 120

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

Lab Sample ID: 400-240426-4 MS
Matrix: Water
Analysis Batch: 633800

Client Sample ID: MW6C-ROX-071123
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Di-n-butyl phthalate	ND		118	98.8		ug/L		83	49 - 120
4,6-Dinitro-ortho-cresol	ND		237	182		ug/L		77	25 - 120
2,4-Dinitrophenol	ND		237	227		ug/L		96	15 - 140
2,4-Dinitrotoluene	ND		118	99.6		ug/L		84	53 - 120
2,6-Dinitrotoluene	ND		118	97.5		ug/L		82	43 - 120
Di-n-octyl phthalate	ND		118	87.9		ug/L		74	35 - 121
1,4-Dioxane	ND	F1	118	56.6	F1	ug/L		48	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		118	74.3		ug/L		63	50 - 150
Hexachlorobenzene	ND		118	111		ug/L		94	38 - 122
Hexachlorocyclopentadiene	ND		118	73.7		ug/L		62	10 - 120
Hexachloroethane	ND		118	74.5		ug/L		63	10 - 150
Indene	ND	*+ F1	118	187	F1	ug/L		158	50 - 150
Isophorone	ND		118	85.0		ug/L		72	42 - 120
2-Methylphenol	ND		118	85.9		ug/L		73	28 - 120
3 & 4 Methylphenol	ND		118	87.3		ug/L		74	31 - 120
2-Nitroaniline	ND		118	85.0		ug/L		72	45 - 120
3-Nitroaniline	ND		118	86.0		ug/L		73	10 - 130
4-Nitroaniline	ND		118	108		ug/L		91	10 - 132
Nitrobenzene	ND		118	79.8		ug/L		67	39 - 120
2-Nitrophenol	ND		118	68.0		ug/L		57	33 - 120
4-Nitrophenol	ND		237	176		ug/L		74	10 - 120
N-Nitrosodimethylamine	ND		118	77.2		ug/L		65	10 - 139
N-Nitrosodi-n-propylamine	ND		118	90.2		ug/L		76	37 - 124
N-Nitrosodiphenylamine	ND		117	78.0		ug/L		66	10 - 150
Pentachlorophenol	ND		237	211		ug/L		89	29 - 130
Phenol	ND		118	57.7		ug/L		49	10 - 150
Pyridine	ND		237	130		ug/L		55	10 - 120
Quinoline	ND		108	82.0		ug/L		76	51 - 120
2,4,5-Trichlorophenol	ND		118	92.3		ug/L		78	34 - 120
2,4,6-Trichlorophenol	ND		118	87.8		ug/L		74	33 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*46 - 124*
2-Fluorophenol	*17*		*13 - 113*
Nitrobenzene-d5	*71*		*36 - 126*
Phenol-d5	*52*		*17 - 127*
Terphenyl-d14	*86*		*44 - 149*
2,4,6-Tribromophenol	*94*		*26 - 150*

Lab Sample ID: 400-240426-4 MSD
Matrix: Water
Analysis Batch: 633800

Client Sample ID: MW6C-ROX-071123
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	ND		122	89.9		ug/L		74	10 - 120	3	63
Benzoic acid	ND		529	705		ug/L		133	10 - 149	1	49
Benzyl alcohol	ND		122	69.7		ug/L		57	33 - 120	10	37
Bis(2-chloroethoxy)methane	ND		122	76.6		ug/L		63	26 - 120	8	70

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

Lab Sample ID: 400-240426-4 MSD
Matrix: Water
Analysis Batch: 633800

Client Sample ID: MW6C-ROX-071123
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether	ND		122	71.0		ug/L		58	42 - 120	10	42
bis (2-chloroisopropyl) ether	ND		122	76.4		ug/L		63	28 - 120	10	41
Bis(2-ethylhexyl) phthalate	ND		122	80.8		ug/L		66	39 - 120	11	35
4-Bromophenyl phenyl ether	ND		122	87.0		ug/L		71	40 - 120	1	30
Butyl benzyl phthalate	ND		122	91.1		ug/L		75	45 - 120	8	32
4-Chloroaniline	ND		122	65.6		ug/L		54	10 - 120	9	94
4-Chloro-3-methylphenol	ND		122	85.5		ug/L		70	34 - 120	3	40
2-Chloronaphthalene	ND		122	88.5		ug/L		73	39 - 120	7	29
2-Chlorophenol	ND		122	61.1		ug/L		50	25 - 120	29	42
4-Chlorophenyl phenyl ether	ND		122	92.6		ug/L		76	44 - 120	8	27
Dibenz[a,h]acridine	ND		111	90.2		ug/L		81	50 - 150	0	40
Dibenzofuran	ND		122	94.0		ug/L		77	25 - 130	6	29
3,3'-Dichlorobenzidine	ND		162	133		ug/L		82	10 - 120	1	58
2,4-Dichlorophenol	ND		122	83.0		ug/L		68	31 - 120	8	43
Diethyl phthalate	ND		122	98.0		ug/L		81	46 - 120	8	40
2,4-Dimethylphenol	ND		122	78.9		ug/L		65	21 - 120	8	47
Dimethyl phthalate	ND		122	92.8		ug/L		76	38 - 120	6	36
Di-n-butyl phthalate	ND		122	92.5		ug/L		76	49 - 120	7	32
4,6-Dinitro-ortho-cresol	ND		244	191		ug/L		79	25 - 120	5	42
2,4-Dinitrophenol	ND		244	223		ug/L		91	15 - 140	2	36
2,4-Dinitrotoluene	ND		122	95.5		ug/L		78	53 - 120	4	28
2,6-Dinitrotoluene	ND		122	93.0		ug/L		76	43 - 120	5	28
Di-n-octyl phthalate	ND		122	81.5		ug/L		67	35 - 121	8	35
1,4-Dioxane	ND	F1	122	48.3	F1	ug/L		40	50 - 150	16	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		122	75.3		ug/L		62	50 - 150	1	40
Hexachlorobenzene	ND		122	104		ug/L		85	38 - 122	7	33
Hexachlorocyclopentadiene	ND		122	69.9		ug/L		57	10 - 120	5	50
Hexachloroethane	ND		122	68.5		ug/L		56	10 - 150	8	41
Indene	ND	*+ F1	122	173		ug/L		142	50 - 150	8	40
Isophorone	ND		122	76.6		ug/L		63	42 - 120	10	33
2-Methylphenol	ND		122	84.2		ug/L		69	28 - 120	2	47
3 & 4 Methylphenol	ND		122	86.4		ug/L		71	31 - 120	1	47
2-Nitroaniline	ND		122	79.8		ug/L		66	45 - 120	6	33
3-Nitroaniline	ND		122	80.7		ug/L		66	10 - 130	6	39
4-Nitroaniline	ND		122	110		ug/L		90	10 - 132	2	50
Nitrobenzene	ND		122	69.0		ug/L		57	39 - 120	15	35
2-Nitrophenol	ND		122	78.4		ug/L		64	33 - 120	14	43
4-Nitrophenol	ND		244	163		ug/L		67	10 - 120	8	82
N-Nitrosodimethylamine	ND		122	69.8		ug/L		57	10 - 139	10	62
N-Nitrosodi-n-propylamine	ND		122	81.3		ug/L		67	37 - 124	10	36
N-Nitrosodiphenylamine	ND		121	83.4		ug/L		69	10 - 150	7	34
Pentachlorophenol	ND		244	202		ug/L		83	29 - 130	4	42
Phenol	ND		122	67.9		ug/L		56	10 - 150	16	52
Pyridine	ND		244	122		ug/L		50	10 - 120	7	55
Quinoline	ND		111	82.0		ug/L		74	51 - 120	0	40
2,4,5-Trichlorophenol	ND		122	93.0		ug/L		76	34 - 120	1	42
2,4,6-Trichlorophenol	ND		122	89.7		ug/L		74	33 - 120	2	44

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

Lab Sample ID: 400-240426-4 MSD
Matrix: Water
Analysis Batch: 633800

Client Sample ID: MW6C-ROX-071123
Prep Type: Total/NA
Prep Batch: 633574

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	*67*		*46 - 124*
2-Fluorophenol	*32*		*13 - 113*
Nitrobenzene-d5	*61*		*36 - 126*
Phenol-d5	*59*		*17 - 127*
Terphenyl-d14	*75*		*44 - 149*
2,4,6-Tribromophenol	*93*		*26 - 150*

Lab Sample ID: 400-240426-12 MS
Matrix: Water
Analysis Batch: 633800

Client Sample ID: P93D-ROX-071123
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	ND		124	84.9		ug/L		68	10 - 120
Benzoic acid	ND		539	549		ug/L		102	10 - 149
Benzyl alcohol	ND		124	64.2		ug/L		52	33 - 120
Bis(2-chloroethoxy)methane	ND		124	72.7		ug/L		59	26 - 120
Bis(2-chloroethyl)ether	ND		124	65.5		ug/L		53	42 - 120
bis (2-chloroisopropyl) ether	ND		124	72.9		ug/L		59	28 - 120
Bis(2-ethylhexyl) phthalate	ND		124	76.3		ug/L		61	39 - 120
4-Bromophenyl phenyl ether	ND		124	79.1		ug/L		64	40 - 120
Butyl benzyl phthalate	ND		124	84.7		ug/L		68	45 - 120
4-Chloroaniline	ND		124	61.4		ug/L		49	10 - 120
4-Chloro-3-methylphenol	ND		124	75.6		ug/L		61	34 - 120
2-Chloronaphthalene	ND		124	78.3		ug/L		63	39 - 120
2-Chlorophenol	ND		124	49.7		ug/L		40	25 - 120
4-Chlorophenyl phenyl ether	ND		124	83.2		ug/L		67	44 - 120
Dibenz[a,h]acridine	ND		113	76.5		ug/L		68	50 - 150
Dibenzofuran	ND		124	84.7		ug/L		68	25 - 130
3,3'-Dichlorobenzidine	ND		165	108		ug/L		66	10 - 120
2,4-Dichlorophenol	ND		124	71.2		ug/L		57	31 - 120
Diethyl phthalate	ND		124	87.4		ug/L		70	46 - 120
2,4-Dimethylphenol	ND		124	72.5		ug/L		58	21 - 120
Dimethyl phthalate	ND		124	83.3		ug/L		67	38 - 120
Di-n-butyl phthalate	ND		124	82.9		ug/L		67	49 - 120
4,6-Dinitro-ortho-cresol	ND		248	159		ug/L		64	25 - 120
2,4-Dinitrophenol	ND		248	174		ug/L		70	15 - 140
2,4-Dinitrotoluene	ND		124	84.8		ug/L		68	53 - 120
2,6-Dinitrotoluene	ND		124	82.9		ug/L		67	43 - 120
Di-n-octyl phthalate	ND		124	76.1		ug/L		61	35 - 121
1,4-Dioxane	ND	F1	124	49.3	F1	ug/L		40	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		124	69.1		ug/L		56	50 - 150
Hexachlorobenzene	ND		124	92.4		ug/L		75	38 - 122
Hexachlorocyclopentadiene	ND		124	58.9		ug/L		47	10 - 120
Hexachloroethane	ND		124	63.5		ug/L		51	10 - 150
Indene	ND	*+ F1	124	161		ug/L		130	50 - 150
Isophorone	ND		124	72.6		ug/L		58	42 - 120
2-Methylphenol	ND		124	72.3		ug/L		58	28 - 120
3 & 4 Methylphenol	ND		124	73.1		ug/L		59	31 - 120

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

Lab Sample ID: 400-240426-12 MS
Matrix: Water
Analysis Batch: 633800

Client Sample ID: P93D-ROX-071123
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2-Nitroaniline	ND		124	72.9		ug/L		59	45 - 120
3-Nitroaniline	ND		124	72.6		ug/L		59	10 - 130
4-Nitroaniline	ND		124	93.4		ug/L		75	10 - 132
Nitrobenzene	ND		124	66.7		ug/L		54	39 - 120
2-Nitrophenol	ND		124	60.9		ug/L		49	33 - 120
4-Nitrophenol	ND		248	132		ug/L		53	10 - 120
N-Nitrosodimethylamine	ND		124	56.7		ug/L		46	10 - 139
N-Nitrosodi-n-propylamine	ND		124	76.7		ug/L		62	37 - 124
N-Nitrosodiphenylamine	ND		123	74.7		ug/L		61	10 - 150
Pentachlorophenol	ND		248	172		ug/L		69	29 - 130
Phenol	ND		124	56.7		ug/L		46	10 - 150
Pyridine	ND		248	121		ug/L		49	10 - 120
Quinoline	ND		113	77.0		ug/L		68	51 - 120
2,4,5-Trichlorophenol	ND		124	78.3		ug/L		63	34 - 120
2,4,6-Trichlorophenol	ND		124	74.6		ug/L		60	33 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*46 - 124*
2-Fluorophenol	*27*		*13 - 113*
Nitrobenzene-d5	*57*		*36 - 126*
Phenol-d5	*47*		*17 - 127*
Terphenyl-d14	*69*		*44 - 149*
2,4,6-Tribromophenol	*78*		*26 - 150*

Lab Sample ID: 400-240426-12 MSD
Matrix: Water
Analysis Batch: 633800

Client Sample ID: P93D-ROX-071123
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	ND		122	102		ug/L		84	10 - 120	18	63
Benzoic acid	ND		529	779		ug/L		147	10 - 149	35	49
Benzyl alcohol	ND		122	76.0		ug/L		62	33 - 120	17	37
Bis(2-chloroethoxy)methane	ND		122	83.2		ug/L		68	26 - 120	13	70
Bis(2-chloroethyl)ether	ND		122	73.1		ug/L		60	42 - 120	11	42
bis (2-chloroisopropyl) ether	ND		122	81.7		ug/L		67	28 - 120	11	41
Bis(2-ethylhexyl) phthalate	ND		122	85.5		ug/L		70	39 - 120	11	35
4-Bromophenyl phenyl ether	ND		122	94.1		ug/L		77	40 - 120	17	30
Butyl benzyl phthalate	ND		122	95.4		ug/L		78	45 - 120	12	32
4-Chloroaniline	ND		122	69.3		ug/L		57	10 - 120	12	94
4-Chloro-3-methylphenol	ND		122	91.1		ug/L		75	34 - 120	19	40
2-Chloronaphthalene	ND		122	94.8		ug/L		78	39 - 120	19	29
2-Chlorophenol	ND		122	61.4		ug/L		50	25 - 120	21	42
4-Chlorophenyl phenyl ether	ND		122	99.9		ug/L		82	44 - 120	18	27
Dibenz[a,h]acridine	ND		111	95.6		ug/L		86	50 - 150	22	40
Dibenzofuran	ND		122	102		ug/L		84	25 - 130	18	29
3,3'-Dichlorobenzidine	ND		162	142		ug/L		88	10 - 120	27	58
2,4-Dichlorophenol	ND		122	86.4		ug/L		71	31 - 120	19	43
Diethyl phthalate	ND		122	104		ug/L		86	46 - 120	18	40

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

Lab Sample ID: 400-240426-12 MSD
Matrix: Water
Analysis Batch: 633800

Client Sample ID: P93D-ROX-071123
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-Dimethylphenol	ND		122	86.3		ug/L		71	21 - 120	17	47
Dimethyl phthalate	ND		122	99.4		ug/L		82	38 - 120	18	36
Di-n-butyl phthalate	ND		122	98.6		ug/L		81	49 - 120	17	32
4,6-Dinitro-ortho-cresol	ND		243	203		ug/L		84	25 - 120	24	42
2,4-Dinitrophenol	ND		243	238		ug/L		98	15 - 140	31	36
2,4-Dinitrotoluene	ND		122	102		ug/L		84	53 - 120	19	28
2,6-Dinitrotoluene	ND		122	99.6		ug/L		82	43 - 120	18	28
Di-n-octyl phthalate	ND		122	87.3		ug/L		72	35 - 121	14	35
1,4-Dioxane	ND	F1	122	51.4	F1	ug/L		42	50 - 150	4	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		122	81.3		ug/L		67	50 - 150	16	40
Hexachlorobenzene	ND		122	113		ug/L		93	38 - 122	20	33
Hexachlorocyclopentadiene	ND		122	73.5		ug/L		60	10 - 120	22	50
Hexachloroethane	ND		122	71.6		ug/L		59	10 - 150	12	41
Indene	ND	*+ F1	122	186	F1	ug/L		153	50 - 150	15	40
Isophorone	ND		122	82.8		ug/L		68	42 - 120	13	33
2-Methylphenol	ND		122	91.1		ug/L		75	28 - 120	23	47
3 & 4 Methylphenol	ND		122	90.7		ug/L		75	31 - 120	22	47
2-Nitroaniline	ND		122	87.7		ug/L		72	45 - 120	18	33
3-Nitroaniline	ND		122	88.4		ug/L		73	10 - 130	20	39
4-Nitroaniline	ND		122	120		ug/L		99	10 - 132	25	50
Nitrobenzene	ND		122	74.7		ug/L		61	39 - 120	11	35
2-Nitrophenol	ND		122	79.8		ug/L		66	33 - 120	27	43
4-Nitrophenol	ND		243	173		ug/L		71	10 - 120	27	82
N-Nitrosodimethylamine	ND		122	62.6		ug/L		51	10 - 139	10	62
N-Nitrosodi-n-propylamine	ND		122	89.3		ug/L		73	37 - 124	15	36
N-Nitrosodiphenylamine	ND		121	90.5		ug/L		75	10 - 150	19	34
Pentachlorophenol	ND		243	218		ug/L		90	29 - 130	24	42
Phenol	ND		122	68.9		ug/L		57	10 - 150	19	52
Pyridine	ND		243	132		ug/L		54	10 - 120	9	55
Quinoline	ND		111	89.8		ug/L		81	51 - 120	15	40
2,4,5-Trichlorophenol	ND		122	95.1		ug/L		78	34 - 120	19	42
2,4,6-Trichlorophenol	ND		122	93.5		ug/L		77	33 - 120	22	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*46 - 124*
2-Fluorophenol	*29*		*13 - 113*
Nitrobenzene-d5	*67*		*36 - 126*
Phenol-d5	*60*		*17 - 127*
Terphenyl-d14	*81*		*44 - 149*
2,4,6-Tribromophenol	*97*		*26 - 150*

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

Lab Sample ID: MB 400-633574/1-A
Matrix: Water
Analysis Batch: 633763

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633574

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/18/23 10:58	07/19/23 22:53	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/18/23 10:58	07/19/23 22:53	1
Anthracene	ND		0.20	0.047	ug/L		07/18/23 10:58	07/19/23 22:53	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/18/23 10:58	07/19/23 22:53	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/18/23 10:58	07/19/23 22:53	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/18/23 10:58	07/19/23 22:53	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/18/23 10:58	07/19/23 22:53	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/18/23 10:58	07/19/23 22:53	1
Chrysene	ND		0.20	0.033	ug/L		07/18/23 10:58	07/19/23 22:53	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/18/23 10:58	07/19/23 22:53	1
Fluoranthene	ND		0.20	0.034	ug/L		07/18/23 10:58	07/19/23 22:53	1
Fluorene	ND		0.20	0.089	ug/L		07/18/23 10:58	07/19/23 22:53	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/18/23 10:58	07/19/23 22:53	1
Phenanthrene	ND		0.20	0.090	ug/L		07/18/23 10:58	07/19/23 22:53	1
Pyrene	ND		0.20	0.039	ug/L		07/18/23 10:58	07/19/23 22:53	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/18/23 10:58	07/19/23 22:53	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/18/23 10:58	07/19/23 22:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*90*		*18 - 147*	*07/18/23 10:58*	*07/19/23 22:53*	*1*
2-Fluorobiphenyl	*87*		*15 - 128*	*07/18/23 10:58*	*07/19/23 22:53*	*1*
Nitrobenzene-d5	*69*		*10 - 144*	*07/18/23 10:58*	*07/19/23 22:53*	*1*

Lab Sample ID: LCS 400-633574/18-A
Matrix: Water
Analysis Batch: 633763

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	2.00	1.52		ug/L		76	40 - 140
Acenaphthylene	2.00	1.63		ug/L		81	40 - 140
Anthracene	2.00	1.58		ug/L		79	40 - 140
Benzo[a]anthracene	2.00	1.76		ug/L		88	40 - 140
Benzo[a]pyrene	2.00	1.52		ug/L		76	40 - 140
Benzo[b]fluoranthene	2.00	1.49		ug/L		74	40 - 140
Benzo[g,h,i]perylene	2.00	1.68		ug/L		84	40 - 140
Benzo[k]fluoranthene	2.00	1.61		ug/L		81	40 - 140
Chrysene	2.00	1.70		ug/L		85	40 - 140
Dibenz(a,h)anthracene	2.00	1.75		ug/L		87	40 - 140
Fluoranthene	2.00	1.93		ug/L		97	40 - 140
Fluorene	2.00	1.59		ug/L		79	40 - 140
Indeno[1,2,3-cd]pyrene	2.00	1.73		ug/L		86	40 - 140
Phenanthrene	2.00	1.58		ug/L		79	40 - 140
Pyrene	2.00	1.37		ug/L		68	40 - 140
1-Methylnaphthalene	2.00	1.66		ug/L		83	40 - 140
2-Methylnaphthalene	2.00	1.63		ug/L		81	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*81*		*18 - 147*

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

Lab Sample ID: LCS 400-633574/18-A
Matrix: Water
Analysis Batch: 633763

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633574

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	81		15 - 128
Nitrobenzene-d5	66		10 - 144

Lab Sample ID: LCSD 400-633574/19-A
Matrix: Water
Analysis Batch: 633763

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633574

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			2.00	1.64		ug/L		82	40 - 140	8	40
Acenaphthylene			2.00	1.75		ug/L		87	40 - 140	7	40
Anthracene			2.00	1.65		ug/L		83	40 - 140	5	40
Benzo[a]anthracene			2.00	1.90		ug/L		95	40 - 140	8	40
Benzo[a]pyrene			2.00	1.70		ug/L		85	40 - 140	11	40
Benzo[b]fluoranthene			2.00	1.75		ug/L		87	40 - 140	16	40
Benzo[g,h,i]perylene			2.00	1.82		ug/L		91	40 - 140	8	40
Benzo[k]fluoranthene			2.00	1.66		ug/L		83	40 - 140	3	40
Chrysene			2.00	1.84		ug/L		92	40 - 140	8	40
Dibenz(a,h)anthracene			2.00	1.94		ug/L		97	40 - 140	10	40
Fluoranthene			2.00	1.99		ug/L		100	40 - 140	3	40
Fluorene			2.00	1.76		ug/L		88	40 - 140	10	40
Indeno[1,2,3-cd]pyrene			2.00	1.93		ug/L		97	40 - 140	11	40
Phenanthrene			2.00	1.63		ug/L		82	40 - 140	3	40
Pyrene			2.00	1.39		ug/L		69	40 - 140	2	40
1-Methylnaphthalene			2.00	1.76		ug/L		88	40 - 140	6	40
2-Methylnaphthalene			2.00	1.80		ug/L		90	40 - 140	10	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	85		18 - 147
2-Fluorobiphenyl	86		15 - 128
Nitrobenzene-d5	67		10 - 144

Lab Sample ID: 400-240426-4 MS
Matrix: Water
Analysis Batch: 633763

Client Sample ID: MW6C-ROX-071123
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		118	91.8		ug/L		78	50 - 150
Acenaphthylene	ND		118	95.3		ug/L		80	50 - 150
Anthracene	ND		118	95.0		ug/L		80	50 - 150
Benzo[a]anthracene	ND		118	108		ug/L		91	50 - 150
Benzo[a]pyrene	ND		118	96.4		ug/L		81	50 - 150
Benzo[b]fluoranthene	ND		118	105		ug/L		89	50 - 150
Benzo[g,h,i]perylene	ND		118	103		ug/L		87	50 - 150
Benzo[k]fluoranthene	ND		118	90.9		ug/L		77	50 - 150
Chrysene	ND		118	103		ug/L		87	50 - 150
Dibenz(a,h)anthracene	ND		118	113		ug/L		95	50 - 150
Fluoranthene	ND		118	109		ug/L		92	50 - 150
Fluorene	ND		118	99.2		ug/L		84	50 - 150

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

Lab Sample ID: 400-240426-4 MS
Matrix: Water
Analysis Batch: 633763

Client Sample ID: MW6C-ROX-071123
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Indeno[1,2,3-cd]pyrene	ND		118	108		ug/L		91	50 - 150
Phenanthrene	ND		118	90.7		ug/L		77	50 - 150
Pyrene	ND		118	77.2		ug/L		65	50 - 150
1-Methylnaphthalene	ND	F1	118	55.7	F1	ug/L		47	50 - 150
2-Methylnaphthalene	ND	F1	118	56.7	F1	ug/L		48	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*83*		*18 - 147*
2-Fluorobiphenyl	*85*		*15 - 128*
Nitrobenzene-d5	*40*		*10 - 144*

Lab Sample ID: 400-240426-4 MSD
Matrix: Water
Analysis Batch: 633763

Client Sample ID: MW6C-ROX-071123
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		122	83.3		ug/L		68	50 - 150	10	40
Acenaphthylene	ND		122	87.2		ug/L		72	50 - 150	9	40
Anthracene	ND		122	87.1		ug/L		72	50 - 150	9	40
Benzo[a]anthracene	ND		122	96.3		ug/L		79	50 - 150	11	40
Benzo[a]pyrene	ND		122	88.7		ug/L		73	50 - 150	8	40
Benzo[b]fluoranthene	ND		122	93.1		ug/L		76	50 - 150	12	40
Benzo[g,h,i]perylene	ND		122	93.3		ug/L		77	50 - 150	10	40
Benzo[k]fluoranthene	ND		122	88.6		ug/L		73	50 - 150	3	40
Chrysene	ND		122	94.1		ug/L		77	50 - 150	9	40
Dibenz(a,h)anthracene	ND		122	100		ug/L		82	50 - 150	12	40
Fluoranthene	ND		122	99.0		ug/L		81	50 - 150	9	40
Fluorene	ND		122	88.5		ug/L		73	50 - 150	11	40
Indeno[1,2,3-cd]pyrene	ND		122	98.9		ug/L		81	50 - 150	9	40
Phenanthrene	ND		122	85.0		ug/L		70	50 - 150	7	40
Pyrene	ND		122	73.1		ug/L		60	50 - 150	5	40
1-Methylnaphthalene	ND	F1	122	54.0	F1	ug/L		44	50 - 150	3	40
2-Methylnaphthalene	ND	F1	122	54.2	F1	ug/L		45	50 - 150	4	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*75*		*18 - 147*
2-Fluorobiphenyl	*75*		*15 - 128*
Nitrobenzene-d5	*39*		*10 - 144*

Lab Sample ID: 400-240426-12 MS
Matrix: Water
Analysis Batch: 633763

Client Sample ID: P93D-ROX-071123
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		124	74.6		ug/L		60	50 - 150
Acenaphthylene	ND		124	77.6		ug/L		63	50 - 150
Anthracene	ND		124	77.5		ug/L		63	50 - 150
Benzo[a]anthracene	ND		124	81.1		ug/L		65	50 - 150

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

Lab Sample ID: 400-240426-12 MS
Matrix: Water
Analysis Batch: 633763

Client Sample ID: P93D-ROX-071123
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[a]pyrene	ND		124	78.9		ug/L		64	50 - 150
Benzo[b]fluoranthene	ND		124	83.6		ug/L		67	50 - 150
Benzo[g,h,i]perylene	ND		124	76.3		ug/L		62	50 - 150
Benzo[k]fluoranthene	ND		124	84.0		ug/L		68	50 - 150
Chrysene	ND		124	78.1		ug/L		63	50 - 150
Dibenz(a,h)anthracene	ND		124	78.0		ug/L		63	50 - 150
Fluoranthene	ND		124	84.0		ug/L		68	50 - 150
Fluorene	ND		124	77.9		ug/L		63	50 - 150
Indeno[1,2,3-cd]pyrene	ND		124	77.9		ug/L		63	50 - 150
Phenanthrene	ND		124	75.7		ug/L		61	50 - 150
Pyrene	ND		124	64.4		ug/L		52	50 - 150
1-Methylnaphthalene	ND	F1	124	50.1	F1	ug/L		40	50 - 150
2-Methylnaphthalene	ND	F1	124	49.4	F1	ug/L		40	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*64*		*18 - 147*
2-Fluorobiphenyl	*68*		*15 - 128*
Nitrobenzene-d5	*36*		*10 - 144*

Lab Sample ID: 400-240426-12 MSD
Matrix: Water
Analysis Batch: 633763

Client Sample ID: P93D-ROX-071123
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		122	88.9		ug/L		73	50 - 150	17	40
Acenaphthylene	ND		122	92.2		ug/L		76	50 - 150	17	40
Anthracene	ND		122	93.8		ug/L		77	50 - 150	19	40
Benzo[a]anthracene	ND		122	102		ug/L		84	50 - 150	23	40
Benzo[a]pyrene	ND		122	98.2		ug/L		81	50 - 150	22	40
Benzo[b]fluoranthene	ND		122	104		ug/L		85	50 - 150	21	40
Benzo[g,h,i]perylene	ND		122	101		ug/L		83	50 - 150	28	40
Benzo[k]fluoranthene	ND		122	101		ug/L		83	50 - 150	18	40
Chrysene	ND		122	97.8		ug/L		80	50 - 150	22	40
Dibenz(a,h)anthracene	ND		122	113		ug/L		93	50 - 150	36	40
Fluoranthene	ND		122	107		ug/L		88	50 - 150	24	40
Fluorene	ND		122	97.1		ug/L		80	50 - 150	22	40
Indeno[1,2,3-cd]pyrene	ND		122	108		ug/L		89	50 - 150	32	40
Phenanthrene	ND		122	90.1		ug/L		74	50 - 150	17	40
Pyrene	ND		122	74.2		ug/L		61	50 - 150	14	40
1-Methylnaphthalene	ND	F1	122	55.9	F1	ug/L		46	50 - 150	11	40
2-Methylnaphthalene	ND	F1	122	57.1	F1	ug/L		47	50 - 150	14	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*74*		*18 - 147*
2-Fluorobiphenyl	*81*		*15 - 128*
Nitrobenzene-d5	*40*		*10 - 144*

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

Lab Sample ID: MB 400-633899/1-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633899

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/20/23 09:40	07/21/23 19:54	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/20/23 09:40	07/21/23 19:54	1
Anthracene	ND		0.20	0.047	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/20/23 09:40	07/21/23 19:54	1
Chrysene	ND		0.20	0.033	ug/L		07/20/23 09:40	07/21/23 19:54	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/20/23 09:40	07/21/23 19:54	1
Fluoranthene	ND		0.20	0.034	ug/L		07/20/23 09:40	07/21/23 19:54	1
Fluorene	ND		0.20	0.089	ug/L		07/20/23 09:40	07/21/23 19:54	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/20/23 09:40	07/21/23 19:54	1
Phenanthrene	ND		0.20	0.090	ug/L		07/20/23 09:40	07/21/23 19:54	1
Pyrene	ND		0.20	0.039	ug/L		07/20/23 09:40	07/21/23 19:54	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/20/23 09:40	07/21/23 19:54	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/20/23 09:40	07/21/23 19:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*68*		*18 - 147*	*07/20/23 09:40*	*07/21/23 19:54*	*1*
2-Fluorobiphenyl	*67*		*15 - 128*	*07/20/23 09:40*	*07/21/23 19:54*	*1*
Nitrobenzene-d5	*50*		*10 - 144*	*07/20/23 09:40*	*07/21/23 19:54*	*1*

Lab Sample ID: LCS 400-633899/6-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	2.00	1.18		ug/L		59	40 - 140
Acenaphthylene	2.00	1.24		ug/L		62	40 - 140
Anthracene	2.00	1.24		ug/L		62	40 - 140
Benzo[a]anthracene	2.00	1.41		ug/L		70	40 - 140
Benzo[a]pyrene	2.00	1.23		ug/L		61	40 - 140
Benzo[b]fluoranthene	2.00	1.21		ug/L		60	40 - 140
Benzo[g,h,i]perylene	2.00	1.36		ug/L		68	40 - 140
Benzo[k]fluoranthene	2.00	1.18		ug/L		59	40 - 140
Chrysene	2.00	1.32		ug/L		66	40 - 140
Dibenz(a,h)anthracene	2.00	1.45		ug/L		72	40 - 140
Fluoranthene	2.00	1.49		ug/L		74	40 - 140
Fluorene	2.00	1.30		ug/L		65	40 - 140
Indeno[1,2,3-cd]pyrene	2.00	1.42		ug/L		71	40 - 140
Phenanthrene	2.00	1.21		ug/L		60	40 - 140
Pyrene	2.00	1.02		ug/L		51	40 - 140
1-Methylnaphthalene	2.00	1.41		ug/L		71	40 - 140
2-Methylnaphthalene	2.00	1.42		ug/L		71	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*134*		*18 - 147*

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

Lab Sample ID: LCS 400-633899/6-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	134	S1+	15 - 128
Nitrobenzene-d5	107		10 - 144

Lab Sample ID: LCSD 400-633899/7-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			2.00	1.25		ug/L		63	40 - 140	6	40
Acenaphthylene			2.00	1.30		ug/L		65	40 - 140	5	40
Anthracene			2.00	1.26		ug/L		63	40 - 140	2	40
Benzo[a]anthracene			2.00	1.46		ug/L		73	40 - 140	4	40
Benzo[a]pyrene			2.00	1.30		ug/L		65	40 - 140	6	40
Benzo[b]fluoranthene			2.00	1.26		ug/L		63	40 - 140	4	40
Benzo[g,h,i]perylene			2.00	1.39		ug/L		70	40 - 140	3	40
Benzo[k]fluoranthene			2.00	1.22		ug/L		61	40 - 140	4	40
Chrysene			2.00	1.38		ug/L		69	40 - 140	5	40
Dibenz(a,h)anthracene			2.00	1.50		ug/L		75	40 - 140	4	40
Fluoranthene			2.00	1.55		ug/L		77	40 - 140	4	40
Fluorene			2.00	1.39		ug/L		69	40 - 140	7	40
Indeno[1,2,3-cd]pyrene			2.00	1.44		ug/L		72	40 - 140	1	40
Phenanthrene			2.00	1.25		ug/L		63	40 - 140	4	40
Pyrene			2.00	1.09		ug/L		54	40 - 140	7	40
1-Methylnaphthalene			2.00	1.36		ug/L		68	40 - 140	4	40
2-Methylnaphthalene			2.00	1.37		ug/L		69	40 - 140	3	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	140		18 - 147
2-Fluorobiphenyl	141	S1+	15 - 128
Nitrobenzene-d5	112		10 - 144

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-633461/1-A
Matrix: Water
Analysis Batch: 633483

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633461

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/17/23 14:59	07/18/23 00:08	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/17/23 14:59	07/18/23 00:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	65		51 - 149	07/17/23 14:59	07/18/23 00:08	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCS 400-633461/2-A
Matrix: Water
Analysis Batch: 633483

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633461

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-D bromo-3-Chloropropane			0.101	0.105		ug/L		104	60 - 140		
1,2-D bromoethane			0.101	0.0986		ug/L		98	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*85*		*51 - 149*

Lab Sample ID: LCSD 400-633461/3-A
Matrix: Water
Analysis Batch: 633483

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633461

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane			0.101	0.119		ug/L		119	60 - 140	13	30
1,2-D bromoethane			0.101	0.108		ug/L		107	60 - 140	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*92*		*51 - 149*

Lab Sample ID: MB 400-633516/1-A
Matrix: Water
Analysis Batch: 633678

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633516

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/18/23 08:10	07/18/23 21:46	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/18/23 08:10	07/18/23 21:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*51 - 149*	*07/18/23 08:10*	*07/18/23 21:46*	*1*

Lab Sample ID: LCS 400-633516/2-A
Matrix: Water
Analysis Batch: 633678

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633516

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-D bromo-3-Chloropropane			0.101	0.102		ug/L		101	60 - 140		
1,2-D bromoethane			0.101	0.0972		ug/L		96	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*86*		*51 - 149*

Lab Sample ID: LCSD 400-633516/3-A
Matrix: Water
Analysis Batch: 633678

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633516

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane			0.101	0.102		ug/L		101	60 - 140	0	30
1,2-D bromoethane			0.101	0.0975		ug/L		97	60 - 140	0	30

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-633516/3-A
Matrix: Water
Analysis Batch: 633678

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633516

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*87*		*51 - 149*

Lab Sample ID: 400-240426-4 MS
Matrix: Water
Analysis Batch: 633678

Client Sample ID: MW6C-ROX-071123
Prep Type: Total/NA
Prep Batch: 633516

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-D bromo-3-Chloropropane	ND		0.0936	0.105		ug/L		112	10 - 150
1,2-D bromoethane	ND		0.0938	0.0958		ug/L		102	39 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*51 - 149*

Lab Sample ID: 400-240426-4 MSD
Matrix: Water
Analysis Batch: 633678

Client Sample ID: MW6C-ROX-071123
Prep Type: Total/NA
Prep Batch: 633516

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane	ND		0.0980	0.119		ug/L		121	10 - 150	12	20
1,2-D bromoethane	ND		0.0982	0.102		ug/L		104	39 - 150	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*51 - 149*

Lab Sample ID: 400-240426-12 MS
Matrix: Water
Analysis Batch: 634065

Client Sample ID: P93D-ROX-071123
Prep Type: Total/NA
Prep Batch: 633516

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-D bromo-3-Chloropropane	ND	F1	0.0951	0.140		ug/L		147	10 - 150
1,2-D bromoethane	ND		0.0953	0.103		ug/L		108	39 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*110*		*51 - 149*

Lab Sample ID: 400-240426-12 MSD
Matrix: Water
Analysis Batch: 634065

Client Sample ID: P93D-ROX-071123
Prep Type: Total/NA
Prep Batch: 633516

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane	ND	F1	0.0966	0.144		ug/L		149	10 - 150	3	20
1,2-D bromoethane	ND		0.0969	0.106		ug/L		109	39 - 150	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*51 - 149*

Shell Oil Products US Chain Of Custody Recor

400-240426 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 I
Melissa Remiger	25278
PO #	**GSAP Project ID**
60697537 – 3.3.2	USPC/00114/R/02

☐ CK IF NO INCIDENT # APPLIES

DATE: 7/11/2023

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 60697537 – 3.3.2

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, 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

* 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
60697537 – 3.3.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°: 5.6, 5.1 IR8

Container PID Readings or Laboratory Notes:

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-071123-8260-A	7/11/2023	0000	Water	2					2	X			
	TB-ROX-071123-8011-A	7/11/2023	0000	Water	2					2		X		
	MW16-ROX-071123	7/11/2023	0925	Water	6			2		8	X	X	X	X
	MW6C-ROX-071123	7/11/2023	1055	Water	6			2		8	X	X	X	X
	MW6C-ROX-071123-MS	7/11/2023	1055	Water	6			2		8	X	X	X	X
	MW6C-ROX-071123-MSD	7/11/2023	1055	Water	6			2		8	X	X	X	X
	MW6A-ROX-071123	7/11/2023	1200	Water	6			2		8	X	X	X	X
	MW6B-ROX-071123	7/11/2023	1320	Water	6			2		8	X	X	X	X
	MW6B-ROX-071123-DUP	7/11/2023	1320	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
MARY MASSA	FEDEX: 6339 6592 6494, 6339 6592 6509	7/11/2023	1600
Relinquished by: (Signature)	Received by: (Signature)	Date: 7.13.23	Time: 8:19
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time

Version: 13Oct22

CUSTODY SEALS: 2349718, 2349719, 2349720, 2349721

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: 7/11/2023
PO #	**GSAP Project ID**	PAGE: 2 of 2
60697537 – 3.3.2	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 60697537 – 3.3.2

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	J. Mayer, 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; loredana.filimon@aecom.com

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

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 8270LL
	TB-ROX-071123-8260-B	7/11/2023	0000	Water	2					2	X			
	TB-ROX-071123-8011-B	7/11/2023	0000	Water	2					2		X		
	P93A-ROX-071123-EB	7/11/2023	0835	Water	6			2		8	X	X	X	X
	P93A-ROX-071123	7/11/2023	1015	Water	6			2		8	X	X	X	X
	P93D-ROX-071123	7/11/2023	1115	Water	6			2		8	X	X	X	X
	P93D-ROX-071123-MS	7/11/2023	1115	Water	6			2		8	X	X	X	X
	P93D-ROX-071123-MSD	7/11/2023	1115	Water	6			2		8	X	X	X	X
	ROST4PZC-ROX-071123	7/11/2023	1305	Water	6			2		8	X	X	X	X

7/11/23

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Joe Mayer	FEDEX: See page 1	7/11/2023	1600
Relinquished by: (Signature)	Received by: (Signature)	Date: 7.13.23	Time 8:19
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 13Oct22

CUSTODY SEALS: See page 1

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7/31/2023 (Rev. 1)

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc. Job Number: 400-240426-1

Login Number: 240426 **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	5.6°C, 5.1°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: 400-240426-1
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	09-01-23
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-23
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 – 3rd Quarter 2023 Data Review

Laboratory SDG: 400-240428-1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 8/21/2023

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

Sample Identification	Sample Identification
TB-ROX-071223-8260-A	TB-ROX-071223-8011-A
MW6D-ROX-071223	MW11-ROX-071223
MW28-ROX-071223	P54-ROX-071223
TB-ROX-071223-8260-B	TB-ROX-071223-8011-B
ROST4PZE-ROX-071223	MW12-ROX-071223
P74-ROX-071223	

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 sample P74-ROX-071223. LCS/LCSD recoveries for benzenethiol and indene and LCS/LCSD RPD for benzenethiol were outside evaluation criteria. MS/MSD recoveries for 2-chloroethyl vinyl ether were outside evaluation criteria in sample MW6D-ROX-071223. Benzene in sample P74-ROX-071223 was diluted to bring target analytes into calibration range of the instrument The continuing calibration verification 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 sample P74-ROX-071223 were re-extracted 8 days outside extraction time criteria (7 days) and then re-analyzed due to confirm PAH detections in the original extract. Holding time exceedances were not greater than two times (2X) criteria; both sets of data are reported. Initial PAH results in sample P74-ROX-071223 were confirmed by the confirmation run. 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 400-633574/16-A/17-A	SVOCs	Benzenethiol	10/**7**	**34**	10-120/30
LCS 400-633574/2-A	SVOCs	Indene	**149**	NA	49-120

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 below evaluation criteria; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW6D-ROX-071223	SVOCs	Benzenethiol	**UJ**
MW11-ROX-071223	SVOCs	Benzenethiol	**UJ**
MW28-ROX-071223	SVOCs	Benzenethiol	**UJ**
P54-ROX-071223	SVOCs	Benzenethiol	**UJ**
ROST4PZE-ROX-071223	SVOCs	Benzenethiol	**UJ**
MW12-ROX-071223	SVOCs	Benzenethiol	**UJ**
P74-ROX-071223	SVOCs	Benzenethiol	**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, although not requested, samples MW6D-ROX-071223 were spiked and analyzed for VOCs.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW6D-ROX-071223 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/30

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 the compound 2-chloroethyl vinyl ether due to acceptable LCS recoveries for this compound and to the acid reactive nature of 2-chloroethyl vinyl ether.

Sample ID	Parameter	Analyte	Qualification
MW6D-ROX-071223	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 for several analytes was outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW6D-ROX-071223	VOCs	Chloromethane	**UJ**
MW6D-ROX-071223	VOCs	Vinyl chloride	**UJ**
MW6D-ROX-071223	SVOCs	N-Nitrosodimethylamine	**UJ**
MW6D-ROX-071223	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW6D-ROX-071223	PAHs	Pyrene	**UJ**
MW11-ROX-071223	VOCs	Chloromethane	**UJ**
MW11-ROX-071223	VOCs	Vinyl chloride	**UJ**
MW11-ROX-071223	SVOCs	N-Nitrosodimethylamine	**UJ**
MW11-ROX-071223	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW11-ROX-071223	PAHs	Pyrene	**UJ**
MW28-ROX-071223	VOCs	Chloromethane	**UJ**
MW28-ROX-071223	VOCs	Vinyl chloride	**UJ**
MW28-ROX-071223	SVOCs	N-Nitrosodimethylamine	**UJ**
MW28-ROX-071223	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW28-ROX-071223	PAHs	Pyrene	**UJ**
P54-ROX-071223	VOCs	Chloromethane	**UJ**

Sample ID	Parameter	Analyte	Qualification
P54-ROX-071223	VOCs	Vinyl chloride	**UJ**
P54-ROX-071223	SVOCs	N-Nitrosodimethylamine	**UJ**
P54-ROX-071223	SVOCs	Hexachlorocyclopentadiene	**UJ**
P54-ROX-071223	PAHs	Pyrene	**UJ**
ROST4PZE-ROX-071223	VOCs	Chloromethane	**UJ**
ROST4PZE-ROX-071223	VOCs	Vinyl chloride	**UJ**
ROST4PZE-ROX-071223	SVOCs	N-Nitrosodimethylamine	**UJ**
ROST4PZE-ROX-071223	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW12-ROX-071223	VOCs	Chloromethane	**UJ**
MW12-ROX-071223	VOCs	Vinyl chloride	**UJ**
MW12-ROX-071223	SVOCs	N-Nitrosodimethylamine	**UJ**
MW12-ROX-071223	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW12-ROX-071223	PAHs	Pyrene	**UJ**
P74-ROX-071223	VOCs	Chloromethane	**UJ**
P74-ROX-071223	VOCs	Vinyl chloride	**UJ**
P74-ROX-071223	SVOCs	N-Nitrosodimethylamine	**UJ**
P74-ROX-071223	SVOCs	Hexachlorocyclopentadiene	**UJ**
P74-ROX-071223	PAHs	Pyrene	**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 8/3/2023 11:55:11 AM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-240428-1

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
8/3/2023 11:55:11 AM

Authorized for release by
Leah Klingensmith, Senior Project Manager
Leah.Klingensmith@et.eurofinsus.com
(615)301-5038

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Receipt Checklists 74
Certification Summary 75

Job ID: 400-240428-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-240428-1

Comments
No additional comments.

Receipt
The samples were received on 7/13/2023 8:19 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 6.0º C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-634438 recovered above the upper control limit for n-Butylbenzene. 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 400-634438 recovered outside acceptance criteria, low biased, for Chloromethane and Vinyl 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-634438 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 400-634438 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-071223-8260-A (400-240428-1), MW6D-ROX-071223 (400-240428-3), MW11-ROX-071223 (400-240428-4), MW28-ROX-071223 (400-240428-5), P54-ROX-071223 (400-240428-6), TB-ROX-071223-8260-B (400-240428-7), ROST4PZE-ROX-071223 (400-240428-9), MW12-ROX-071223 (400-240428-10) and P74-ROX-071223 (400-240428-11). 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 400-625791 was outside method criteria for the following analyte(s): Hexachlorobutadiene. 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 sample was diluted to bring the concentration of target analytes within the calibration range: P74-ROX-071223 (400-240428-11). 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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-633574 and analytical batch 400-633800 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270E: The laboratory control sample duplicate (LCSD) for preparation batch 400-633574 and analytical batch 400-633800 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 400-633574 and analytical batch 400-633800 recovered outside control limits for the following analytes: Indene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Job ID: 400-240428-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

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: (400-240426-G-12-D). These results have been reported and qualified.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-633983 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 400-633983 recovered outside acceptance criteria, low biased, for N-Nitrosodimethylamine 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: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-633574 and analytical batch 400-633800 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: 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: (400-240426-G-4-B) and (400-240426-G-12-D). These results have been reported and qualified.

Method 8270E SIM: The continuing calibration verification (CCV) associated with batch 400-633763 recovered outside acceptance criteria, low biased, for Pyrene. 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 400-634089 recovered outside acceptance criteria, low biased, for Pyrene. 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 to confirm original results: P74-ROX-071223 (400-240428-11). 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 400-633678 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8011: The continuing calibration verification (CCV) associated with batch 400-634065 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

Organic Prep

Method 3520C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 400-634770.

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

VOA Prep

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

Sample Summary

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

Job ID: 400-240428-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-240428-1	TB-ROX-071223-8260-A	Water	07/12/23 12:00	07/13/23 08:19
400-240428-2	TB-ROX-071223-8011-A	Water	07/12/23 12:00	07/13/23 08:19
400-240428-3	MW6D-ROX-071223	Water	07/12/23 09:25	07/13/23 08:19
400-240428-4	MW11-ROX-071223	Water	07/12/23 10:30	07/13/23 08:19
400-240428-5	MW28-ROX-071223	Water	07/12/23 12:15	07/13/23 08:19
400-240428-6	P54-ROX-071223	Water	07/12/23 13:25	07/13/23 08:19
400-240428-7	TB-ROX-071223-8260-B	Water	07/12/23 12:00	07/13/23 08:19
400-240428-8	TB-ROX-071223-8011-B	Water	07/12/23 12:00	07/13/23 08:19
400-240428-9	ROST4PZE-ROX-071223	Water	07/12/23 09:35	07/13/23 08:19
400-240428-10	MW12-ROX-071223	Water	07/12/23 10:50	07/13/23 08:19
400-240428-11	P74-ROX-071223	Water	07/12/23 13:05	07/13/23 08:19

Detection Summary

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

Job ID: 400-240428-1

Client Sample ID: TB-ROX-071223-8260-A — Lab Sample ID: 400-240428-1

No Detections.

Client Sample ID: TB-ROX-071223-8011-A — Lab Sample ID: 400-240428-2

No Detections.

Client Sample ID: MW6D-ROX-071223 — Lab Sample ID: 400-240428-3

No Detections.

Client Sample ID: MW11-ROX-071223 — Lab Sample ID: 400-240428-4

No Detections.

Client Sample ID: MW28-ROX-071223 — Lab Sample ID: 400-240428-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.1		1.0	0.22	ug/L	1		8260D	Total/NA

Client Sample ID: P54-ROX-071223 — Lab Sample ID: 400-240428-6

No Detections.

Client Sample ID: TB-ROX-071223-8260-B — Lab Sample ID: 400-240428-7

No Detections.

Client Sample ID: TB-ROX-071223-8011-B — Lab Sample ID: 400-240428-8

No Detections.

Client Sample ID: ROST4PZE-ROX-071223 — Lab Sample ID: 400-240428-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.74	J	1.0	0.50	ug/L	1		8260D	Total/NA
Ethylbenzene	4.6		1.0	0.50	ug/L	1		8260D	Total/NA
Isopropy benzene	0.89	J	1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	6.3		5.0	0.63	ug/L	1		8260D	Total/NA
Naphthalene	5.8		5.0	3.0	ug/L	1		8260D	Total/NA
o-Xylene	1.2	J	5.0	0.60	ug/L	1		8260D	Total/NA
1,2,4-Trimethy benzene	16		1.0	0.82	ug/L	1		8260D	Total/NA
Xylenes, Total	7.5	J	10	1.6	ug/L	1		8260D	Total/NA
Acenaphthene	1.3		0.20	0.098	ug/L	1		8270E SIM	Total/NA
Anthracene	1.0		0.20	0.047	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.067	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Chrysene	0.042	J	0.20	0.033	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.26		0.20	0.034	ug/L	1		8270E SIM	Total/NA
Fluorene	1.1		0.20	0.088	ug/L	1		8270E SIM	Total/NA
Phenanthrene	5.1		0.20	0.089	ug/L	1		8270E SIM	Total/NA
Pyrene	0.48		0.20	0.039	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	20		0.20	0.079	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	4.1		0.20	0.065	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW12-ROX-071223 — Lab Sample ID: 400-240428-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	0.78	J	10	0.24	ug/L	1		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Pensacola

Detection Summary

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

Job ID: 400-240428-1

Client Sample ID: P74-ROX-071223

Lab Sample ID: 400-240428-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	25		25	10	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	3.8	J	25	2.6	ug/L	1		8260D	Total/NA
Ethylbenzene	1.9		1.0	0.50	ug/L	1		8260D	Total/NA
Methyl tert-butyl ether	3.6		1.0	0.22	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	6.4		5.0	0.63	ug/L	1		8260D	Total/NA
o-Xylene	0.68	J	5.0	0.60	ug/L	1		8260D	Total/NA
Toluene	4.0		1.0	0.90	ug/L	1		8260D	Total/NA
1,2,4-Trimethy benzene	1.6		1.0	0.82	ug/L	1		8260D	Total/NA
Xylenes, Total	7.1	J	10	1.6	ug/L	1		8260D	Total/NA
Benzene - DL	420		2.0	1.0	ug/L	2		8260D	Total/NA
1-Methylnaphthalene	0.20		0.20	0.081	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	0.17	J	0.20	0.067	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene - RERA	0.13	J H	0.20	0.082	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene - RERA	0.11	J H	0.20	0.067	ug/L	1		8270E SIM	Total/NA
Diethyl phthalate	1.0	J	10	0.24	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: 400-240428-1

Client Sample ID: TB-ROX-071223-8260-A
Date Collected: 07/12/23 12:00
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-1
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			07/25/23 15:01	1
Acrolein	ND		20	3.3	ug/L			07/25/23 15:01	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 15:01	1
Benzene	ND		1.0	0.50	ug/L			07/25/23 15:01	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 15:01	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 15:01	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 15:01	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 15:01	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 15:01	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/25/23 15:01	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 15:01	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 15:01	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 15:01	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 15:01	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 15:01	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 15:01	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 15:01	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 15:01	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 15:01	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 15:01	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 15:01	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 15:01	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 15:01	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 15:01	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 15:01	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 15:01	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 15:01	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 15:01	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 15:01	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 15:01	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 15:01	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 15:01	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 15:01	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 15:01	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 15:01	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 15:01	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/25/23 15:01	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 15:01	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 15:01	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 15:01	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/25/23 15:01	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 15:01	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 15:01	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 15:01	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 15:01	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 15:01	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 15:01	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 15:01	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 15:01	1

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

Job ID: 400-240428-1

Client Sample ID: TB-ROX-071223-8260-A
Date Collected: 07/12/23 12:00
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-1
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			07/25/23 15:01	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 15:01	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 15:01	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 15:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 15:01	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 15:01	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 15:01	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 15:01	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 15:01	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 15:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 15:01	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 15:01	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 15:01	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 15:01	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 15:01	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 15:01	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/25/23 15:01	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/25/23 15:01	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 15:01	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 15:01	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*07/25/23 15:01*	*1*
Dibromofluoromethane	*114*		*75 - 126*		*07/25/23 15:01*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/25/23 15:01*	*1*

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

Job ID: 400-240428-1

Client Sample ID: TB-ROX-071223-8011-A
Date Collected: 07/12/23 12:00
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-2
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-D bromo-3-Chloropropane	ND		0.029	0.016	ug/L		07/18/23 08:10	07/21/23 12:46	1
1,2-D bromoethane	ND		0.019	0.014	ug/L		07/18/23 08:10	07/21/23 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*51 - 149*	*07/18/23 08:10*	*07/21/23 12:46*	*1*

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

Job ID: 400-240428-1

Client Sample ID: MW6D-ROX-071223
Date Collected: 07/12/23 09:25
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-3
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			07/25/23 13:30	1
Acrolein	ND		20	3.3	ug/L			07/25/23 13:30	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 13:30	1
Benzene	ND		1.0	0.50	ug/L			07/25/23 13:30	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 13:30	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 13:30	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 13:30	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 13:30	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 13:30	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/25/23 13:30	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 13:30	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 13:30	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 13:30	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 13:30	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			07/25/23 13:30	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 13:30	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 13:30	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 13:30	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 13:30	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 13:30	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 13:30	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 13:30	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 13:30	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 13:30	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 13:30	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 13:30	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 13:30	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 13:30	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 13:30	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 13:30	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 13:30	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 13:30	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 13:30	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 13:30	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 13:30	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 13:30	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/25/23 13:30	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 13:30	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 13:30	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 13:30	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/25/23 13:30	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 13:30	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 13:30	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 13:30	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 13:30	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 13:30	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 13:30	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 13:30	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 13:30	1

Client Sample ID: MW6D-ROX-071223
Date Collected: 07/12/23 09:25
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-3
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			07/25/23 13:30	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 13:30	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 13:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 13:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 13:30	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 13:30	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 13:30	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 13:30	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 13:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 13:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 13:30	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 13:30	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 13:30	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 13:30	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 13:30	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 13:30	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/25/23 13:30	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/25/23 13:30	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 13:30	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 13:30	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 13:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/25/23 13:30*	*1*
Dibromofluoromethane	*119*		*75 - 126*		*07/25/23 13:30*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/25/23 13:30*	*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		07/18/23 14:24	07/20/23 19:21	1
Acenaphthylene	ND		0.20	0.043	ug/L		07/18/23 14:24	07/20/23 19:21	1
Anthracene	ND		0.20	0.046	ug/L		07/18/23 14:24	07/20/23 19:21	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		07/18/23 14:24	07/20/23 19:21	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/18/23 14:24	07/20/23 19:21	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		07/18/23 14:24	07/20/23 19:21	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/18/23 14:24	07/20/23 19:21	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		07/18/23 14:24	07/20/23 19:21	1
Chrysene	ND		0.20	0.032	ug/L		07/18/23 14:24	07/20/23 19:21	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		07/18/23 14:24	07/20/23 19:21	1
Fluoranthene	ND		0.20	0.033	ug/L		07/18/23 14:24	07/20/23 19:21	1
Fluorene	ND		0.20	0.088	ug/L		07/18/23 14:24	07/20/23 19:21	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		07/18/23 14:24	07/20/23 19:21	1
Phenanthrene	ND		0.20	0.089	ug/L		07/18/23 14:24	07/20/23 19:21	1
Pyrene	ND		0.20	0.038	ug/L		07/18/23 14:24	07/20/23 19:21	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		07/18/23 14:24	07/20/23 19:21	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		07/18/23 14:24	07/20/23 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*87*		*18 - 147*	*07/18/23 14:24*	*07/20/23 19:21*	*1*
2-Fluorobiphenyl	*84*		*15 - 128*	*07/18/23 14:24*	*07/20/23 19:21*	*1*

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

Job ID: 400-240428-1

Client Sample ID: MW6D-ROX-071223

Date Collected: 07/12/23 09:25
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-3

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*	*07/18/23 14:24*	*07/20/23 19:21*	*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		07/18/23 14:24	07/20/23 16:29	1
Benzenethiol	ND	*- *1	9.8	1.7	ug/L		07/18/23 14:24	07/20/23 16:29	1
Benzoic acid	ND		30	7.2	ug/L		07/18/23 14:24	07/20/23 16:29	1
Benzyl alcohol	ND		9.8	2.0	ug/L		07/18/23 14:24	07/20/23 16:29	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		07/18/23 14:24	07/20/23 16:29	1
Bis(2-chloroethyl)ether	ND		9.8	2.7	ug/L		07/18/23 14:24	07/20/23 16:29	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		07/18/23 14:24	07/20/23 16:29	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		07/18/23 14:24	07/20/23 16:29	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		07/18/23 14:24	07/20/23 16:29	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		07/18/23 14:24	07/20/23 16:29	1
4-Chloroaniline	ND		9.8	3.3	ug/L		07/18/23 14:24	07/20/23 16:29	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		07/18/23 14:24	07/20/23 16:29	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		07/18/23 14:24	07/20/23 16:29	1
2-Chlorophenol	ND		9.8	2.2	ug/L		07/18/23 14:24	07/20/23 16:29	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		07/18/23 14:24	07/20/23 16:29	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		07/18/23 14:24	07/20/23 16:29	1
Dibenzofuran	ND		9.8	0.17	ug/L		07/18/23 14:24	07/20/23 16:29	1
3,3'-Dichlorobenzidine	ND		9.8	2.6	ug/L		07/18/23 14:24	07/20/23 16:29	1
2,4-Dichlorophenol	ND		9.8	3.0	ug/L		07/18/23 14:24	07/20/23 16:29	1
Diethyl phthalate	ND		9.8	0.24	ug/L		07/18/23 14:24	07/20/23 16:29	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		07/18/23 14:24	07/20/23 16:29	1
Dimethyl phthalate	ND		9.8	0.17	ug/L		07/18/23 14:24	07/20/23 16:29	1
Di-n-butyl phthalate	ND		9.8	2.7	ug/L		07/18/23 14:24	07/20/23 16:29	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		07/18/23 14:24	07/20/23 16:29	1
2,4-Dinitrophenol	ND		30	3.3	ug/L		07/18/23 14:24	07/20/23 16:29	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		07/18/23 14:24	07/20/23 16:29	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		07/18/23 14:24	07/20/23 16:29	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		07/18/23 14:24	07/20/23 16:29	1
1,4-Dioxane	ND		9.8	0.98	ug/L		07/18/23 14:24	07/20/23 16:29	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		07/18/23 14:24	07/20/23 16:29	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		07/18/23 14:24	07/20/23 16:29	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/18/23 14:24	07/20/23 16:29	1
Hexachloroethane	ND		9.8	4.1	ug/L		07/18/23 14:24	07/20/23 16:29	1
Indene	ND	*+	9.8	0.98	ug/L		07/18/23 14:24	07/20/23 16:29	1
Isophorone	ND		9.8	0.14	ug/L		07/18/23 14:24	07/20/23 16:29	1
2-Methylphenol	ND		9.8	1.8	ug/L		07/18/23 14:24	07/20/23 16:29	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		07/18/23 14:24	07/20/23 16:29	1
2-Nitroaniline	ND		9.8	2.2	ug/L		07/18/23 14:24	07/20/23 16:29	1
3-Nitroaniline	ND		9.8	1.8	ug/L		07/18/23 14:24	07/20/23 16:29	1
4-Nitroaniline	ND		9.8	1.5	ug/L		07/18/23 14:24	07/20/23 16:29	1
Nitrobenzene	ND		9.8	0.13	ug/L		07/18/23 14:24	07/20/23 16:29	1
2-Nitrophenol	ND		9.8	5.1	ug/L		07/18/23 14:24	07/20/23 16:29	1
4-Nitrophenol	ND		9.8	2.1	ug/L		07/18/23 14:24	07/20/23 16:29	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		07/18/23 14:24	07/20/23 16:29	1

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

Job ID: 400-240428-1

Client Sample ID: MW6D-ROX-071223

Date Collected: 07/12/23 09:25
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-3

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	3.2	ug/L		07/18/23 14:24	07/20/23 16:29	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		07/18/23 14:24	07/20/23 16:29	1
Pentachlorophenol	ND		20	1.4	ug/L		07/18/23 14:24	07/20/23 16:29	1
Phenol	ND		9.8	2.6	ug/L		07/18/23 14:24	07/20/23 16:29	1
Pyridine	ND		9.8	3.1	ug/L		07/18/23 14:24	07/20/23 16:29	1
Quinoline	ND		9.8	4.4	ug/L		07/18/23 14:24	07/20/23 16:29	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		07/18/23 14:24	07/20/23 16:29	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		07/18/23 14:24	07/20/23 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*46 - 124*	*07/18/23 14:24*	*07/20/23 16:29*	*1*
2-Fluorophenol	*23*		*13 - 113*	*07/18/23 14:24*	*07/20/23 16:29*	*1*
Nitrobenzene-d5	*66*		*36 - 126*	*07/18/23 14:24*	*07/20/23 16:29*	*1*
Phenol-d5	*58*		*17 - 127*	*07/18/23 14:24*	*07/20/23 16:29*	*1*
Terphenyl-d14	*101*		*44 - 149*	*07/18/23 14:24*	*07/20/23 16:29*	*1*
2,4,6-Tribromophenol	*89*		*26 - 150*	*07/18/23 14:24*	*07/20/23 16:29*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.029	0.016	ug/L		07/18/23 08:10	07/21/23 13:08	1
1,2-D bromoethane	ND		0.019	0.015	ug/L		07/18/23 08:10	07/21/23 13:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*51 - 149*	*07/18/23 08:10*	*07/21/23 13:08*	*1*

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

Job ID: 400-240428-1

Client Sample ID: MW11-ROX-071223
Date Collected: 07/12/23 10:30
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-4
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			07/25/23 15:24	1
Acrolein	ND		20	3.3	ug/L			07/25/23 15:24	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 15:24	1
Benzene	ND		1.0	0.50	ug/L			07/25/23 15:24	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 15:24	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 15:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 15:24	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 15:24	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 15:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/25/23 15:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 15:24	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 15:24	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 15:24	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 15:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 15:24	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 15:24	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 15:24	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 15:24	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 15:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 15:24	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 15:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 15:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 15:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 15:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 15:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 15:24	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 15:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 15:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 15:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 15:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 15:24	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 15:24	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 15:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 15:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 15:24	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 15:24	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/25/23 15:24	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 15:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 15:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 15:24	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/25/23 15:24	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 15:24	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 15:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 15:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 15:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 15:24	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 15:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 15:24	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 15:24	1

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

Job ID: 400-240428-1

Client Sample ID: MW11-ROX-071223
Date Collected: 07/12/23 10:30
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-4
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			07/25/23 15:24	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 15:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 15:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 15:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 15:24	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 15:24	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 15:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 15:24	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 15:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 15:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 15:24	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 15:24	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 15:24	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 15:24	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 15:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 15:24	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/25/23 15:24	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/25/23 15:24	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 15:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 15:24	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*07/25/23 15:24*	*1*
Dibromofluoromethane	*115*		*75 - 126*		*07/25/23 15:24*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/25/23 15:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.098	ug/L		07/18/23 14:24	07/20/23 19:42	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/18/23 14:24	07/20/23 19:42	1
Anthracene	ND		0.20	0.047	ug/L		07/18/23 14:24	07/20/23 19:42	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/18/23 14:24	07/20/23 19:42	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/18/23 14:24	07/20/23 19:42	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/18/23 14:24	07/20/23 19:42	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/18/23 14:24	07/20/23 19:42	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/18/23 14:24	07/20/23 19:42	1
Chrysene	ND		0.20	0.033	ug/L		07/18/23 14:24	07/20/23 19:42	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/18/23 14:24	07/20/23 19:42	1
Fluoranthene	ND		0.20	0.034	ug/L		07/18/23 14:24	07/20/23 19:42	1
Fluorene	ND		0.20	0.088	ug/L		07/18/23 14:24	07/20/23 19:42	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/18/23 14:24	07/20/23 19:42	1
Phenanthrene	ND		0.20	0.089	ug/L		07/18/23 14:24	07/20/23 19:42	1
Pyrene	ND		0.20	0.039	ug/L		07/18/23 14:24	07/20/23 19:42	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		07/18/23 14:24	07/20/23 19:42	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/18/23 14:24	07/20/23 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*92*		*18 - 147*	*07/18/23 14:24*	*07/20/23 19:42*	*1*
2-Fluorobiphenyl	*87*		*15 - 128*	*07/18/23 14:24*	*07/20/23 19:42*	*1*

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

Job ID: 400-240428-1

Client Sample ID: MW11-ROX-071223
Date Collected: 07/12/23 10:30
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-4
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*	*07/18/23 14:24*	*07/20/23 19:42*	*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		07/18/23 14:24	07/20/23 16:52	1
Benzenethiol	ND	*- *1	9.9	1.7	ug/L		07/18/23 14:24	07/20/23 16:52	1
Benzoic acid	ND		30	7.2	ug/L		07/18/23 14:24	07/20/23 16:52	1
Benzyl alcohol	ND		9.9	2.0	ug/L		07/18/23 14:24	07/20/23 16:52	1
Bis(2-chloroethoxy)methane	ND		9.9	0.16	ug/L		07/18/23 14:24	07/20/23 16:52	1
Bis(2-chloroethyl)ether	ND		9.9	2.7	ug/L		07/18/23 14:24	07/20/23 16:52	1
bis (2-chloroisopropyl) ether	ND		9.9	0.16	ug/L		07/18/23 14:24	07/20/23 16:52	1
Bis(2-ethylhexyl) phthalate	ND		9.9	5.0	ug/L		07/18/23 14:24	07/20/23 16:52	1
4-Bromophenyl phenyl ether	ND		9.9	0.20	ug/L		07/18/23 14:24	07/20/23 16:52	1
Butyl benzyl phthalate	ND		9.9	0.19	ug/L		07/18/23 14:24	07/20/23 16:52	1
4-Chloroaniline	ND		9.9	3.4	ug/L		07/18/23 14:24	07/20/23 16:52	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		07/18/23 14:24	07/20/23 16:52	1
2-Chloronaphthalene	ND		9.9	0.14	ug/L		07/18/23 14:24	07/20/23 16:52	1
2-Chlorophenol	ND		9.9	2.2	ug/L		07/18/23 14:24	07/20/23 16:52	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		07/18/23 14:24	07/20/23 16:52	1
Dibenz[a,h]acridine	ND		9.9	0.99	ug/L		07/18/23 14:24	07/20/23 16:52	1
Dibenzofuran	ND		9.9	0.17	ug/L		07/18/23 14:24	07/20/23 16:52	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		07/18/23 14:24	07/20/23 16:52	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		07/18/23 14:24	07/20/23 16:52	1
Diethyl phthalate	ND		9.9	0.24	ug/L		07/18/23 14:24	07/20/23 16:52	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		07/18/23 14:24	07/20/23 16:52	1
Dimethyl phthalate	ND		9.9	0.17	ug/L		07/18/23 14:24	07/20/23 16:52	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		07/18/23 14:24	07/20/23 16:52	1
4,6-Dinitro-ortho-cresol	ND		9.9	1.6	ug/L		07/18/23 14:24	07/20/23 16:52	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/18/23 14:24	07/20/23 16:52	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		07/18/23 14:24	07/20/23 16:52	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		07/18/23 14:24	07/20/23 16:52	1
Di-n-octyl phthalate	ND		9.9	0.17	ug/L		07/18/23 14:24	07/20/23 16:52	1
1,4-Dioxane	ND		9.9	0.99	ug/L		07/18/23 14:24	07/20/23 16:52	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		07/18/23 14:24	07/20/23 16:52	1
Hexachlorobenzene	ND		9.9	0.17	ug/L		07/18/23 14:24	07/20/23 16:52	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/18/23 14:24	07/20/23 16:52	1
Hexachloroethane	ND		9.9	4.2	ug/L		07/18/23 14:24	07/20/23 16:52	1
Indene	ND	*+	9.9	0.99	ug/L		07/18/23 14:24	07/20/23 16:52	1
Isophorone	ND		9.9	0.14	ug/L		07/18/23 14:24	07/20/23 16:52	1
2-Methylphenol	ND		9.9	1.8	ug/L		07/18/23 14:24	07/20/23 16:52	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/18/23 14:24	07/20/23 16:52	1
2-Nitroaniline	ND		9.9	2.2	ug/L		07/18/23 14:24	07/20/23 16:52	1
3-Nitroaniline	ND		9.9	1.8	ug/L		07/18/23 14:24	07/20/23 16:52	1
4-Nitroaniline	ND		9.9	1.5	ug/L		07/18/23 14:24	07/20/23 16:52	1
Nitrobenzene	ND		9.9	0.13	ug/L		07/18/23 14:24	07/20/23 16:52	1
2-Nitrophenol	ND		9.9	5.2	ug/L		07/18/23 14:24	07/20/23 16:52	1
4-Nitrophenol	ND		9.9	2.1	ug/L		07/18/23 14:24	07/20/23 16:52	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		07/18/23 14:24	07/20/23 16:52	1

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

Job ID: 400-240428-1

Client Sample ID: MW11-ROX-071223

Date Collected: 07/12/23 10:30
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-4

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		9.9	3.3	ug/L		07/18/23 14:24	07/20/23 16:52	1
N-Nitrosodiphenylamine	ND		9.9	0.18	ug/L		07/18/23 14:24	07/20/23 16:52	1
Pentachlorophenol	ND		20	1.4	ug/L		07/18/23 14:24	07/20/23 16:52	1
Phenol	ND		9.9	2.6	ug/L		07/18/23 14:24	07/20/23 16:52	1
Pyridine	ND		9.9	3.2	ug/L		07/18/23 14:24	07/20/23 16:52	1
Quinoline	ND		9.9	4.5	ug/L		07/18/23 14:24	07/20/23 16:52	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		07/18/23 14:24	07/20/23 16:52	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		07/18/23 14:24	07/20/23 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*46 - 124*	*07/18/23 14:24*	*07/20/23 16:52*	*1*
2-Fluorophenol	*32*		*13 - 113*	*07/18/23 14:24*	*07/20/23 16:52*	*1*
Nitrobenzene-d5	*64*		*36 - 126*	*07/18/23 14:24*	*07/20/23 16:52*	*1*
Phenol-d5	*63*		*17 - 127*	*07/18/23 14:24*	*07/20/23 16:52*	*1*
Terphenyl-d14	*105*		*44 - 149*	*07/18/23 14:24*	*07/20/23 16:52*	*1*
2,4,6-Tribromophenol	*89*		*26 - 150*	*07/18/23 14:24*	*07/20/23 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-D bromo-3-Chloropropane	ND		0.029	0.017	ug/L		07/18/23 08:10	07/21/23 13:29	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/18/23 08:10	07/21/23 13:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*07/18/23 08:10*	*07/21/23 13:29*	*1*

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

Job ID: 400-240428-1

Client Sample ID: MW28-ROX-071223
Date Collected: 07/12/23 12:15
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-5
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			07/25/23 15:47	1
Acrolein	ND		20	3.3	ug/L			07/25/23 15:47	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 15:47	1
Benzene	ND		1.0	0.50	ug/L			07/25/23 15:47	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 15:47	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 15:47	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 15:47	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 15:47	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 15:47	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/25/23 15:47	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 15:47	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 15:47	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 15:47	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 15:47	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 15:47	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 15:47	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 15:47	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 15:47	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 15:47	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 15:47	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 15:47	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 15:47	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 15:47	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 15:47	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 15:47	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 15:47	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 15:47	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 15:47	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 15:47	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 15:47	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 15:47	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 15:47	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 15:47	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 15:47	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 15:47	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 15:47	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/25/23 15:47	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 15:47	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 15:47	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 15:47	1
Methyl tert-butyl ether	**1.1**		1.0	0.22	ug/L			07/25/23 15:47	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 15:47	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 15:47	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 15:47	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 15:47	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 15:47	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 15:47	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 15:47	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 15:47	1

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

Job ID: 400-240428-1

Client Sample ID: MW28-ROX-071223

Date Collected: 07/12/23 12:15
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-5

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			07/25/23 15:47	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 15:47	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 15:47	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 15:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 15:47	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 15:47	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 15:47	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 15:47	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 15:47	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 15:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 15:47	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 15:47	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 15:47	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 15:47	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 15:47	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 15:47	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/25/23 15:47	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/25/23 15:47	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 15:47	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 15:47	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 15:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/25/23 15:47*	*1*
Dibromofluoromethane	*115*		*75 - 126*		*07/25/23 15:47*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/25/23 15:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.096	ug/L		07/18/23 14:24	07/20/23 20:04	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/18/23 14:24	07/20/23 20:04	1
Anthracene	ND		0.19	0.046	ug/L		07/18/23 14:24	07/20/23 20:04	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		07/18/23 14:24	07/20/23 20:04	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		07/18/23 14:24	07/20/23 20:04	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		07/18/23 14:24	07/20/23 20:04	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		07/18/23 14:24	07/20/23 20:04	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		07/18/23 14:24	07/20/23 20:04	1
Chrysene	ND		0.19	0.032	ug/L		07/18/23 14:24	07/20/23 20:04	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		07/18/23 14:24	07/20/23 20:04	1
Fluoranthene	ND		0.19	0.033	ug/L		07/18/23 14:24	07/20/23 20:04	1
Fluorene	ND		0.19	0.086	ug/L		07/18/23 14:24	07/20/23 20:04	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		07/18/23 14:24	07/20/23 20:04	1
Phenanthrene	ND		0.19	0.087	ug/L		07/18/23 14:24	07/20/23 20:04	1
Pyrene	ND		0.19	0.038	ug/L		07/18/23 14:24	07/20/23 20:04	1
1-Methylnaphthalene	ND		0.19	0.078	ug/L		07/18/23 14:24	07/20/23 20:04	1
2-Methylnaphthalene	ND		0.19	0.064	ug/L		07/18/23 14:24	07/20/23 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*93*		*18 - 147*	*07/18/23 14:24*	*07/20/23 20:04*	*1*
2-Fluorobiphenyl	*86*		*15 - 128*	*07/18/23 14:24*	*07/20/23 20:04*	*1*

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

Job ID: 400-240428-1

Client Sample ID: MW28-ROX-071223
Date Collected: 07/12/23 12:15
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-5
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*	*07/18/23 14:24*	*07/20/23 20:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	3.7	ug/L		07/18/23 14:24	07/20/23 17:15	1
Benzenethiol	ND	*- *1	9.7	1.7	ug/L		07/18/23 14:24	07/20/23 17:15	1
Benzoic acid	ND		29	7.1	ug/L		07/18/23 14:24	07/20/23 17:15	1
Benzyl alcohol	ND		9.7	1.9	ug/L		07/18/23 14:24	07/20/23 17:15	1
Bis(2-chloroethoxy)methane	ND		9.7	0.16	ug/L		07/18/23 14:24	07/20/23 17:15	1
Bis(2-chloroethyl)ether	ND		9.7	2.6	ug/L		07/18/23 14:24	07/20/23 17:15	1
bis (2-chloroisopropyl) ether	ND		9.7	0.16	ug/L		07/18/23 14:24	07/20/23 17:15	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.9	ug/L		07/18/23 14:24	07/20/23 17:15	1
4-Bromophenyl phenyl ether	ND		9.7	0.19	ug/L		07/18/23 14:24	07/20/23 17:15	1
Butyl benzyl phthalate	ND		9.7	0.18	ug/L		07/18/23 14:24	07/20/23 17:15	1
4-Chloroaniline	ND		9.7	3.3	ug/L		07/18/23 14:24	07/20/23 17:15	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		07/18/23 14:24	07/20/23 17:15	1
2-Chloronaphthalene	ND		9.7	0.14	ug/L		07/18/23 14:24	07/20/23 17:15	1
2-Chlorophenol	ND		9.7	2.1	ug/L		07/18/23 14:24	07/20/23 17:15	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		07/18/23 14:24	07/20/23 17:15	1
Dibenz[a,h]acridine	ND		9.7	0.97	ug/L		07/18/23 14:24	07/20/23 17:15	1
Dibenzofuran	ND		9.7	0.17	ug/L		07/18/23 14:24	07/20/23 17:15	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		07/18/23 14:24	07/20/23 17:15	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		07/18/23 14:24	07/20/23 17:15	1
Diethyl phthalate	ND		9.7	0.23	ug/L		07/18/23 14:24	07/20/23 17:15	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		07/18/23 14:24	07/20/23 17:15	1
Dimethyl phthalate	ND		9.7	0.17	ug/L		07/18/23 14:24	07/20/23 17:15	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		07/18/23 14:24	07/20/23 17:15	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.6	ug/L		07/18/23 14:24	07/20/23 17:15	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/18/23 14:24	07/20/23 17:15	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		07/18/23 14:24	07/20/23 17:15	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		07/18/23 14:24	07/20/23 17:15	1
Di-n-octyl phthalate	ND		9.7	0.17	ug/L		07/18/23 14:24	07/20/23 17:15	1
1,4-Dioxane	ND		9.7	0.97	ug/L		07/18/23 14:24	07/20/23 17:15	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		07/18/23 14:24	07/20/23 17:15	1
Hexachlorobenzene	ND		9.7	0.17	ug/L		07/18/23 14:24	07/20/23 17:15	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/18/23 14:24	07/20/23 17:15	1
Hexachloroethane	ND		9.7	4.1	ug/L		07/18/23 14:24	07/20/23 17:15	1
Indene	ND	*+	9.7	0.97	ug/L		07/18/23 14:24	07/20/23 17:15	1
Isophorone	ND		9.7	0.14	ug/L		07/18/23 14:24	07/20/23 17:15	1
2-Methylphenol	ND		9.7	1.7	ug/L		07/18/23 14:24	07/20/23 17:15	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		07/18/23 14:24	07/20/23 17:15	1
2-Nitroaniline	ND		9.7	2.1	ug/L		07/18/23 14:24	07/20/23 17:15	1
3-Nitroaniline	ND		9.7	1.7	ug/L		07/18/23 14:24	07/20/23 17:15	1
4-Nitroaniline	ND		9.7	1.5	ug/L		07/18/23 14:24	07/20/23 17:15	1
Nitrobenzene	ND		9.7	0.13	ug/L		07/18/23 14:24	07/20/23 17:15	1
2-Nitrophenol	ND		9.7	5.1	ug/L		07/18/23 14:24	07/20/23 17:15	1
4-Nitrophenol	ND		9.7	2.0	ug/L		07/18/23 14:24	07/20/23 17:15	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		07/18/23 14:24	07/20/23 17:15	1

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

Job ID: 400-240428-1

Client Sample ID: MW28-ROX-071223
Date Collected: 07/12/23 12:15
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-5
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		9.7	3.2	ug/L		07/18/23 14:24	07/20/23 17:15	1
N-Nitrosodiphenylamine	ND		9.7	0.17	ug/L		07/18/23 14:24	07/20/23 17:15	1
Pentachlorophenol	ND		19	1.4	ug/L		07/18/23 14:24	07/20/23 17:15	1
Phenol	ND		9.7	2.5	ug/L		07/18/23 14:24	07/20/23 17:15	1
Pyridine	ND		9.7	3.1	ug/L		07/18/23 14:24	07/20/23 17:15	1
Quinoline	ND		9.7	4.4	ug/L		07/18/23 14:24	07/20/23 17:15	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		07/18/23 14:24	07/20/23 17:15	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		07/18/23 14:24	07/20/23 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*46 - 124*	*07/18/23 14:24*	*07/20/23 17:15*	*1*
2-Fluorophenol	*14*		*13 - 113*	*07/18/23 14:24*	*07/20/23 17:15*	*1*
Nitrobenzene-d5	*57*		*36 - 126*	*07/18/23 14:24*	*07/20/23 17:15*	*1*
Phenol-d5	*48*		*17 - 127*	*07/18/23 14:24*	*07/20/23 17:15*	*1*
Terphenyl-d14	*93*		*44 - 149*	*07/18/23 14:24*	*07/20/23 17:15*	*1*
2,4,6-Tribromophenol	*76*		*26 - 150*	*07/18/23 14:24*	*07/20/23 17:15*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.028	0.016	ug/L		07/18/23 08:10	07/21/23 14:12	1
1,2-D bromoethane	ND		0.019	0.014	ug/L		07/18/23 08:10	07/21/23 14:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*115*		*51 - 149*	*07/18/23 08:10*	*07/21/23 14:12*	*1*

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

Job ID: 400-240428-1

Client Sample ID: P54-ROX-071223
Date Collected: 07/12/23 13:25
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-6
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			07/25/23 16:10	1
Acrolein	ND		20	3.3	ug/L			07/25/23 16:10	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 16:10	1
Benzene	ND		1.0	0.50	ug/L			07/25/23 16:10	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 16:10	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 16:10	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 16:10	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 16:10	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 16:10	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/25/23 16:10	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 16:10	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 16:10	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 16:10	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 16:10	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 16:10	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 16:10	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 16:10	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 16:10	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 16:10	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 16:10	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 16:10	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 16:10	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 16:10	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 16:10	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 16:10	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 16:10	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 16:10	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 16:10	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 16:10	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 16:10	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 16:10	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 16:10	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 16:10	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 16:10	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 16:10	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 16:10	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/25/23 16:10	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 16:10	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 16:10	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 16:10	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/25/23 16:10	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 16:10	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 16:10	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 16:10	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 16:10	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 16:10	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 16:10	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 16:10	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 16:10	1

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

Job ID: 400-240428-1

Client Sample ID: P54-ROX-071223
Date Collected: 07/12/23 13:25
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-6
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			07/25/23 16:10	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 16:10	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 16:10	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 16:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 16:10	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 16:10	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 16:10	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 16:10	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 16:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 16:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 16:10	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 16:10	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 16:10	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 16:10	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 16:10	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 16:10	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/25/23 16:10	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/25/23 16:10	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 16:10	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 16:10	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*72 - 130*		*07/25/23 16:10*	*1*
Dibromofluoromethane	*115*		*75 - 126*		*07/25/23 16:10*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/25/23 16:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/18/23 14:24	07/20/23 20:25	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/18/23 14:24	07/20/23 20:25	1
Anthracene	ND		0.20	0.047	ug/L		07/18/23 14:24	07/20/23 20:25	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/18/23 14:24	07/20/23 20:25	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/18/23 14:24	07/20/23 20:25	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/18/23 14:24	07/20/23 20:25	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/18/23 14:24	07/20/23 20:25	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/18/23 14:24	07/20/23 20:25	1
Chrysene	ND		0.20	0.033	ug/L		07/18/23 14:24	07/20/23 20:25	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/18/23 14:24	07/20/23 20:25	1
Fluoranthene	ND		0.20	0.034	ug/L		07/18/23 14:24	07/20/23 20:25	1
Fluorene	ND		0.20	0.089	ug/L		07/18/23 14:24	07/20/23 20:25	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/18/23 14:24	07/20/23 20:25	1
Phenanthrene	ND		0.20	0.090	ug/L		07/18/23 14:24	07/20/23 20:25	1
Pyrene	ND		0.20	0.039	ug/L		07/18/23 14:24	07/20/23 20:25	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/18/23 14:24	07/20/23 20:25	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/18/23 14:24	07/20/23 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*97*		*18 - 147*	*07/18/23 14:24*	*07/20/23 20:25*	*1*
2-Fluorobiphenyl	*90*		*15 - 128*	*07/18/23 14:24*	*07/20/23 20:25*	*1*

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

Job ID: 400-240428-1

Client Sample ID: P54-ROX-071223
Date Collected: 07/12/23 13:25
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-6
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*	*07/18/23 14:24*	*07/20/23 20:25*	*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		07/18/23 14:24	07/20/23 17:38	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		07/18/23 14:24	07/20/23 17:38	1
Benzoic acid	ND		30	7.3	ug/L		07/18/23 14:24	07/20/23 17:38	1
Benzyl alcohol	ND		10	2.0	ug/L		07/18/23 14:24	07/20/23 17:38	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/18/23 14:24	07/20/23 17:38	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/18/23 14:24	07/20/23 17:38	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/18/23 14:24	07/20/23 17:38	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/18/23 14:24	07/20/23 17:38	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/18/23 14:24	07/20/23 17:38	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/18/23 14:24	07/20/23 17:38	1
4-Chloroaniline	ND		10	3.4	ug/L		07/18/23 14:24	07/20/23 17:38	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/18/23 14:24	07/20/23 17:38	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/18/23 14:24	07/20/23 17:38	1
2-Chlorophenol	ND		10	2.2	ug/L		07/18/23 14:24	07/20/23 17:38	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/18/23 14:24	07/20/23 17:38	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/18/23 14:24	07/20/23 17:38	1
Dibenzofuran	ND		10	0.17	ug/L		07/18/23 14:24	07/20/23 17:38	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/18/23 14:24	07/20/23 17:38	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/18/23 14:24	07/20/23 17:38	1
Diethyl phthalate	ND		10	0.24	ug/L		07/18/23 14:24	07/20/23 17:38	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/18/23 14:24	07/20/23 17:38	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/18/23 14:24	07/20/23 17:38	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/18/23 14:24	07/20/23 17:38	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/18/23 14:24	07/20/23 17:38	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/18/23 14:24	07/20/23 17:38	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/18/23 14:24	07/20/23 17:38	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/18/23 14:24	07/20/23 17:38	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/18/23 14:24	07/20/23 17:38	1
1,4-Dioxane	ND		10	1.0	ug/L		07/18/23 14:24	07/20/23 17:38	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/18/23 14:24	07/20/23 17:38	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/18/23 14:24	07/20/23 17:38	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/18/23 14:24	07/20/23 17:38	1
Hexachloroethane	ND		10	4.2	ug/L		07/18/23 14:24	07/20/23 17:38	1
Indene	ND	*+	10	1.0	ug/L		07/18/23 14:24	07/20/23 17:38	1
Isophorone	ND		10	0.14	ug/L		07/18/23 14:24	07/20/23 17:38	1
2-Methylphenol	ND		10	1.8	ug/L		07/18/23 14:24	07/20/23 17:38	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/18/23 14:24	07/20/23 17:38	1
2-Nitroaniline	ND		10	2.2	ug/L		07/18/23 14:24	07/20/23 17:38	1
3-Nitroaniline	ND		10	1.8	ug/L		07/18/23 14:24	07/20/23 17:38	1
4-Nitroaniline	ND		10	1.5	ug/L		07/18/23 14:24	07/20/23 17:38	1
Nitrobenzene	ND		10	0.13	ug/L		07/18/23 14:24	07/20/23 17:38	1
2-Nitrophenol	ND		10	5.2	ug/L		07/18/23 14:24	07/20/23 17:38	1
4-Nitrophenol	ND		10	2.1	ug/L		07/18/23 14:24	07/20/23 17:38	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/18/23 14:24	07/20/23 17:38	1

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

Job ID: 400-240428-1

Client Sample ID: P54-ROX-071223
Date Collected: 07/12/23 13:25
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-6
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	3.3	ug/L		07/18/23 14:24	07/20/23 17:38	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/18/23 14:24	07/20/23 17:38	1
Pentachlorophenol	ND		20	1.4	ug/L		07/18/23 14:24	07/20/23 17:38	1
Phenol	ND		10	2.6	ug/L		07/18/23 14:24	07/20/23 17:38	1
Pyridine	ND		10	3.2	ug/L		07/18/23 14:24	07/20/23 17:38	1
Quinoline	ND		10	4.5	ug/L		07/18/23 14:24	07/20/23 17:38	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/18/23 14:24	07/20/23 17:38	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/18/23 14:24	07/20/23 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*46 - 124*	*07/18/23 14:24*	*07/20/23 17:38*	*1*
2-Fluorophenol	*24*		*13 - 113*	*07/18/23 14:24*	*07/20/23 17:38*	*1*
Nitrobenzene-d5	*61*		*36 - 126*	*07/18/23 14:24*	*07/20/23 17:38*	*1*
Phenol-d5	*48*		*17 - 127*	*07/18/23 14:24*	*07/20/23 17:38*	*1*
Terphenyl-d14	*100*		*44 - 149*	*07/18/23 14:24*	*07/20/23 17:38*	*1*
2,4,6-Tribromophenol	*67*		*26 - 150*	*07/18/23 14:24*	*07/20/23 17:38*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.029	0.016	ug/L		07/18/23 08:10	07/21/23 14:34	1
1,2-D bromoethane	ND		0.019	0.015	ug/L		07/18/23 08:10	07/21/23 14:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*51 - 149*	*07/18/23 08:10*	*07/21/23 14:34*	*1*

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

Job ID: 400-240428-1

Client Sample ID: TB-ROX-071223-8260-B
Date Collected: 07/12/23 12:00
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-7
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			07/25/23 16:33	1
Acrolein	ND		20	3.3	ug/L			07/25/23 16:33	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 16:33	1
Benzene	ND		1.0	0.50	ug/L			07/25/23 16:33	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 16:33	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 16:33	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 16:33	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 16:33	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 16:33	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/25/23 16:33	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 16:33	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 16:33	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 16:33	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 16:33	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 16:33	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 16:33	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 16:33	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 16:33	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 16:33	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 16:33	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 16:33	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 16:33	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 16:33	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 16:33	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 16:33	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 16:33	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 16:33	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 16:33	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 16:33	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 16:33	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 16:33	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 16:33	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 16:33	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 16:33	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 16:33	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 16:33	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/25/23 16:33	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 16:33	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 16:33	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 16:33	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/25/23 16:33	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 16:33	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 16:33	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 16:33	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 16:33	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 16:33	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 16:33	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 16:33	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 16:33	1

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

Job ID: 400-240428-1

Client Sample ID: TB-ROX-071223-8260-B
Date Collected: 07/12/23 12:00
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-7
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			07/25/23 16:33	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 16:33	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 16:33	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 16:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 16:33	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 16:33	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 16:33	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 16:33	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 16:33	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 16:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 16:33	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 16:33	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 16:33	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 16:33	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 16:33	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 16:33	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/25/23 16:33	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/25/23 16:33	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 16:33	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 16:33	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*07/25/23 16:33*	*1*
Dibromofluoromethane	*116*		*75 - 126*		*07/25/23 16:33*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/25/23 16:33*	*1*

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

Job ID: 400-240428-1

Client Sample ID: TB-ROX-071223-8011-B
Date Collected: 07/12/23 12:00
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-8
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-D bromo-3-Chloropropane	ND		0.029	0.017	ug/L		07/18/23 08:10	07/21/23 14:55	1
1,2-D bromoethane	ND		0.019	0.015	ug/L		07/18/23 08:10	07/21/23 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*118*		*51 - 149*	*07/18/23 08:10*	*07/21/23 14:55*	*1*

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

Job ID: 400-240428-1

Client Sample ID: ROST4PZE-ROX-071223
Date Collected: 07/12/23 09:35
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-9
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			07/25/23 16:56	1
Acrolein	ND		20	3.3	ug/L			07/25/23 16:56	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 16:56	1
Benzene	**0.74**	**J**	1.0	0.50	ug/L			07/25/23 16:56	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 16:56	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 16:56	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 16:56	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 16:56	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 16:56	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/25/23 16:56	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 16:56	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 16:56	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 16:56	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 16:56	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 16:56	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 16:56	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 16:56	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 16:56	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 16:56	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 16:56	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 16:56	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 16:56	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 16:56	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 16:56	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 16:56	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 16:56	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 16:56	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 16:56	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 16:56	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 16:56	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 16:56	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 16:56	1
Ethylbenzene	**4.6**		1.0	0.50	ug/L			07/25/23 16:56	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 16:56	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 16:56	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 16:56	1
Isopropylbenzene	**0.89**	**J**	1.0	0.53	ug/L			07/25/23 16:56	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 16:56	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 16:56	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 16:56	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/25/23 16:56	1
m-Xylene & p-Xylene	**6.3**		5.0	0.63	ug/L			07/25/23 16:56	1
Naphthalene	**5.8**		5.0	3.0	ug/L			07/25/23 16:56	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 16:56	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 16:56	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 16:56	1
o-Xylene	**1.2**	**J**	5.0	0.60	ug/L			07/25/23 16:56	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 16:56	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 16:56	1

Client Sample ID: ROST4PZE-ROX-071223
Date Collected: 07/12/23 09:35
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-9
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			07/25/23 16:56	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 16:56	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 16:56	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 16:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 16:56	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 16:56	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 16:56	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 16:56	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 16:56	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 16:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 16:56	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 16:56	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 16:56	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 16:56	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 16:56	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 16:56	1
1,2,4-Trimethylbenzene	**16**		1.0	0.82	ug/L			07/25/23 16:56	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/25/23 16:56	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 16:56	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 16:56	1
Xylenes, Total	**7.5**	**J**	10	1.6	ug/L			07/25/23 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*72 - 130*		*07/25/23 16:56*	*1*
Dibromofluoromethane	*110*		*75 - 126*		*07/25/23 16:56*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*07/25/23 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	**1.3**		0.20	0.098	ug/L		07/18/23 14:24	07/20/23 20:46	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/18/23 14:24	07/20/23 20:46	1
Anthracene	**1.0**		0.20	0.047	ug/L		07/18/23 14:24	07/20/23 20:46	1
Benzo[a]anthracene	**0.067**	**J**	0.20	0.034	ug/L		07/18/23 14:24	07/20/23 20:46	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/18/23 14:24	07/20/23 20:46	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/18/23 14:24	07/20/23 20:46	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/18/23 14:24	07/20/23 20:46	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/18/23 14:24	07/20/23 20:46	1
Chrysene	**0.042**	**J**	0.20	0.033	ug/L		07/18/23 14:24	07/20/23 20:46	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/18/23 14:24	07/20/23 20:46	1
Fluoranthene	**0.26**		0.20	0.034	ug/L		07/18/23 14:24	07/20/23 20:46	1
Fluorene	**1.1**		0.20	0.088	ug/L		07/18/23 14:24	07/20/23 20:46	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/18/23 14:24	07/20/23 20:46	1
Phenanthrene	**5.1**		0.20	0.089	ug/L		07/18/23 14:24	07/20/23 20:46	1
Pyrene	**0.48**		0.20	0.039	ug/L		07/18/23 14:24	07/24/23 21:40	1
1-Methylnaphthalene	**20**		0.20	0.079	ug/L		07/18/23 14:24	07/20/23 20:46	1
2-Methylnaphthalene	**4.1**		0.20	0.065	ug/L		07/18/23 14:24	07/20/23 20:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*67*		*18 - 147*	*07/18/23 14:24*	*07/20/23 20:46*	*1*
2-Fluorobiphenyl	*68*		*15 - 128*	*07/18/23 14:24*	*07/20/23 20:46*	*1*

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

Job ID: 400-240428-1

Client Sample ID: ROST4PZE-ROX-071223

Date Collected: 07/12/23 09:35
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-9

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	07/18/23 14:24	07/20/23 20:46	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		07/18/23 14:24	07/20/23 18:01	1
Benzenethiol	ND	*- *1	9.9	1.7	ug/L		07/18/23 14:24	07/20/23 18:01	1
Benzoic acid	ND		30	7.2	ug/L		07/18/23 14:24	07/20/23 18:01	1
Benzyl alcohol	ND		9.9	2.0	ug/L		07/18/23 14:24	07/20/23 18:01	1
Bis(2-chloroethoxy)methane	ND		9.9	0.16	ug/L		07/18/23 14:24	07/20/23 18:01	1
Bis(2-chloroethyl)ether	ND		9.9	2.7	ug/L		07/18/23 14:24	07/20/23 18:01	1
bis (2-chloroisopropyl) ether	ND		9.9	0.16	ug/L		07/18/23 14:24	07/20/23 18:01	1
Bis(2-ethylhexyl) phthalate	ND		9.9	5.0	ug/L		07/18/23 14:24	07/20/23 18:01	1
4-Bromophenyl phenyl ether	ND		9.9	0.20	ug/L		07/18/23 14:24	07/20/23 18:01	1
Butyl benzyl phthalate	ND		9.9	0.19	ug/L		07/18/23 14:24	07/20/23 18:01	1
4-Chloroaniline	ND		9.9	3.4	ug/L		07/18/23 14:24	07/20/23 18:01	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		07/18/23 14:24	07/20/23 18:01	1
2-Chloronaphthalene	ND		9.9	0.14	ug/L		07/18/23 14:24	07/20/23 18:01	1
2-Chlorophenol	ND		9.9	2.2	ug/L		07/18/23 14:24	07/20/23 18:01	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		07/18/23 14:24	07/20/23 18:01	1
Dibenz[a,h]acridine	ND		9.9	0.99	ug/L		07/18/23 14:24	07/20/23 18:01	1
Dibenzofuran	ND		9.9	0.17	ug/L		07/18/23 14:24	07/20/23 18:01	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		07/18/23 14:24	07/20/23 18:01	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		07/18/23 14:24	07/20/23 18:01	1
Diethyl phthalate	ND		9.9	0.24	ug/L		07/18/23 14:24	07/20/23 18:01	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		07/18/23 14:24	07/20/23 18:01	1
Dimethyl phthalate	ND		9.9	0.17	ug/L		07/18/23 14:24	07/20/23 18:01	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		07/18/23 14:24	07/20/23 18:01	1
4,6-Dinitro-ortho-cresol	ND		9.9	1.6	ug/L		07/18/23 14:24	07/20/23 18:01	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/18/23 14:24	07/20/23 18:01	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		07/18/23 14:24	07/20/23 18:01	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		07/18/23 14:24	07/20/23 18:01	1
Di-n-octyl phthalate	ND		9.9	0.17	ug/L		07/18/23 14:24	07/20/23 18:01	1
1,4-Dioxane	ND		9.9	0.99	ug/L		07/18/23 14:24	07/20/23 18:01	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		07/18/23 14:24	07/20/23 18:01	1
Hexachlorobenzene	ND		9.9	0.17	ug/L		07/18/23 14:24	07/20/23 18:01	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/18/23 14:24	07/20/23 18:01	1
Hexachloroethane	ND		9.9	4.2	ug/L		07/18/23 14:24	07/20/23 18:01	1
Indene	ND	*+	9.9	0.99	ug/L		07/18/23 14:24	07/20/23 18:01	1
Isophorone	ND		9.9	0.14	ug/L		07/18/23 14:24	07/20/23 18:01	1
2-Methylphenol	ND		9.9	1.8	ug/L		07/18/23 14:24	07/20/23 18:01	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/18/23 14:24	07/20/23 18:01	1
2-Nitroaniline	ND		9.9	2.2	ug/L		07/18/23 14:24	07/20/23 18:01	1
3-Nitroaniline	ND		9.9	1.8	ug/L		07/18/23 14:24	07/20/23 18:01	1
4-Nitroaniline	ND		9.9	1.5	ug/L		07/18/23 14:24	07/20/23 18:01	1
Nitrobenzene	ND		9.9	0.13	ug/L		07/18/23 14:24	07/20/23 18:01	1
2-Nitrophenol	ND		9.9	5.2	ug/L		07/18/23 14:24	07/20/23 18:01	1
4-Nitrophenol	ND		9.9	2.1	ug/L		07/18/23 14:24	07/20/23 18:01	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		07/18/23 14:24	07/20/23 18:01	1

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

Job ID: 400-240428-1

Client Sample ID: ROST4PZE-ROX-071223

Lab Sample ID: 400-240428-9

Date Collected: 07/12/23 09:35

Matrix: Water

Date Received: 07/13/23 08:19

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		07/18/23 14:24	07/20/23 18:01	1
N-Nitrosodiphenylamine	ND		9.9	0.18	ug/L		07/18/23 14:24	07/20/23 18:01	1
Pentachlorophenol	ND		20	1.4	ug/L		07/18/23 14:24	07/20/23 18:01	1
Phenol	ND		9.9	2.6	ug/L		07/18/23 14:24	07/20/23 18:01	1
Pyridine	ND		9.9	3.2	ug/L		07/18/23 14:24	07/20/23 18:01	1
Quinoline	ND		9.9	4.5	ug/L		07/18/23 14:24	07/20/23 18:01	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		07/18/23 14:24	07/20/23 18:01	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		07/18/23 14:24	07/20/23 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*46 - 124*	*07/18/23 14:24*	*07/20/23 18:01*	*1*
2-Fluorophenol	*39*		*13 - 113*	*07/18/23 14:24*	*07/20/23 18:01*	*1*
Nitrobenzene-d5	*64*		*36 - 126*	*07/18/23 14:24*	*07/20/23 18:01*	*1*
Phenol-d5	*65*		*17 - 127*	*07/18/23 14:24*	*07/20/23 18:01*	*1*
Terphenyl-d14	*82*		*44 - 149*	*07/18/23 14:24*	*07/20/23 18:01*	*1*
2,4,6-Tribromophenol	*95*		*26 - 150*	*07/18/23 14:24*	*07/20/23 18:01*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.029	0.017	ug/L		07/18/23 08:10	07/21/23 15:17	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/18/23 08:10	07/21/23 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*129*		*51 - 149*	*07/18/23 08:10*	*07/21/23 15:17*	*1*

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

Job ID: 400-240428-1

Client Sample ID: MW12-ROX-071223
Date Collected: 07/12/23 10:50
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-10
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			07/25/23 17:19	1
Acrolein	ND		20	3.3	ug/L			07/25/23 17:19	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 17:19	1
Benzene	ND		1.0	0.50	ug/L			07/25/23 17:19	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 17:19	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 17:19	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 17:19	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 17:19	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 17:19	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/25/23 17:19	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 17:19	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 17:19	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 17:19	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 17:19	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 17:19	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 17:19	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 17:19	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 17:19	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 17:19	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 17:19	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 17:19	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 17:19	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 17:19	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 17:19	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 17:19	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 17:19	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 17:19	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 17:19	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 17:19	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 17:19	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 17:19	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 17:19	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 17:19	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 17:19	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 17:19	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 17:19	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/25/23 17:19	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 17:19	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 17:19	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 17:19	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/25/23 17:19	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 17:19	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 17:19	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 17:19	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 17:19	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 17:19	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 17:19	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 17:19	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 17:19	1

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

Job ID: 400-240428-1

Client Sample ID: MW12-ROX-071223
Date Collected: 07/12/23 10:50
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-10
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			07/25/23 17:19	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 17:19	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 17:19	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 17:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 17:19	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 17:19	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 17:19	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 17:19	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 17:19	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 17:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 17:19	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 17:19	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 17:19	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 17:19	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 17:19	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 17:19	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/25/23 17:19	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/25/23 17:19	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 17:19	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 17:19	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/25/23 17:19*	*1*
Dibromofluoromethane	*116*		*75 - 126*		*07/25/23 17:19*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/25/23 17:19*	*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		07/18/23 14:24	07/21/23 13:05	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/18/23 14:24	07/21/23 13:05	1
Anthracene	ND		0.20	0.047	ug/L		07/18/23 14:24	07/21/23 13:05	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/18/23 14:24	07/21/23 13:05	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/18/23 14:24	07/21/23 13:05	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/18/23 14:24	07/21/23 13:05	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/18/23 14:24	07/21/23 13:05	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/18/23 14:24	07/21/23 13:05	1
Chrysene	ND		0.20	0.033	ug/L		07/18/23 14:24	07/21/23 13:05	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/18/23 14:24	07/21/23 13:05	1
Fluoranthene	ND		0.20	0.034	ug/L		07/18/23 14:24	07/21/23 13:05	1
Fluorene	ND		0.20	0.090	ug/L		07/18/23 14:24	07/21/23 13:05	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/18/23 14:24	07/21/23 13:05	1
Phenanthrene	ND		0.20	0.091	ug/L		07/18/23 14:24	07/21/23 13:05	1
Pyrene	ND		0.20	0.039	ug/L		07/18/23 14:24	07/21/23 13:05	1
1-Methylnaphthalene	ND		0.20	0.081	ug/L		07/18/23 14:24	07/21/23 13:05	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/18/23 14:24	07/21/23 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*104*		*18 - 147*	*07/18/23 14:24*	*07/21/23 13:05*	*1*
2-Fluorobiphenyl	*92*		*15 - 128*	*07/18/23 14:24*	*07/21/23 13:05*	*1*

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

Job ID: 400-240428-1

Client Sample ID: MW12-ROX-071223
Date Collected: 07/12/23 10:50
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-10
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*	*07/18/23 14:24*	*07/21/23 13:05*	*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		07/18/23 14:24	07/20/23 18:24	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		07/18/23 14:24	07/20/23 18:24	1
Benzoic acid	ND		30	7.3	ug/L		07/18/23 14:24	07/20/23 18:24	1
Benzyl alcohol	ND		10	2.0	ug/L		07/18/23 14:24	07/20/23 18:24	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/18/23 14:24	07/20/23 18:24	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/18/23 14:24	07/20/23 18:24	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/18/23 14:24	07/20/23 18:24	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/18/23 14:24	07/20/23 18:24	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/18/23 14:24	07/20/23 18:24	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/18/23 14:24	07/20/23 18:24	1
4-Chloroaniline	ND		10	3.4	ug/L		07/18/23 14:24	07/20/23 18:24	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/18/23 14:24	07/20/23 18:24	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/18/23 14:24	07/20/23 18:24	1
2-Chlorophenol	ND		10	2.2	ug/L		07/18/23 14:24	07/20/23 18:24	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/18/23 14:24	07/20/23 18:24	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/18/23 14:24	07/20/23 18:24	1
Dibenzofuran	ND		10	0.17	ug/L		07/18/23 14:24	07/20/23 18:24	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/18/23 14:24	07/20/23 18:24	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/18/23 14:24	07/20/23 18:24	1
Diethyl phthalate	**0.78**	**J**	10	0.24	ug/L		07/18/23 14:24	07/20/23 18:24	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/18/23 14:24	07/20/23 18:24	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/18/23 14:24	07/20/23 18:24	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/18/23 14:24	07/20/23 18:24	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/18/23 14:24	07/20/23 18:24	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/18/23 14:24	07/20/23 18:24	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/18/23 14:24	07/20/23 18:24	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/18/23 14:24	07/20/23 18:24	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/18/23 14:24	07/20/23 18:24	1
1,4-Dioxane	ND		10	1.0	ug/L		07/18/23 14:24	07/20/23 18:24	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/18/23 14:24	07/20/23 18:24	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/18/23 14:24	07/20/23 18:24	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/18/23 14:24	07/20/23 18:24	1
Hexachloroethane	ND		10	4.2	ug/L		07/18/23 14:24	07/20/23 18:24	1
Indene	ND	*+	10	1.0	ug/L		07/18/23 14:24	07/20/23 18:24	1
Isophorone	ND		10	0.14	ug/L		07/18/23 14:24	07/20/23 18:24	1
2-Methylphenol	ND		10	1.8	ug/L		07/18/23 14:24	07/20/23 18:24	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/18/23 14:24	07/20/23 18:24	1
2-Nitroaniline	ND		10	2.2	ug/L		07/18/23 14:24	07/20/23 18:24	1
3-Nitroaniline	ND		10	1.8	ug/L		07/18/23 14:24	07/20/23 18:24	1
4-Nitroaniline	ND		10	1.5	ug/L		07/18/23 14:24	07/20/23 18:24	1
Nitrobenzene	ND		10	0.13	ug/L		07/18/23 14:24	07/20/23 18:24	1
2-Nitrophenol	ND		10	5.2	ug/L		07/18/23 14:24	07/20/23 18:24	1
4-Nitrophenol	ND		10	2.1	ug/L		07/18/23 14:24	07/20/23 18:24	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/18/23 14:24	07/20/23 18:24	1

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

Job ID: 400-240428-1

Client Sample ID: MW12-ROX-071223
Date Collected: 07/12/23 10:50
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-10
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	3.3	ug/L		07/18/23 14:24	07/20/23 18:24	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/18/23 14:24	07/20/23 18:24	1
Pentachlorophenol	ND		20	1.4	ug/L		07/18/23 14:24	07/20/23 18:24	1
Phenol	ND		10	2.6	ug/L		07/18/23 14:24	07/20/23 18:24	1
Pyridine	ND		10	3.2	ug/L		07/18/23 14:24	07/20/23 18:24	1
Quinoline	ND		10	4.5	ug/L		07/18/23 14:24	07/20/23 18:24	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/18/23 14:24	07/20/23 18:24	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/18/23 14:24	07/20/23 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*46 - 124*	*07/18/23 14:24*	*07/20/23 18:24*	*1*
2-Fluorophenol	*30*		*13 - 113*	*07/18/23 14:24*	*07/20/23 18:24*	*1*
Nitrobenzene-d5	*66*		*36 - 126*	*07/18/23 14:24*	*07/20/23 18:24*	*1*
Phenol-d5	*59*		*17 - 127*	*07/18/23 14:24*	*07/20/23 18:24*	*1*
Terphenyl-d14	*92*		*44 - 149*	*07/18/23 14:24*	*07/20/23 18:24*	*1*
2,4,6-Tribromophenol	*70*		*26 - 150*	*07/18/23 14:24*	*07/20/23 18:24*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.028	0.016	ug/L		07/18/23 08:10	07/21/23 15:38	1
1,2-D bromoethane	ND		0.019	0.014	ug/L		07/18/23 08:10	07/21/23 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*51 - 149*	*07/18/23 08:10*	*07/21/23 15:38*	*1*

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

Job ID: 400-240428-1

Client Sample ID: P74-ROX-071223
Date Collected: 07/12/23 13:05
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**25**		25	10	ug/L			07/25/23 17:41	1
Acrolein	ND		20	3.3	ug/L			07/25/23 17:41	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 17:41	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 17:41	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 17:41	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 17:41	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 17:41	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 17:41	1
2-Butanone (MEK)	**3.8**	**J**	25	2.6	ug/L			07/25/23 17:41	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 17:41	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 17:41	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 17:41	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 17:41	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 17:41	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 17:41	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 17:41	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 17:41	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 17:41	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 17:41	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 17:41	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 17:41	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 17:41	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 17:41	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 17:41	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 17:41	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 17:41	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 17:41	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 17:41	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 17:41	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 17:41	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 17:41	1
Ethylbenzene	**1.9**		1.0	0.50	ug/L			07/25/23 17:41	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 17:41	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 17:41	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 17:41	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/25/23 17:41	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 17:41	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 17:41	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 17:41	1
Methyl tert-butyl ether	**3.6**		1.0	0.22	ug/L			07/25/23 17:41	1
m-Xylene & p-Xylene	**6.4**		5.0	0.63	ug/L			07/25/23 17:41	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 17:41	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 17:41	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 17:41	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 17:41	1
o-Xylene	**0.68**	**J**	5.0	0.60	ug/L			07/25/23 17:41	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 17:41	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 17:41	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/25/23 17:41	1

Client Sample ID: P74-ROX-071223
Date Collected: 07/12/23 13:05
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-11
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		1.0	1.0	ug/L			07/25/23 17:41	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 17:41	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 17:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 17:41	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 17:41	1
Toluene	**4.0**		1.0	0.90	ug/L			07/25/23 17:41	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 17:41	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 17:41	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 17:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 17:41	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 17:41	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 17:41	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 17:41	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 17:41	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 17:41	1
1,2,4-Trimethylbenzene	**1.6**		1.0	0.82	ug/L			07/25/23 17:41	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/25/23 17:41	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 17:41	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 17:41	1
Xylenes, Total	**7.1**	**J**	10	1.6	ug/L			07/25/23 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*07/25/23 17:41*	*1*
Dibromofluoromethane	*112*		*75 - 126*		*07/25/23 17:41*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/25/23 17:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**420**		2.0	1.0	ug/L			07/26/23 15:44	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*07/26/23 15:44*	*2*
Dibromofluoromethane	*107*		*75 - 126*		*07/26/23 15:44*	*2*
Toluene-d8 (Surr)	*106*		*64 - 132*		*07/26/23 15:44*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		07/18/23 14:24	07/21/23 13:26	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/18/23 14:24	07/21/23 13:26	1
Anthracene	ND		0.20	0.048	ug/L		07/18/23 14:24	07/21/23 13:26	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/18/23 14:24	07/21/23 13:26	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		07/18/23 14:24	07/21/23 13:26	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/18/23 14:24	07/21/23 13:26	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/18/23 14:24	07/21/23 13:26	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		07/18/23 14:24	07/21/23 13:26	1
Chrysene	ND		0.20	0.033	ug/L		07/18/23 14:24	07/21/23 13:26	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		07/18/23 14:24	07/21/23 13:26	1
Fluoranthene	ND		0.20	0.034	ug/L		07/18/23 14:24	07/21/23 13:26	1
Fluorene	ND		0.20	0.090	ug/L		07/18/23 14:24	07/21/23 13:26	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/18/23 14:24	07/21/23 13:26	1

Client Sample ID: P74-ROX-071223
Date Collected: 07/12/23 13:05
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-11
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	0.091	ug/L		07/18/23 14:24	07/21/23 13:26	1
Pyrene	ND		0.20	0.040	ug/L		07/18/23 14:24	07/21/23 13:26	1
1-Methylnaphthalene	**0.20**		0.20	0.081	ug/L		07/18/23 14:24	07/21/23 13:26	1
2-Methylnaphthalene	**0.17**	**J**	0.20	0.067	ug/L		07/18/23 14:24	07/21/23 13:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*92*		*18 - 147*	*07/18/23 14:24*	*07/21/23 13:26*	*1*
2-Fluorobiphenyl	*81*		*15 - 128*	*07/18/23 14:24*	*07/21/23 13:26*	*1*
Nitrobenzene-d5	*67*		*10 - 144*	*07/18/23 14:24*	*07/21/23 13:26*	*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	0.10	ug/L		07/27/23 09:45	07/29/23 15:13	1
Acenaphthylene	ND	H	0.20	0.045	ug/L		07/27/23 09:45	07/29/23 15:13	1
Anthracene	ND	H	0.20	0.048	ug/L		07/27/23 09:45	07/29/23 15:13	1
Benzo[a]anthracene	ND	H	0.20	0.035	ug/L		07/27/23 09:45	07/29/23 15:13	1
Benzo[a]pyrene	ND	H	0.20	0.065	ug/L		07/27/23 09:45	07/29/23 15:13	1
Benzo[b]fluoranthene	ND	H	0.20	0.038	ug/L		07/27/23 09:45	07/29/23 15:13	1
Benzo[g,h,i]perylene	ND	H	0.20	0.028	ug/L		07/27/23 09:45	07/29/23 15:13	1
Benzo[k]fluoranthene	ND	H	0.20	0.063	ug/L		07/27/23 09:45	07/29/23 15:13	1
Chrysene	ND	H	0.20	0.034	ug/L		07/27/23 09:45	07/29/23 15:13	1
Dibenz(a,h)anthracene	ND	H	0.20	0.049	ug/L		07/27/23 09:45	07/29/23 15:13	1
Fluoranthene	ND	H	0.20	0.035	ug/L		07/27/23 09:45	07/29/23 15:13	1
Fluorene	ND	H	0.20	0.091	ug/L		07/27/23 09:45	07/29/23 15:13	1
Indeno[1,2,3-cd]pyrene	ND	H	0.20	0.035	ug/L		07/27/23 09:45	07/29/23 15:13	1
Phenanthrene	ND	H	0.20	0.092	ug/L		07/27/23 09:45	07/29/23 15:13	1
Pyrene	ND	H	0.20	0.040	ug/L		07/27/23 09:45	07/29/23 15:13	1
1-Methylnaphthalene	**0.13**	**J H**	0.20	0.082	ug/L		07/27/23 09:45	07/29/23 15:13	1
2-Methylnaphthalene	**0.11**	**J H**	0.20	0.067	ug/L		07/27/23 09:45	07/29/23 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*109*		*18 - 147*	*07/27/23 09:45*	*07/29/23 15:13*	*1*
2-Fluorobiphenyl	*104*		*15 - 128*	*07/27/23 09:45*	*07/29/23 15:13*	*1*
Nitrobenzene-d5	*92*		*10 - 144*	*07/27/23 09:45*	*07/29/23 15:13*	*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		07/18/23 14:24	07/20/23 18:47	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		07/18/23 14:24	07/20/23 18:47	1
Benzoic acid	ND		30	7.4	ug/L		07/18/23 14:24	07/20/23 18:47	1
Benzyl alcohol	ND		10	2.0	ug/L		07/18/23 14:24	07/20/23 18:47	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/18/23 14:24	07/20/23 18:47	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/18/23 14:24	07/20/23 18:47	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/18/23 14:24	07/20/23 18:47	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/18/23 14:24	07/20/23 18:47	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/18/23 14:24	07/20/23 18:47	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/18/23 14:24	07/20/23 18:47	1
4-Chloroaniline	ND		10	3.4	ug/L		07/18/23 14:24	07/20/23 18:47	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/18/23 14:24	07/20/23 18:47	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/18/23 14:24	07/20/23 18:47	1

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

Job ID: 400-240428-1

Client Sample ID: P74-ROX-071223
Date Collected: 07/12/23 13:05
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-11
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	2.2	ug/L		07/18/23 14:24	07/20/23 18:47	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/18/23 14:24	07/20/23 18:47	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/18/23 14:24	07/20/23 18:47	1
Dibenzofuran	ND		10	0.17	ug/L		07/18/23 14:24	07/20/23 18:47	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/18/23 14:24	07/20/23 18:47	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/18/23 14:24	07/20/23 18:47	1
Diethyl phthalate	**1.0**	**J**	10	0.24	ug/L		07/18/23 14:24	07/20/23 18:47	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/18/23 14:24	07/20/23 18:47	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/18/23 14:24	07/20/23 18:47	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/18/23 14:24	07/20/23 18:47	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/18/23 14:24	07/20/23 18:47	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/18/23 14:24	07/20/23 18:47	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/18/23 14:24	07/20/23 18:47	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/18/23 14:24	07/20/23 18:47	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/18/23 14:24	07/20/23 18:47	1
1,4-Dioxane	ND		10	1.0	ug/L		07/18/23 14:24	07/20/23 18:47	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/18/23 14:24	07/20/23 18:47	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/18/23 14:24	07/20/23 18:47	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/18/23 14:24	07/20/23 18:47	1
Hexachloroethane	ND		10	4.3	ug/L		07/18/23 14:24	07/20/23 18:47	1
Indene	ND	*+	10	1.0	ug/L		07/18/23 14:24	07/20/23 18:47	1
Isophorone	ND		10	0.14	ug/L		07/18/23 14:24	07/20/23 18:47	1
2-Methylphenol	ND		10	1.8	ug/L		07/18/23 14:24	07/20/23 18:47	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		07/18/23 14:24	07/20/23 18:47	1
2-Nitroaniline	ND		10	2.2	ug/L		07/18/23 14:24	07/20/23 18:47	1
3-Nitroaniline	ND		10	1.8	ug/L		07/18/23 14:24	07/20/23 18:47	1
4-Nitroaniline	ND		10	1.5	ug/L		07/18/23 14:24	07/20/23 18:47	1
Nitrobenzene	ND		10	0.13	ug/L		07/18/23 14:24	07/20/23 18:47	1
2-Nitrophenol	ND		10	5.3	ug/L		07/18/23 14:24	07/20/23 18:47	1
4-Nitrophenol	ND		10	2.1	ug/L		07/18/23 14:24	07/20/23 18:47	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/18/23 14:24	07/20/23 18:47	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/18/23 14:24	07/20/23 18:47	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/18/23 14:24	07/20/23 18:47	1
Pentachlorophenol	ND		20	1.4	ug/L		07/18/23 14:24	07/20/23 18:47	1
Phenol	ND		10	2.6	ug/L		07/18/23 14:24	07/20/23 18:47	1
Pyridine	ND		10	3.2	ug/L		07/18/23 14:24	07/20/23 18:47	1
Quinoline	ND		10	4.6	ug/L		07/18/23 14:24	07/20/23 18:47	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/18/23 14:24	07/20/23 18:47	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/18/23 14:24	07/20/23 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*46 - 124*	*07/18/23 14:24*	*07/20/23 18:47*	*1*
2-Fluorophenol	*22*		*13 - 113*	*07/18/23 14:24*	*07/20/23 18:47*	*1*
Nitrobenzene-d5	*61*		*36 - 126*	*07/18/23 14:24*	*07/20/23 18:47*	*1*
Phenol-d5	*57*		*17 - 127*	*07/18/23 14:24*	*07/20/23 18:47*	*1*
Terphenyl-d14	*97*		*44 - 149*	*07/18/23 14:24*	*07/20/23 18:47*	*1*
2,4,6-Tribromophenol	*95*		*26 - 150*	*07/18/23 14:24*	*07/20/23 18:47*	*1*

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

Job ID: 400-240428-1

Client Sample ID: P74-ROX-071223
Date Collected: 07/12/23 13:05
Date Received: 07/13/23 08:19

Lab Sample ID: 400-240428-11
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-D bromo-3-Chloropropane	ND		0.029	0.017	ug/L		07/18/23 08:10	07/21/23 16:00	1
1,2-D bromoethane	ND		0.019	0.015	ug/L		07/18/23 08:10	07/21/23 16:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*51 - 149*	*07/18/23 08:10*	*07/21/23 16:00*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Job ID: 400-240428-1
Project/Site: ROXANA QUARTERLY GW

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.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. 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 QUARTERLY GW

Job ID: 400-240428-1

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)
400-240428-1	TB-ROX-071223-8260-A	97	114	98
400-240428-3	MW6D-ROX-071223	98	119	99
400-240428-3 MS	MW6D-ROX-071223	100	113	99
400-240428-3 MSD	MW6D-ROX-071223	100	112	98
400-240428-4	MW11-ROX-071223	97	115	99
400-240428-5	MW28-ROX-071223	98	115	98
400-240428-6	P54-ROX-071223	99	115	99
400-240428-7	TB-ROX-071223-8260-B	97	116	98
400-240428-9	ROST4PZE-ROX-071223	99	110	100
400-240428-10	MW12-ROX-071223	98	116	99
400-240428-11	P74-ROX-071223	97	112	98
400-240428-11 - DL	P74-ROX-071223	106	107	106
LCS 400-634438/1002	Lab Control Sample	101	112	100
LCS 400-634438/1003	Lab Control Sample	98	118	102
LCS 400-634565/1002	Lab Control Sample	100	104	102
MB 400-634438/31	Method Blank	97	118	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)
400-240428-3	MW6D-ROX-071223	82	23	66	58	101	89
400-240428-4	MW11-ROX-071223	81	32	64	63	105	89
400-240428-5	MW28-ROX-071223	74	14	57	48	93	76
400-240428-6	P54-ROX-071223	77	24	61	48	100	67
400-240428-9	ROST4PZE-ROX-071223	77	39	64	65	82	95
400-240428-10	MW12-ROX-071223	80	30	66	59	92	70
400-240428-11	P74-ROX-071223	75	22	61	57	97	95
LCS 400-633574/16-A	Lab Control Sample	73	33	60	56	85	74
LCS 400-633574/2-A	Lab Control Sample	73	42	64	63	83	95
LCSD 400-633574/17-A	Lab Control Sample Dup	71	43	57	62	91	79
MB 400-633574/1-A	Method Blank	75	16	64	50	87	73

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: 400-240428-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) TPHL (18-147)	FBP (15-128)	NBZ (10-144)
400-240428-3	MW6D-ROX-071223	87	84	65
400-240428-4	MW11-ROX-071223	92	87	65
400-240428-5	MW28-ROX-071223	93	86	64
400-240428-6	P54-ROX-071223	97	90	67
400-240428-9	ROST4PZE-ROX-071223	67	68	71
400-240428-10	MW12-ROX-071223	104	92	76
400-240428-11	P74-ROX-071223	92	81	67
400-240428-11 - RERA	P74-ROX-071223	109	104	92
LCS 400-633574/18-A	Lab Control Sample	81	81	66
LCS 400-634770/4-A	Lab Control Sample	106	96	93
LCSD 400-633574/19-A	Lab Control Sample Dup	85	86	67
LCSD 400-634770/5-A	Lab Control Sample Dup	111	107	98
MB 400-633574/1-A	Method Blank	90	87	69
MB 400-634770/1-A	Method Blank	132	112	106

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) BFB1 (51-149)
400-240428-2	TB-ROX-071223-8011-A	91
400-240428-3	MW6D-ROX-071223	95
400-240428-4	MW11-ROX-071223	99
400-240428-5	MW28-ROX-071223	115
400-240428-6	P54-ROX-071223	105
400-240428-8	TB-ROX-071223-8011-B	118
400-240428-9	ROST4PZE-ROX-071223	129
400-240428-10	MW12-ROX-071223	102
400-240428-11	P74-ROX-071223	105
LCS 400-633516/2-A	Lab Control Sample	86
LCSD 400-633516/3-A	Lab Control Sample Dup	87
MB 400-633516/1-A	Method Blank	92

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-240428-1

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 QUARTERLY GW

Job ID: 400-240428-1

Client Sample ID: TB-ROX-071223-8260-A
Lab Sample ID: 400-240428-1
Date Collected: 07/12/23 12:00
Matrix: Water
Date Received: 07/13/23 08:19

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	634438	07/25/23 15:01	CH	EET PEN

Client Sample ID: TB-ROX-071223-8011-A
Lab Sample ID: 400-240428-2
Date Collected: 07/12/23 12:00
Matrix: Water
Date Received: 07/13/23 08:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			36.3 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			634065	07/21/23 12:46	PG	EET PEN

Client Sample ID: MW6D-ROX-071223
Lab Sample ID: 400-240428-3
Date Collected: 07/12/23 09:25
Matrix: Water
Date Received: 07/13/23 08:19

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	634438	07/25/23 13:30	CH	EET PEN
Total/NA	Prep	3520C			254 mL	1 mL	633574	07/18/23 14:24	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633983	07/20/23 16:29	S1B	EET PEN
Total/NA	Prep	3520C			254 mL	1 mL	633574	07/18/23 14:24	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633883	07/20/23 19:21	KJA	EET PEN
Total/NA	Prep	8011			36.2 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			634065	07/21/23 13:08	PG	EET PEN

Client Sample ID: MW11-ROX-071223
Lab Sample ID: 400-240428-4
Date Collected: 07/12/23 10:30
Matrix: Water
Date Received: 07/13/23 08:19

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	634438	07/25/23 15:24	CH	EET PEN
Total/NA	Prep	3520C			251.8 mL	1 mL	633574	07/18/23 14:24	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633983	07/20/23 16:52	S1B	EET PEN
Total/NA	Prep	3520C			251.8 mL	1 mL	633574	07/18/23 14:24	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633883	07/20/23 19:42	KJA	EET PEN
Total/NA	Prep	8011			35.8 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			634065	07/21/23 13:29	PG	EET PEN

Client Sample ID: MW28-ROX-071223
Lab Sample ID: 400-240428-5
Date Collected: 07/12/23 12:15
Matrix: Water
Date Received: 07/13/23 08:19

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	634438	07/25/23 15:47	CH	EET PEN
Total/NA	Prep	3520C			257.4 mL	1 mL	633574	07/18/23 14:24	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633983	07/20/23 17:15	S1B	EET PEN

Client Sample ID: MW28-ROX-071223

Lab Sample ID: 400-240428-5

Date Collected: 07/12/23 12:15

Matrix: Water

Date Received: 07/13/23 08:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			257.4 mL	1 mL	633574	07/18/23 14:24	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633883	07/20/23 20:04	KJA	EET PEN
Total/NA	Prep	8011			37.3 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			634065	07/21/23 14:12	PG	EET PEN

Client Sample ID: P54-ROX-071223

Lab Sample ID: 400-240428-6

Date Collected: 07/12/23 13:25

Matrix: Water

Date Received: 07/13/23 08:19

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	634438	07/25/23 16:10	CH	EET PEN
Total/NA	Prep	3520C			249.4 mL	1 mL	633574	07/18/23 14:24	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633983	07/20/23 17:38	S1B	EET PEN
Total/NA	Prep	3520C			249.4 mL	1 mL	633574	07/18/23 14:24	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633883	07/20/23 20:25	KJA	EET PEN
Total/NA	Prep	8011			36.1 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			634065	07/21/23 14:34	PG	EET PEN

Client Sample ID: TB-ROX-071223-8260-B

Lab Sample ID: 400-240428-7

Date Collected: 07/12/23 12:00

Matrix: Water

Date Received: 07/13/23 08:19

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	634438	07/25/23 16:33	CH	EET PEN

Client Sample ID: TB-ROX-071223-8011-B

Lab Sample ID: 400-240428-8

Date Collected: 07/12/23 12:00

Matrix: Water

Date Received: 07/13/23 08:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.9 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			634065	07/21/23 14:55	PG	EET PEN

Client Sample ID: ROST4PZE-ROX-071223

Lab Sample ID: 400-240428-9

Date Collected: 07/12/23 09:35

Matrix: Water

Date Received: 07/13/23 08:19

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	634438	07/25/23 16:56	CH	EET PEN
Total/NA	Prep	3520C			252 mL	1 mL	633574	07/18/23 14:24	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633983	07/20/23 18:01	S1B	EET PEN
Total/NA	Prep	3520C			252 mL	1 mL	633574	07/18/23 14:24	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633883	07/20/23 20:46	KJA	EET PEN
Total/NA	Prep	3520C			252 mL	1 mL	633574	07/18/23 14:24	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634435	07/24/23 21:40	KJA	EET PEN

Lab Chronicle

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

Job ID: 400-240428-1

Client Sample ID: ROST4PZE-ROX-071223

Lab Sample ID: 400-240428-9

Date Collected: 07/12/23 09:35

Matrix: Water

Date Received: 07/13/23 08:19

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	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			634065	07/21/23 15:17	PG	EET PEN

Client Sample ID: MW12-ROX-071223

Lab Sample ID: 400-240428-10

Date Collected: 07/12/23 10:50

Matrix: Water

Date Received: 07/13/23 08:19

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	634438	07/25/23 17:19	CH	EET PEN
Total/NA	Prep	3520C			248.4 mL	1 mL	633574	07/18/23 14:24	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633983	07/20/23 18:24	S1B	EET PEN
Total/NA	Prep	3520C			248.4 mL	1 mL	633574	07/18/23 14:24	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 13:05	KJA	EET PEN
Total/NA	Prep	8011			37 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			634065	07/21/23 15:38	PG	EET PEN

Client Sample ID: P74-ROX-071223

Lab Sample ID: 400-240428-11

Date Collected: 07/12/23 13:05

Matrix: Water

Date Received: 07/13/23 08:19

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	2	5 mL	5 mL	634565	07/26/23 15:44	WPD	EET PEN
Total/NA	Analysis	8260D		1	5 mL	5 mL	634438	07/25/23 17:41	CH	EET PEN
Total/NA	Prep	3520C			246.8 mL	1 mL	633574	07/18/23 14:24	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633983	07/20/23 18:47	S1B	EET PEN
Total/NA	Prep	3520C			246.8 mL	1 mL	633574	07/18/23 14:24	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 13:26	KJA	EET PEN
Total/NA	Prep	3520C	RERA		244.6 mL	1 mL	634770	07/27/23 09:45	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	635153	07/29/23 15:13	S1B	EET PEN
Total/NA	Prep	8011			36 mL	35 mL	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			634065	07/21/23 16:00	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-633516/1-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	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			633678	07/18/23 21:46	DS	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-633574/1-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	633574	07/18/23 10:58	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 16:32	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	633574	07/18/23 10:58	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633763	07/19/23 22:53	KJA	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-634438/31

Date Collected: N/A
Matrix: Water

Date Received: 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	634438	07/25/23 11:59	CH	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-634770/1-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	634770	07/27/23 09:45	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	635153	07/29/23 14:08	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-633516/2-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	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			633678	07/18/23 22:07	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-633574/16-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	3520C			250 mL	1 mL	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 16:55	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-633574/18-A

Date Collected: N/A
Matrix: Water

Date Received: N/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	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633763	07/19/23 23:14	KJA	EET PEN

Lab Chronicle

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

Job ID: 400-240428-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-633574/2-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	633574	07/18/23 10:58	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 17:41	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634438/1002
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	634438	07/25/23 10:29	CH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634438/1003
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	634438	07/25/23 11:14	CH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634565/1002
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	634565	07/26/23 08:12	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634770/4-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	634770	07/27/23 09:45	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	635153	07/29/23 14:30	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633516/3-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	633516	07/18/23 08:10	PG	EET PEN
Total/NA	Analysis	8011		1			633678	07/18/23 22:28	DS	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633574/17-A

Date Collected: N/A
Matrix: Water
Date Received: N/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	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	633800	07/19/23 17:18	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633574/19-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	633574	07/18/23 10:59	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	633763	07/19/23 23:35	KJA	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-634770/5-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	634770	07/27/23 09:45	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	635153	07/29/23 14:52	S1B	EET PEN

Client Sample ID: MW6D-ROX-071223
Lab Sample ID: 400-240428-3 MS

Date Collected: 07/12/23 09:25
Matrix: Water
Date Received: 07/13/23 08:19

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	634438	07/25/23 13:53	CH	EET PEN

Client Sample ID: MW6D-ROX-071223
Lab Sample ID: 400-240428-3 MSD

Date Collected: 07/12/23 09:25
Matrix: Water
Date Received: 07/13/23 08:19

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	634438	07/25/23 14:15	CH	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 634438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240428-1	TB-ROX-071223-8260-A	Total/NA	Water	8260D	
400-240428-3	MW6D-ROX-071223	Total/NA	Water	8260D	
400-240428-4	MW11-ROX-071223	Total/NA	Water	8260D	
400-240428-5	MW28-ROX-071223	Total/NA	Water	8260D	
400-240428-6	P54-ROX-071223	Total/NA	Water	8260D	
400-240428-7	TB-ROX-071223-8260-B	Total/NA	Water	8260D	
400-240428-9	ROST4PZE-ROX-071223	Total/NA	Water	8260D	
400-240428-10	MW12-ROX-071223	Total/NA	Water	8260D	
400-240428-11	P74-ROX-071223	Total/NA	Water	8260D	
MB 400-634438/31	Method Blank	Total/NA	Water	8260D	
LCS 400-634438/1002	Lab Control Sample	Total/NA	Water	8260D	
LCS 400-634438/1003	Lab Control Sample	Total/NA	Water	8260D	
400-240428-3 MS	MW6D-ROX-071223	Total/NA	Water	8260D	
400-240428-3 MSD	MW6D-ROX-071223	Total/NA	Water	8260D	

Analysis Batch: 634565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240428-11 - DL	P74-ROX-071223	Total/NA	Water	8260D	
LCS 400-634565/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 633574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240428-3	MW6D-ROX-071223	Total/NA	Water	3520C	
400-240428-4	MW11-ROX-071223	Total/NA	Water	3520C	
400-240428-5	MW28-ROX-071223	Total/NA	Water	3520C	
400-240428-6	P54-ROX-071223	Total/NA	Water	3520C	
400-240428-9	ROST4PZE-ROX-071223	Total/NA	Water	3520C	
400-240428-10	MW12-ROX-071223	Total/NA	Water	3520C	
400-240428-11	P74-ROX-071223	Total/NA	Water	3520C	
MB 400-633574/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-633574/16-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-633574/18-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-633574/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-633574/17-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-633574/19-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 633763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-633574/1-A	Method Blank	Total/NA	Water	8270E SIM	633574
LCS 400-633574/18-A	Lab Control Sample	Total/NA	Water	8270E SIM	633574
LCSD 400-633574/19-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	633574

Analysis Batch: 633800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-633574/1-A	Method Blank	Total/NA	Water	8270E	633574
LCS 400-633574/16-A	Lab Control Sample	Total/NA	Water	8270E	633574
LCS 400-633574/2-A	Lab Control Sample	Total/NA	Water	8270E	633574
LCSD 400-633574/17-A	Lab Control Sample Dup	Total/NA	Water	8270E	633574

GC/MS Semi VOA

Analysis Batch: 633883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240428-3	MW6D-ROX-071223	Total/NA	Water	8270E SIM	633574
400-240428-4	MW11-ROX-071223	Total/NA	Water	8270E SIM	633574
400-240428-5	MW28-ROX-071223	Total/NA	Water	8270E SIM	633574
400-240428-6	P54-ROX-071223	Total/NA	Water	8270E SIM	633574
400-240428-9	ROST4PZE-ROX-071223	Total/NA	Water	8270E SIM	633574

Analysis Batch: 633983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240428-3	MW6D-ROX-071223	Total/NA	Water	8270E	633574
400-240428-4	MW11-ROX-071223	Total/NA	Water	8270E	633574
400-240428-5	MW28-ROX-071223	Total/NA	Water	8270E	633574
400-240428-6	P54-ROX-071223	Total/NA	Water	8270E	633574
400-240428-9	ROST4PZE-ROX-071223	Total/NA	Water	8270E	633574
400-240428-10	MW12-ROX-071223	Total/NA	Water	8270E	633574
400-240428-11	P74-ROX-071223	Total/NA	Water	8270E	633574

Analysis Batch: 634089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240428-10	MW12-ROX-071223	Total/NA	Water	8270E SIM	633574
400-240428-11	P74-ROX-071223	Total/NA	Water	8270E SIM	633574

Analysis Batch: 634435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240428-9	ROST4PZE-ROX-071223	Total/NA	Water	8270E SIM	633574

Prep Batch: 634770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240428-11 - RERA	P74-ROX-071223	Total/NA	Water	3520C	
MB 400-634770/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-634770/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-634770/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 635153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240428-11 - RERA	P74-ROX-071223	Total/NA	Water	8270E SIM	634770
MB 400-634770/1-A	Method Blank	Total/NA	Water	8270E SIM	634770
LCS 400-634770/4-A	Lab Control Sample	Total/NA	Water	8270E SIM	634770
LCSD 400-634770/5-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	634770

GC Semi VOA

Prep Batch: 633516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240428-2	TB-ROX-071223-8011-A	Total/NA	Water	8011	
400-240428-3	MW6D-ROX-071223	Total/NA	Water	8011	
400-240428-4	MW11-ROX-071223	Total/NA	Water	8011	
400-240428-5	MW28-ROX-071223	Total/NA	Water	8011	
400-240428-6	P54-ROX-071223	Total/NA	Water	8011	
400-240428-8	TB-ROX-071223-8011-B	Total/NA	Water	8011	
400-240428-9	ROST4PZE-ROX-071223	Total/NA	Water	8011	
400-240428-10	MW12-ROX-071223	Total/NA	Water	8011	

GC Semi VOA (Continued)

Prep Batch: 633516 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240428-11	P74-ROX-071223	Total/NA	Water	8011	
MB 400-633516/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-633516/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-633516/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 633678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-633516/1-A	Method Blank	Total/NA	Water	8011	633516
LCS 400-633516/2-A	Lab Control Sample	Total/NA	Water	8011	633516
LCSD 400-633516/3-A	Lab Control Sample Dup	Total/NA	Water	8011	633516

Analysis Batch: 634065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240428-2	TB-ROX-071223-8011-A	Total/NA	Water	8011	633516
400-240428-3	MW6D-ROX-071223	Total/NA	Water	8011	633516
400-240428-4	MW11-ROX-071223	Total/NA	Water	8011	633516
400-240428-5	MW28-ROX-071223	Total/NA	Water	8011	633516
400-240428-6	P54-ROX-071223	Total/NA	Water	8011	633516
400-240428-8	TB-ROX-071223-8011-B	Total/NA	Water	8011	633516
400-240428-9	ROST4PZE-ROX-071223	Total/NA	Water	8011	633516
400-240428-10	MW12-ROX-071223	Total/NA	Water	8011	633516
400-240428-11	P74-ROX-071223	Total/NA	Water	8011	633516

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

Lab Sample ID: MB 400-634438/31
Matrix: Water
Analysis Batch: 634438

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/25/23 11:59	1
Acrolein	ND		20	3.3	ug/L			07/25/23 11:59	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 11:59	1
Benzene	ND		1.0	0.50	ug/L			07/25/23 11:59	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 11:59	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 11:59	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 11:59	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 11:59	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 11:59	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/25/23 11:59	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 11:59	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 11:59	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 11:59	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 11:59	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 11:59	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 11:59	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 11:59	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 11:59	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 11:59	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 11:59	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 11:59	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 11:59	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 11:59	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 11:59	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 11:59	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 11:59	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 11:59	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 11:59	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 11:59	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 11:59	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 11:59	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 11:59	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 11:59	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 11:59	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 11:59	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 11:59	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/25/23 11:59	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 11:59	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 11:59	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 11:59	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/25/23 11:59	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 11:59	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 11:59	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 11:59	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 11:59	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 11:59	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 11:59	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 11:59	1

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

Lab Sample ID: MB 400-634438/31
Matrix: Water
Analysis Batch: 634438

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 11:59	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/25/23 11:59	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 11:59	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 11:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 11:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 11:59	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 11:59	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 11:59	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 11:59	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 11:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 11:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 11:59	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 11:59	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 11:59	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 11:59	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 11:59	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 11:59	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/25/23 11:59	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/25/23 11:59	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 11:59	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 11:59	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 11:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*07/25/23 11:59*	*1*
Dibromofluoromethane	*118*		*75 - 126*		*07/25/23 11:59*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/25/23 11:59*	*1*

Lab Sample ID: LCS 400-634438/1002
Matrix: Water
Analysis Batch: 634438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acrolein	500	333		ug/L		67	38 - 160
Acrylonitrile	500	471		ug/L		94	64 - 142
Benzene	50.0	48.6		ug/L		97	70 - 130
Bromobenzene	50.0	52.3		ug/L		105	70 - 132
Bromochloromethane	50.0	54.6		ug/L		109	70 - 130
Bromodichloromethane	50.0	53.8		ug/L		108	67 - 133
Bromoform	50.0	56.3		ug/L		113	57 - 140
Bromomethane	50.0	47.8		ug/L		96	10 - 160
Carbon disulfide	50.0	44.1		ug/L		88	61 - 137
Carbon tetrachloride	50.0	54.1		ug/L		108	61 - 137
Chlorobenzene	50.0	51.6		ug/L		103	70 - 130
Chloroethane	50.0	55.6		ug/L		111	55 - 141
2-Chloroethyl vinyl ether	50.0	50.9		ug/L		102	10 - 160
Chloroform	50.0	53.1		ug/L		106	69 - 130
1-Chlorohexane	50.0	51.8		ug/L		104	69 - 130

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

Lab Sample ID: LCS 400-634438/1002
Matrix: Water
Analysis Batch: 634438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloromethane	50.0	34.8		ug/L		70	58 - 137
cis-1,2-Dichloroethene	50.0	49.1		ug/L		98	68 - 130
cis-1,3-Dichloropropene	50.0	51.1		ug/L		102	69 - 132
Dibromochloromethane	50.0	57.7		ug/L		115	67 - 135
1,2-Dichlorobenzene	50.0	55.3		ug/L		111	67 - 130
1,3-Dichlorobenzene	50.0	54.6		ug/L		109	70 - 130
1,4-Dichlorobenzene	50.0	54.2		ug/L		108	70 - 130
Dichlorodifluoromethane	50.0	43.2		ug/L		86	41 - 146
1,1-Dichloroethane	50.0	49.4		ug/L		99	70 - 130
1,2-Dichloroethane	50.0	58.5		ug/L		117	69 - 130
1,1-Dichloroethene	50.0	47.3		ug/L		95	63 - 134
1,2-Dichloropropane	50.0	50.6		ug/L		101	70 - 130
1,3-Dichloropropane	50.0	54.2		ug/L		108	70 - 130
2,2-Dichloropropane	50.0	41.4		ug/L		83	52 - 135
1,1-Dichloropropene	50.0	49.5		ug/L		99	70 - 130
Ethylbenzene	50.0	52.0		ug/L		104	70 - 130
Ethyl methacrylate	50.0	51.5		ug/L		103	68 - 130
Hexachlorobutadiene	50.0	54.3		ug/L		109	53 - 140
Isopropy benzene	50.0	53.5		ug/L		107	70 - 130
Methylene bromide	50.0	56.0		ug/L		112	70 - 130
Methylene Chloride	50.0	49.4		ug/L		99	66 - 135
Methyl tert-butyl ether	50.0	50.1		ug/L		100	66 - 130
m-Xylene & p-Xylene	50.0	52.2		ug/L		104	70 - 130
Naphthalene	50.0	51.5		ug/L		103	47 - 149
n-Butylbenzene	50.0	62.2		ug/L		124	67 - 130
N-Propylbenzene	50.0	55.2		ug/L		110	70 - 130
o-Chlorotoluene	50.0	56.6		ug/L		113	70 - 130
o-Xylene	50.0	53.0		ug/L		106	70 - 130
p-Chlorotoluene	50.0	56.3		ug/L		113	70 - 130
p-Isopropyltoluene	50.0	56.7		ug/L		113	65 - 130
sec-Butylbenzene	50.0	55.4		ug/L		111	66 - 130
Styrene	50.0	51.9		ug/L		104	70 - 130
tert-Butylbenzene	50.0	56.3		ug/L		113	64 - 139
1,1,1,2-Tetrachloroethane	50.0	54.2		ug/L		108	67 - 131
1,1,2,2-Tetrachloroethane	50.0	53.8		ug/L		108	70 - 131
Tetrachloroethene	50.0	50.7		ug/L		101	65 - 130
Toluene	50.0	49.0		ug/L		98	70 - 130
trans-1,2-Dichloroethene	50.0	49.0		ug/L		98	70 - 130
trans-1,3-Dichloropropene	50.0	52.7		ug/L		105	63 - 130
1,2,3-Trichlorobenzene	50.0	51.8		ug/L		104	60 - 138
1,2,4-Trichlorobenzene	50.0	52.1		ug/L		104	60 - 140
1,1,1-Trichloroethane	50.0	50.9		ug/L		102	68 - 130
1,1,2-Trichloroethane	50.0	54.4		ug/L		109	70 - 130
Trichloroethene	50.0	50.0		ug/L		100	70 - 130
Trichlorofluoromethane	50.0	45.5		ug/L		91	65 - 138
1,2,3-Trichloropropane	50.0	55.0		ug/L		110	70 - 130
1,2,4-Trimethy benzene	50.0	55.5		ug/L		111	70 - 130
1,3,5-Trimethy benzene	50.0	54.8		ug/L		110	69 - 130
Vinyl acetate	100	113		ug/L		113	26 - 160

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

Lab Sample ID: LCS 400-634438/1002
Matrix: Water
Analysis Batch: 634438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	50.0	37.2		ug/L		74	59 - 136
Xylenes, Total	100	105		ug/L		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*72 - 130*
Dibromofluoromethane	*112*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

Lab Sample ID: LCS 400-634438/1003
Matrix: Water
Analysis Batch: 634438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	272		ug/L		136	43 - 160
2-Butanone (MEK)	200	246		ug/L		123	61 - 145
2-Hexanone	200	258		ug/L		129	65 - 137
4-Methyl-2-pentanone (MIBK)	200	258		ug/L		129	69 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 130*
Dibromofluoromethane	*118*		*75 - 126*
Toluene-d8 (Surr)	*102*		*64 - 132*

Lab Sample ID: 400-240428-3 MS
Matrix: Water
Analysis Batch: 634438

Client Sample ID: MW6D-ROX-071223
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND		200	212		ug/L		106	43 - 150
Acrolein	ND		500	424		ug/L		85	38 - 150
Acrylonitrile	ND		500	551		ug/L		110	62 - 149
Benzene	ND		50.0	54.4		ug/L		109	56 - 142
Bromobenzene	ND		50.0	56.0		ug/L		112	59 - 136
Bromochloromethane	ND		50.0	61.7		ug/L		123	64 - 140
Bromodichloromethane	ND		50.0	61.3		ug/L		123	59 - 143
Bromoform	ND		50.0	60.9		ug/L		122	50 - 140
Bromomethane	ND		50.0	54.9		ug/L		110	10 - 150
2-Butanone (MEK)	ND		200	215		ug/L		107	55 - 150
Carbon disulfide	ND		50.0	48.2		ug/L		96	48 - 150
Carbon tetrachloride	ND		50.0	58.3		ug/L		117	55 - 145
Chlorobenzene	ND		50.0	56.0		ug/L		112	64 - 130
Chloroethane	ND		50.0	64.9		ug/L		130	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	59.5		ug/L		119	60 - 141
1-Chlorohexane	ND		50.0	56.7		ug/L		113	56 - 136
Chloromethane	ND		50.0	41.3		ug/L		83	49 - 148
cis-1,2-Dichloroethene	ND		50.0	55.3		ug/L		111	59 - 143
cis-1,3-Dichloropropene	ND		50.0	58.2		ug/L		116	57 - 140

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

Lab Sample ID: 400-240428-3 MS
Matrix: Water
Analysis Batch: 634438

Client Sample ID: MW6D-ROX-071223
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Dibromochloromethane	ND		50.0	63.5		ug/L		127	56 - 143
1,2-Dichlorobenzene	ND		50.0	58.9		ug/L		118	52 - 137
1,3-Dichlorobenzene	ND		50.0	56.7		ug/L		113	54 - 135
1,4-Dichlorobenzene	ND		50.0	56.8		ug/L		114	53 - 135
Dichlorodifluoromethane	ND		50.0	50.7		ug/L		101	16 - 150
1,1-Dichloroethane	ND		50.0	55.3		ug/L		111	61 - 144
1,2-Dichloroethane	ND		50.0	67.8		ug/L		136	60 - 141
1,1-Dichloroethene	ND		50.0	51.9		ug/L		104	54 - 147
1,2-Dichloropropane	ND		50.0	57.5		ug/L		115	66 - 137
1,3-Dichloropropane	ND		50.0	61.3		ug/L		123	66 - 133
2,2-Dichloropropane	ND		50.0	46.4		ug/L		93	42 - 144
1,1-Dichloropropene	ND		50.0	54.4		ug/L		109	65 - 136
Ethylbenzene	ND		50.0	56.4		ug/L		113	58 - 131
Ethyl methacrylate	ND		50.0	61.3		ug/L		123	64 - 130
Hexachlorobutadiene	ND		50.0	53.0		ug/L		106	31 - 149
2-Hexanone	ND		200	237		ug/L		118	65 - 140
Isopropy benzene	ND		50.0	57.2		ug/L		114	56 - 133
Methylene bromide	ND		50.0	65.6		ug/L		131	63 - 138
Methylene Chloride	ND		50.0	55.6		ug/L		111	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	256		ug/L		128	63 - 146
Methyl tert-butyl ether	ND		50.0	60.2		ug/L		120	59 - 137
m-Xylene & p-Xylene	ND		50.0	56.2		ug/L		112	57 - 130
Naphthalene	ND		50.0	59.1		ug/L		118	25 - 150
n-Butylbenzene	ND		50.0	61.5		ug/L		123	41 - 142
N-Propylbenzene	ND		50.0	56.3		ug/L		113	51 - 138
o-Chlorotoluene	ND		50.0	57.7		ug/L		115	53 - 134
o-Xylene	ND		50.0	58.1		ug/L		116	61 - 130
p-Chlorotoluene	ND		50.0	57.5		ug/L		115	54 - 133
p-Isopropyltoluene	ND		50.0	57.2		ug/L		114	48 - 139
sec-Butylbenzene	ND		50.0	56.5		ug/L		113	50 - 138
Styrene	ND		50.0	56.3		ug/L		113	58 - 131
tert-Butylbenzene	ND		50.0	57.8		ug/L		116	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	60.0		ug/L		120	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	62.4		ug/L		125	66 - 135
Tetrachloroethene	ND		50.0	46.8		ug/L		94	52 - 133
Toluene	ND		50.0	53.6		ug/L		107	65 - 130
trans-1,2-Dichloroethene	ND		50.0	53.3		ug/L		107	61 - 143
trans-1,3-Dichloropropene	ND		50.0	59.4		ug/L		119	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	56.9		ug/L		114	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	55.8		ug/L		112	39 - 148
1,1,1-Trichloroethane	ND		50.0	55.9		ug/L		112	57 - 142
1,1,2-Trichloroethane	ND		50.0	61.5		ug/L		123	66 - 131
Trichloroethene	ND		50.0	54.2		ug/L		108	64 - 136
Trichlorofluoromethane	ND		50.0	52.7		ug/L		105	54 - 150
1,2,3-Trichloropropane	ND		50.0	62.5		ug/L		125	65 - 133
1,2,4-Trimethy benzene	ND		50.0	57.7		ug/L		115	50 - 139
1,3,5-Trimethy benzene	ND		50.0	55.9		ug/L		112	52 - 135
Vinyl acetate	ND		100	142		ug/L		142	26 - 150
Vinyl chloride	ND		50.0	43.8		ug/L		88	46 - 150

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

Lab Sample ID: 400-240428-3 MS
Matrix: Water
Analysis Batch: 634438

Client Sample ID: MW6D-ROX-071223
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Xylenes, Total	ND		100	114		ug/L		114	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*72 - 130*
Dibromofluoromethane	*113*		*75 - 126*
Toluene-d8 (Surr)	*99*		*64 - 132*

Lab Sample ID: 400-240428-3 MSD
Matrix: Water
Analysis Batch: 634438

Client Sample ID: MW6D-ROX-071223
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	217		ug/L		108	43 - 150	2	30
Acrolein	ND		500	397		ug/L		79	38 - 150	6	31
Acrylonitrile	ND		500	560		ug/L		112	62 - 149	2	30
Benzene	ND		50.0	54.6		ug/L		109	56 - 142	0	30
Bromobenzene	ND		50.0	55.4		ug/L		111	59 - 136	1	30
Bromochloromethane	ND		50.0	62.5		ug/L		125	64 - 140	1	30
Bromodichloromethane	ND		50.0	61.1		ug/L		122	59 - 143	0	30
Bromoform	ND		50.0	60.1		ug/L		120	50 - 140	1	30
Bromomethane	ND		50.0	52.6		ug/L		105	10 - 150	4	50
2-Butanone (MEK)	ND		200	219		ug/L		109	55 - 150	2	30
Carbon disulfide	ND		50.0	49.5		ug/L		99	48 - 150	3	30
Carbon tetrachloride	ND		50.0	59.2		ug/L		118	55 - 145	1	30
Chlorobenzene	ND		50.0	54.5		ug/L		109	64 - 130	3	30
Chloroethane	ND		50.0	59.7		ug/L		119	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	60.1		ug/L		120	60 - 141	1	30
1-Chlorohexane	ND		50.0	53.4		ug/L		107	56 - 136	6	30
Chloromethane	ND		50.0	39.7		ug/L		79	49 - 148	4	31
cis-1,2-Dichloroethene	ND		50.0	56.8		ug/L		114	59 - 143	3	30
cis-1,3-Dichloropropene	ND		50.0	58.4		ug/L		117	57 - 140	0	30
Dibromochloromethane	ND		50.0	62.6		ug/L		125	56 - 143	1	30
1,2-Dichlorobenzene	ND		50.0	56.8		ug/L		114	52 - 137	4	30
1,3-Dichlorobenzene	ND		50.0	54.7		ug/L		109	54 - 135	4	30
1,4-Dichlorobenzene	ND		50.0	55.0		ug/L		110	53 - 135	3	30
Dichlorodifluoromethane	ND		50.0	49.4		ug/L		99	16 - 150	3	31
1,1-Dichloroethane	ND		50.0	56.5		ug/L		113	61 - 144	2	30
1,2-Dichloroethane	ND		50.0	68.1		ug/L		136	60 - 141	1	30
1,1-Dichloroethene	ND		50.0	53.3		ug/L		107	54 - 147	3	30
1,2-Dichloropropane	ND		50.0	58.9		ug/L		118	66 - 137	2	30
1,3-Dichloropropane	ND		50.0	61.5		ug/L		123	66 - 133	0	30
2,2-Dichloropropane	ND		50.0	49.8		ug/L		100	42 - 144	7	31
1,1-Dichloropropene	ND		50.0	54.7		ug/L		109	65 - 136	0	30
Ethylbenzene	ND		50.0	54.4		ug/L		109	58 - 131	4	30
Ethyl methacrylate	ND		50.0	61.8		ug/L		124	64 - 130	1	30
Hexachlorobutadiene	ND		50.0	49.8		ug/L		100	31 - 149	6	36
2-Hexanone	ND		200	241		ug/L		121	65 - 140	2	30

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

Lab Sample ID: 400-240428-3 MSD
Matrix: Water
Analysis Batch: 634438

Client Sample ID: MW6D-ROX-071223
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Isopropy benzene	ND		50.0	54.2		ug/L		108	56 - 133	5	30
Methylene bromide	ND		50.0	65.8		ug/L		132	63 - 138	0	30
Methylene Chloride	ND		50.0	58.0		ug/L		116	60 - 146	4	32
4-Methyl-2-pentanone (MIBK)	ND		200	260		ug/L		130	63 - 146	2	30
Methyl tert-butyl ether	ND		50.0	62.4		ug/L		125	59 - 137	4	30
m-Xylene & p-Xylene	ND		50.0	53.6		ug/L		107	57 - 130	5	30
Naphthalene	ND		50.0	58.8		ug/L		118	25 - 150	0	30
n-Butylbenzene	ND		50.0	54.9		ug/L		110	41 - 142	11	31
N-Propylbenzene	ND		50.0	53.7		ug/L		107	51 - 138	5	30
o-Chlorotoluene	ND		50.0	54.1		ug/L		108	53 - 134	7	30
o-Xylene	ND		50.0	56.2		ug/L		112	61 - 130	3	30
p-Chlorotoluene	ND		50.0	55.1		ug/L		110	54 - 133	4	30
p-Isopropyltoluene	ND		50.0	53.5		ug/L		107	48 - 139	7	30
sec-Butylbenzene	ND		50.0	53.5		ug/L		107	50 - 138	6	30
Styrene	ND		50.0	54.1		ug/L		108	58 - 131	4	30
tert-Butylbenzene	ND		50.0	55.9		ug/L		112	54 - 146	3	30
1,1,1,2-Tetrachloroethane	ND		50.0	58.7		ug/L		117	59 - 137	2	30
1,1,2,2-Tetrachloroethane	ND		50.0	62.4		ug/L		125	66 - 135	0	30
Tetrachloroethene	ND		50.0	45.2		ug/L		90	52 - 133	3	30
Toluene	ND		50.0	52.5		ug/L		105	65 - 130	2	30
trans-1,2-Dichloroethene	ND		50.0	54.8		ug/L		110	61 - 143	3	30
trans-1,3-Dichloropropene	ND		50.0	59.4		ug/L		119	53 - 133	0	30
1,2,3-Trichlorobenzene	ND		50.0	55.5		ug/L		111	43 - 145	2	30
1,2,4-Trichlorobenzene	ND		50.0	53.6		ug/L		107	39 - 148	4	30
1,1,1-Trichloroethane	ND		50.0	56.9		ug/L		114	57 - 142	2	30
1,1,2-Trichloroethane	ND		50.0	61.9		ug/L		124	66 - 131	1	30
Trichloroethene	ND		50.0	53.6		ug/L		107	64 - 136	1	30
Trichlorofluoromethane	ND		50.0	49.0		ug/L		98	54 - 150	7	30
1,2,3-Trichloropropane	ND		50.0	62.5		ug/L		125	65 - 133	0	30
1,2,4-Trimethy benzene	ND		50.0	54.9		ug/L		110	50 - 139	5	30
1,3,5-Trimethy benzene	ND		50.0	53.5		ug/L		107	52 - 135	4	30
Vinyl acetate	ND		100	136		ug/L		136	26 - 150	4	33
Vinyl chloride	ND		50.0	42.3		ug/L		85	46 - 150	4	30
Xylenes, Total	ND		100	110		ug/L		110	59 - 130	4	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*72 - 130*
Dibromofluoromethane	*112*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Lab Sample ID: LCS 400-634565/1002
Matrix: Water
Analysis Batch: 634565

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	55.2		ug/L		110	70 - 130		

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

Lab Sample ID: LCS 400-634565/1002
Matrix: Water
Analysis Batch: 634565

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	*100*		*72 - 130*
Dibromofluoromethane	*104*		*75 - 126*
Toluene-d8 (Surr)	*102*		*64 - 132*

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

Lab Sample ID: MB 400-633574/1-A
Matrix: Water
Analysis Batch: 633800

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633574

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/18/23 10:58	07/19/23 16:32	1
Benzenethiol	ND		10	1.7	ug/L		07/18/23 10:58	07/19/23 16:32	1
Benzoic acid	ND		30	7.3	ug/L		07/18/23 10:58	07/19/23 16:32	1
Benzyl alcohol	ND		10	2.0	ug/L		07/18/23 10:58	07/19/23 16:32	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/18/23 10:58	07/19/23 16:32	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/18/23 10:58	07/19/23 16:32	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/18/23 10:58	07/19/23 16:32	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/18/23 10:58	07/19/23 16:32	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/18/23 10:58	07/19/23 16:32	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/18/23 10:58	07/19/23 16:32	1
4-Chloroaniline	ND		10	3.4	ug/L		07/18/23 10:58	07/19/23 16:32	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/18/23 10:58	07/19/23 16:32	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/18/23 10:58	07/19/23 16:32	1
2-Chlorophenol	ND		10	2.2	ug/L		07/18/23 10:58	07/19/23 16:32	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/18/23 10:58	07/19/23 16:32	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/18/23 10:58	07/19/23 16:32	1
Dibenzofuran	ND		10	0.17	ug/L		07/18/23 10:58	07/19/23 16:32	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/18/23 10:58	07/19/23 16:32	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/18/23 10:58	07/19/23 16:32	1
Diethyl phthalate	ND		10	0.24	ug/L		07/18/23 10:58	07/19/23 16:32	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/18/23 10:58	07/19/23 16:32	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/18/23 10:58	07/19/23 16:32	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/18/23 10:58	07/19/23 16:32	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/18/23 10:58	07/19/23 16:32	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/18/23 10:58	07/19/23 16:32	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/18/23 10:58	07/19/23 16:32	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/18/23 10:58	07/19/23 16:32	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/18/23 10:58	07/19/23 16:32	1
1,4-Dioxane	ND		10	1.0	ug/L		07/18/23 10:58	07/19/23 16:32	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/18/23 10:58	07/19/23 16:32	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/18/23 10:58	07/19/23 16:32	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/18/23 10:58	07/19/23 16:32	1
Hexachloroethane	ND		10	4.2	ug/L		07/18/23 10:58	07/19/23 16:32	1
Indene	ND		10	1.0	ug/L		07/18/23 10:58	07/19/23 16:32	1
Isophorone	ND		10	0.14	ug/L		07/18/23 10:58	07/19/23 16:32	1
2-Methylphenol	ND		10	1.8	ug/L		07/18/23 10:58	07/19/23 16:32	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/18/23 10:58	07/19/23 16:32	1

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

Lab Sample ID: MB 400-633574/1-A
Matrix: Water
Analysis Batch: 633800

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633574

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.2	ug/L		07/18/23 10:58	07/19/23 16:32	1
3-Nitroaniline	ND		10	1.8	ug/L		07/18/23 10:58	07/19/23 16:32	1
4-Nitroaniline	ND		10	1.5	ug/L		07/18/23 10:58	07/19/23 16:32	1
Nitrobenzene	ND		10	0.13	ug/L		07/18/23 10:58	07/19/23 16:32	1
2-Nitrophenol	ND		10	5.2	ug/L		07/18/23 10:58	07/19/23 16:32	1
4-Nitrophenol	ND		10	2.1	ug/L		07/18/23 10:58	07/19/23 16:32	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/18/23 10:58	07/19/23 16:32	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/18/23 10:58	07/19/23 16:32	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/18/23 10:58	07/19/23 16:32	1
Pentachlorophenol	ND		20	1.4	ug/L		07/18/23 10:58	07/19/23 16:32	1
Phenol	ND		10	2.6	ug/L		07/18/23 10:58	07/19/23 16:32	1
Pyridine	ND		10	3.2	ug/L		07/18/23 10:58	07/19/23 16:32	1
Quinoline	ND		10	4.5	ug/L		07/18/23 10:58	07/19/23 16:32	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/18/23 10:58	07/19/23 16:32	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/18/23 10:58	07/19/23 16:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*46 - 124*	*07/18/23 10:58*	*07/19/23 16:32*	*1*
2-Fluorophenol	*16*		*13 - 113*	*07/18/23 10:58*	*07/19/23 16:32*	*1*
Nitrobenzene-d5	*64*		*36 - 126*	*07/18/23 10:58*	*07/19/23 16:32*	*1*
Phenol-d5	*50*		*17 - 127*	*07/18/23 10:58*	*07/19/23 16:32*	*1*
Terphenyl-d14	*87*		*44 - 149*	*07/18/23 10:58*	*07/19/23 16:32*	*1*
2,4,6-Tribromophenol	*73*		*26 - 150*	*07/18/23 10:58*	*07/19/23 16:32*	*1*

Lab Sample ID: LCS 400-633574/16-A
Matrix: Water
Analysis Batch: 633800

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633574

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	11.6		ug/L		10	10 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*46 - 124*
2-Fluorophenol	*33*		*13 - 113*
Nitrobenzene-d5	*60*		*36 - 126*
Phenol-d5	*56*		*17 - 127*
Terphenyl-d14	*85*		*44 - 149*
2,4,6-Tribromophenol	*74*		*26 - 150*

Lab Sample ID: LCS 400-633574/2-A
Matrix: Water
Analysis Batch: 633800

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633574

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Aniline			120	84.8		ug/L		71	21 - 120		
Benzoic acid			522	397		ug/L		76	10 - 144		
Benzyl alcohol			120	68.9		ug/L		57	28 - 120		
Bis(2-chloroethoxy)methane			120	77.7		ug/L		65	47 - 120		

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

Lab Sample ID: LCS 400-633574/2-A
Matrix: Water
Analysis Batch: 633800

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-chloroethyl)ether	120	75.9		ug/L		63	44 - 120
bis (2-chloroisopropyl) ether	120	78.9		ug/L		66	33 - 121
Bis(2-ethylhexyl) phthalate	120	85.8		ug/L		72	52 - 147
4-Bromophenyl phenyl ether	120	89.1		ug/L		74	54 - 122
Butyl benzyl phthalate	120	96.2		ug/L		80	54 - 133
4-Chloroaniline	120	66.5		ug/L		55	26 - 120
4-Chloro-3-methylphenol	120	83.3		ug/L		69	48 - 131
2-Chloronaphthalene	120	88.4		ug/L		74	52 - 121
2-Chlorophenol	120	67.7		ug/L		56	40 - 120
4-Chlorophenyl phenyl ether	120	94.0		ug/L		78	56 - 125
Dibenz[a,h]acridine	110	93.7		ug/L		86	31 - 150
Dibenzofuran	120	95.3		ug/L		79	56 - 122
3,3'-Dichlorobenzidine	160	148		ug/L		92	36 - 132
2,4-Dichlorophenol	120	83.4		ug/L		70	49 - 120
Diethyl phthalate	120	100		ug/L		83	50 - 137
2,4-Dimethylphenol	120	79.2		ug/L		66	48 - 120
Dimethyl phthalate	120	95.3		ug/L		79	57 - 124
Di-n-butyl phthalate	120	95.1		ug/L		79	58 - 126
4,6-Dinitro-ortho-cresol	240	176		ug/L		73	23 - 148
2,4-Dinitrophenol	240	169		ug/L		70	10 - 150
2,4-Dinitrotoluene	120	93.9		ug/L		78	54 - 142
2,6-Dinitrotoluene	120	94.3		ug/L		79	55 - 130
Di-n-octyl phthalate	120	84.4		ug/L		70	57 - 138
1,4-Dioxane	120	51.9		ug/L		43	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	78.0		ug/L		65	45 - 124
Hexachlorobenzene	120	107		ug/L		89	52 - 129
Hexachlorocyclopentadiene	120	66.0		ug/L		55	10 - 134
Hexachloroethane	120	71.4		ug/L		59	20 - 120
Indene	120	179	*+	ug/L		149	49 - 120
Isophorone	120	78.5		ug/L		65	48 - 120
2-Methylphenol	120	80.6		ug/L		67	46 - 124
3 & 4 Methylphenol	120	84.1		ug/L		70	45 - 120
2-Nitroaniline	120	81.8		ug/L		68	51 - 145
3-Nitroaniline	120	81.6		ug/L		68	37 - 127
4-Nitroaniline	120	104		ug/L		87	36 - 137
Nitrobenzene	120	70.0		ug/L		58	45 - 120
2-Nitrophenol	120	80.0		ug/L		67	40 - 124
4-Nitrophenol	240	159		ug/L		66	23 - 146
N-Nitrosodimethylamine	120	65.3		ug/L		54	29 - 137
N-Nitrosodi-n-propylamine	120	83.3		ug/L		69	45 - 120
N-Nitrosodiphenylamine	119	85.1		ug/L		72	54 - 120
Pentachlorophenol	240	194		ug/L		81	31 - 130
Phenol	120	71.2		ug/L		59	11 - 120
Pyridine	240	110		ug/L		46	16 - 120
Quinoline	110	85.6		ug/L		78	49 - 130
2,4,5-Trichlorophenol	120	93.0		ug/L		77	51 - 136
2,4,6-Trichlorophenol	120	92.7		ug/L		77	50 - 127

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

Lab Sample ID: LCS 400-633574/2-A
Matrix: Water
Analysis Batch: 633800

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633574

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	73		46 - 124
2-Fluorophenol	42		13 - 113
Nitrobenzene-d5	64		36 - 126
Phenol-d5	63		17 - 127
Terphenyl-d14	83		44 - 149
2,4,6-Tribromophenol	95		26 - 150

Lab Sample ID: LCSD 400-633574/17-A
Matrix: Water
Analysis Batch: 633800

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633574

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	8.20	J *- *1	ug/L		7	10 - 120	34	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	71		46 - 124
2-Fluorophenol	43		13 - 113
Nitrobenzene-d5	57		36 - 126
Phenol-d5	62		17 - 127
Terphenyl-d14	91		44 - 149
2,4,6-Tribromophenol	79		26 - 150

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

Lab Sample ID: MB 400-633574/1-A
Matrix: Water
Analysis Batch: 633763

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633574

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/18/23 10:58	07/19/23 22:53	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/18/23 10:58	07/19/23 22:53	1
Anthracene	ND		0.20	0.047	ug/L		07/18/23 10:58	07/19/23 22:53	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/18/23 10:58	07/19/23 22:53	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/18/23 10:58	07/19/23 22:53	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/18/23 10:58	07/19/23 22:53	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/18/23 10:58	07/19/23 22:53	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/18/23 10:58	07/19/23 22:53	1
Chrysene	ND		0.20	0.033	ug/L		07/18/23 10:58	07/19/23 22:53	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/18/23 10:58	07/19/23 22:53	1
Fluoranthene	ND		0.20	0.034	ug/L		07/18/23 10:58	07/19/23 22:53	1
Fluorene	ND		0.20	0.089	ug/L		07/18/23 10:58	07/19/23 22:53	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/18/23 10:58	07/19/23 22:53	1
Phenanthrene	ND		0.20	0.090	ug/L		07/18/23 10:58	07/19/23 22:53	1
Pyrene	ND		0.20	0.039	ug/L		07/18/23 10:58	07/19/23 22:53	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/18/23 10:58	07/19/23 22:53	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/18/23 10:58	07/19/23 22:53	1

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

Lab Sample ID: MB 400-633574/1-A
Matrix: Water
Analysis Batch: 633763

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633574

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	90		18 - 147	07/18/23 10:58	07/19/23 22:53	1
2-Fluorobiphenyl	87		15 - 128	07/18/23 10:58	07/19/23 22:53	1
Nitrobenzene-d5	69		10 - 144	07/18/23 10:58	07/19/23 22:53	1

Lab Sample ID: LCS 400-633574/18-A
Matrix: Water
Analysis Batch: 633763

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	2.00	1.52		ug/L		76	40 - 140
Acenaphthylene	2.00	1.63		ug/L		81	40 - 140
Anthracene	2.00	1.58		ug/L		79	40 - 140
Benzo[a]anthracene	2.00	1.76		ug/L		88	40 - 140
Benzo[a]pyrene	2.00	1.52		ug/L		76	40 - 140
Benzo[b]fluoranthene	2.00	1.49		ug/L		74	40 - 140
Benzo[g,h,i]perylene	2.00	1.68		ug/L		84	40 - 140
Benzo[k]fluoranthene	2.00	1.61		ug/L		81	40 - 140
Chrysene	2.00	1.70		ug/L		85	40 - 140
Dibenz(a,h)anthracene	2.00	1.75		ug/L		87	40 - 140
Fluoranthene	2.00	1.93		ug/L		97	40 - 140
Fluorene	2.00	1.59		ug/L		79	40 - 140
Indeno[1,2,3-cd]pyrene	2.00	1.73		ug/L		86	40 - 140
Phenanthrene	2.00	1.58		ug/L		79	40 - 140
Pyrene	2.00	1.37		ug/L		68	40 - 140
1-Methylnaphthalene	2.00	1.66		ug/L		83	40 - 140
2-Methylnaphthalene	2.00	1.63		ug/L		81	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	81		18 - 147
2-Fluorobiphenyl	81		15 - 128
Nitrobenzene-d5	66		10 - 144

Lab Sample ID: LCSD 400-633574/19-A
Matrix: Water
Analysis Batch: 633763

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633574

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	2.00	1.64		ug/L		82	40 - 140	8	40
Acenaphthylene	2.00	1.75		ug/L		87	40 - 140	7	40
Anthracene	2.00	1.65		ug/L		83	40 - 140	5	40
Benzo[a]anthracene	2.00	1.90		ug/L		95	40 - 140	8	40
Benzo[a]pyrene	2.00	1.70		ug/L		85	40 - 140	11	40
Benzo[b]fluoranthene	2.00	1.75		ug/L		87	40 - 140	16	40
Benzo[g,h,i]perylene	2.00	1.82		ug/L		91	40 - 140	8	40
Benzo[k]fluoranthene	2.00	1.66		ug/L		83	40 - 140	3	40
Chrysene	2.00	1.84		ug/L		92	40 - 140	8	40
Dibenz(a,h)anthracene	2.00	1.94		ug/L		97	40 - 140	10	40
Fluoranthene	2.00	1.99		ug/L		100	40 - 140	3	40

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

Lab Sample ID: LCSD 400-633574/19-A
Matrix: Water
Analysis Batch: 633763

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633574

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluorene			2.00	1.76		ug/L		88	40 - 140	10	40
Indeno[1,2,3-cd]pyrene			2.00	1.93		ug/L		97	40 - 140	11	40
Phenanthrene			2.00	1.63		ug/L		82	40 - 140	3	40
Pyrene			2.00	1.39		ug/L		69	40 - 140	2	40
1-Methylnaphthalene			2.00	1.76		ug/L		88	40 - 140	6	40
2-Methylnaphthalene			2.00	1.80		ug/L		90	40 - 140	10	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*85*		*18 - 147*
2-Fluorobiphenyl	*86*		*15 - 128*
Nitrobenzene-d5	*67*		*10 - 144*

Lab Sample ID: MB 400-634770/1-A
Matrix: Water
Analysis Batch: 635153

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634770

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/27/23 09:45	07/29/23 14:08	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/27/23 09:45	07/29/23 14:08	1
Anthracene	ND		0.20	0.047	ug/L		07/27/23 09:45	07/29/23 14:08	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/27/23 09:45	07/29/23 14:08	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/27/23 09:45	07/29/23 14:08	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/27/23 09:45	07/29/23 14:08	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/27/23 09:45	07/29/23 14:08	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/27/23 09:45	07/29/23 14:08	1
Chrysene	ND		0.20	0.033	ug/L		07/27/23 09:45	07/29/23 14:08	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/27/23 09:45	07/29/23 14:08	1
Fluoranthene	ND		0.20	0.034	ug/L		07/27/23 09:45	07/29/23 14:08	1
Fluorene	ND		0.20	0.089	ug/L		07/27/23 09:45	07/29/23 14:08	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/27/23 09:45	07/29/23 14:08	1
Phenanthrene	ND		0.20	0.090	ug/L		07/27/23 09:45	07/29/23 14:08	1
Pyrene	ND		0.20	0.039	ug/L		07/27/23 09:45	07/29/23 14:08	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/27/23 09:45	07/29/23 14:08	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/27/23 09:45	07/29/23 14:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*132*		*18 - 147*	*07/27/23 09:45*	*07/29/23 14:08*	*1*
2-Fluorobiphenyl	*112*		*15 - 128*	*07/27/23 09:45*	*07/29/23 14:08*	*1*
Nitrobenzene-d5	*106*		*10 - 144*	*07/27/23 09:45*	*07/29/23 14:08*	*1*

Lab Sample ID: LCS 400-634770/4-A
Matrix: Water
Analysis Batch: 635153

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634770

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene			2.00	1.76		ug/L		88	40 - 140
Acenaphthylene			2.00	1.69		ug/L		84	40 - 140
Anthracene			2.00	1.78		ug/L		89	40 - 140

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

Lab Sample ID: LCS 400-634770/4-A
Matrix: Water
Analysis Batch: 635153

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634770

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzo[a]anthracene			2.00	1.81		ug/L		90	40 - 140		
Benzo[a]pyrene			2.00	1.61		ug/L		81	40 - 140		
Benzo[b]fluoranthene			2.00	1.48		ug/L		74	40 - 140		
Benzo[g,h,i]perylene			2.00	1.57		ug/L		78	40 - 140		
Benzo[k]fluoranthene			2.00	1.89		ug/L		95	40 - 140		
Chrysene			2.00	2.01		ug/L		100	40 - 140		
Dibenz(a,h)anthracene			2.00	1.72		ug/L		86	40 - 140		
Fluoranthene			2.00	1.93		ug/L		96	40 - 140		
Fluorene			2.00	1.92		ug/L		96	40 - 140		
Indeno[1,2,3-cd]pyrene			2.00	1.65		ug/L		82	40 - 140		
Phenanthrene			2.00	1.79		ug/L		89	40 - 140		
Pyrene			2.00	1.69		ug/L		85	40 - 140		
1-Methylnaphthalene			2.00	1.93		ug/L		97	40 - 140		
2-Methylnaphthalene			2.00	1.86		ug/L		93	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*106*		*18 - 147*
2-Fluorobiphenyl	*96*		*15 - 128*
Nitrobenzene-d5	*93*		*10 - 144*

Lab Sample ID: LCSD 400-634770/5-A
Matrix: Water
Analysis Batch: 635153

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 634770

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			2.00	2.01		ug/L		100	40 - 140	13	40
Acenaphthylene			2.00	1.93		ug/L		97	40 - 140	14	40
Anthracene			2.00	1.96		ug/L		98	40 - 140	10	40
Benzo[a]anthracene			2.00	1.88		ug/L		94	40 - 140	4	40
Benzo[a]pyrene			2.00	1.75		ug/L		87	40 - 140	8	40
Benzo[b]fluoranthene			2.00	1.62		ug/L		81	40 - 140	9	40
Benzo[g,h,i]perylene			2.00	1.72		ug/L		86	40 - 140	9	40
Benzo[k]fluoranthene			2.00	2.14		ug/L		107	40 - 140	12	40
Chrysene			2.00	2.10		ug/L		105	40 - 140	4	40
Dibenz(a,h)anthracene			2.00	1.90		ug/L		95	40 - 140	10	40
Fluoranthene			2.00	2.03		ug/L		102	40 - 140	5	40
Fluorene			2.00	2.15		ug/L		108	40 - 140	12	40
Indeno[1,2,3-cd]pyrene			2.00	1.82		ug/L		91	40 - 140	10	40
Phenanthrene			2.00	1.93		ug/L		97	40 - 140	8	40
Pyrene			2.00	1.87		ug/L		94	40 - 140	10	40
1-Methylnaphthalene			2.00	2.29		ug/L		115	40 - 140	17	40
2-Methylnaphthalene			2.00	2.14		ug/L		107	40 - 140	14	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*111*		*18 - 147*
2-Fluorobiphenyl	*107*		*15 - 128*
Nitrobenzene-d5	*98*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-633516/1-A
Matrix: Water
Analysis Batch: 633678

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633516

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/18/23 08:10	07/18/23 21:46	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/18/23 08:10	07/18/23 21:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*51 - 149*	*07/18/23 08:10*	*07/18/23 21:46*	*1*

Lab Sample ID: LCS 400-633516/2-A
Matrix: Water
Analysis Batch: 633678

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633516

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-D bromo-3-Chloropropane			0.101	0.102		ug/L		101	60 - 140		
1,2-D bromoethane			0.101	0.0972		ug/L		96	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*86*		*51 - 149*

Lab Sample ID: LCSD 400-633516/3-A
Matrix: Water
Analysis Batch: 633678

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633516

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane			0.101	0.102		ug/L		101	60 - 140	0	30
1,2-D bromoethane			0.101	0.0975		ug/L		97	60 - 140	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*87*		*51 - 149*

Shell Oil Products US Chain Of Custody R

400-240428 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 Si... Project ID
Melissa Remiger	25278
PO #	**GSAP Project ID**
60697537 – 3.3.2	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 7/12/2023

PAGE: 1 of 2

SAMPLING COMPANY:	LOG CODE:
AECOM	

SITE ADDRESS: Street and City	State	AECOM Project / Task Number:
900 South Central Ave, ROXANA	IL	Roxana Quarterly GW 60697537 – 3.3.2

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):	SAMPLER NAME(S) (Print)	LAB USE ONLY
Melissa Remiger, Mary Massa, Brett Howell	M. Massa, E. Chalfant	

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; loredana.filimon@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°
6.0 IR11

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-071223-8260-A	7/12/2023	0000	Water	2					2	X			
	TB-ROX-071223-8011-A	7/12/2023	0000	Water	2					2		X		
	MW6D-ROX-071223	7/12/2023	0925	Water	6			2		8	X	X	X	X
	MW11-ROX-071223	7/12/2023	1030	Water	6			2		8	X	X	X	X
	MW28-ROX-071223	7/12/2023	1215	Water	6			2		8	X	X	X	X
	P54-ROX-071223	7/12/2023	1325	Water	6			2		8	X	X	X	X

7/12/23

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
MARY MASSA	FEDEX: 6339 6592 6483	7/12/2023	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time
		7.13.23	8:19
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time

CUSTODY SEALS: 2349715, 2349714

Version: 12July23

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: 7/12/2023
PO #	**GSAP Project ID**	PAGE: 2 of 2
60697537 – 3.3.2	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 60697537 – 3.3.2

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	J. Mayer, 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; loredana.filimon@aecom.com

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

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-071223-8260-B	7/12/2023	0000	Water	2					2	X			
	TB-ROX-071223-8011-B	7/12/2023	0000	Water	2					2		X		
	ROST4PZE-ROX-071223	7/12/2023	0935	Water	6			2		8	X	X	X	X
	MW12-ROX-071223	7/12/2023	1050	Water	6			2		8	X	X	X	X
	P74-ROX-071223	7/12/2023	1305	Water	6			2		8	X	X	X	X

Joe Mayer 7/12/23

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Joe Mayer	FEDEX: See page 1	7/12/2023	1600
Relinquished by: (Signature)	Received by: (Signature)	Date: 7.13.23	Time: 8:19
Relinquished by: (Signature)	Received by: (Signature)	Date	Time

Version: 13Oct22

CUSTODY SEALS: See page 1

8/3/2023

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-240428-1

Login Number: 240428

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	6.0°C IR11
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 leg ble 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: 400-240428-1
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	09-01-23
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-23
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 – 3rd Quarter 2023 Data Review

Laboratory SDG: 400-240560-1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 8/21/2023

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

Sample Identification	Sample Identification
TB-ROX-071323-8260-A	TB-ROX-071323-8011-A
MW4-ROX-071323-EB	MW4-ROX-071323
MW25-ROX-071323	MW7-ROX-071323
MW7-ROX-071323-DUP	TB-ROX-071323-8260-B
TB-ROX-071323-8011-B	MW22-ROX-071323
P57-ROX-071323	P57-ROX-071323- 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 2-butanone (MEK) was detected in equipment blank MW4-ROX-071323-EB, and trichloroethene was detected in the method blank. LCS/LCSD recoveries for benzenethiol were outside evaluation criteria. Surrogate recoveries for SVOC 2-fluorophenol and PAH 2-fluorobiphenyl in several investigative and quality control samples were outside criteria. Benzene in field duplicate pair P57-ROX-071323/ P57-ROX-071323-DUP, and phenol in field duplicate pair MW7-ROX-071323/ MW7-ROX-071323-DUP, were qualified due to field duplicate RPD above evaluation criteria; therefore, results were qualified as estimated (**J).** VOCs in several samples were diluted to bring target analytes into calibration range of the instrument. VOCs in sample MW22-ROX-071323 were diluted due to the abundance of non-target analytes. The continuing calibration verification for n-butylbenzene was outside evaluation criteria, biased high. The continuing calibration verification 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?

Yes

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration/Amount
MW4-ROX-071323-EB	VOCs	2-Butanone (MEK)	2.9 µg/L
MB 400-634747/29	VOCs	Trichloroethene	0.262 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
P57-ROX-071323	VOCs	Trichloroethene	-	**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 400-633899/4-A/5-A	SVOCs	Benzenethiol	**11/8**	30	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
MW4-ROX-071323	SVOCs	Benzenethiol	**UJ**
MW25-ROX-071323	SVOCs	Benzenethiol	**UJ**
MW7-ROX-071323	SVOCs	Benzenethiol	**UJ**
MW7-ROX-071323-DUP	SVOCs	Benzenethiol	**UJ**
MW22-ROX-071323	SVOCs	Benzenethiol	**UJ**
P57-ROX-071323	SVOCs	Benzenethiol	**UJ**
P57-ROX-071323- DUP	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW7-ROX-071323-DUP	SVOCs	2-Fluorophenol	**11**	13-113
P57-ROX-071323- DUP	SVOCs	2-Fluorophenol	**11**	13-113
LCS 400-633899/6-A	PAHs	2-Fluorobiphenyl	**134**	15-128

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
LCSD 400-633899/7-A	PAHs	2-Fluorobiphenyl	**141**	15-128

Qualifications due to surrogate recoveries were not required if only one of three base/neutral and/or acid surrogate recoveries were outside evaluation criteria. Laboratory control samples 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?

Yes

Field ID	Field Duplicate ID
MW7-ROX-071323	MW7-ROX-071323-DUP
P57-ROX-071323	P57-ROX-071323- DUP

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
MW7-ROX-071323	MW7-ROX-071323-DUP	SVOCs	Phenol	**35**	**J/J**
P57-ROX-071323	P57-ROX-071323-DUP	VOCs	Benzene	**62**	**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.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for n-butylbenzene was outside evaluation criteria, biased high. The continuing calibration verification for several analytes was outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
P57-ROX-071323	VOCs	Bromochloromethane	UJ
P57-ROX-071323	SVOCs	Benzyl alcohol	UJ
P57-ROX-071323- DUP	VOCs	Bromochloromethane	UJ
P57-ROX-071323- DUP	SVOCs	Benzyl alcohol	UJ
MW22-ROX-071323	VOCs	Chloromethane	UJ
MW22-ROX-071323	VOCs	Vinyl chloride	UJ
MW22-ROX-071323	VOCs	n-Butylbenzene	J
MW22-ROX-071323	SVOCs	Benzyl alcohol	UJ
MW4-ROX-071323	VOCs	Chloromethane	UJ
MW4-ROX-071323	VOCs	Vinyl chloride	UJ
MW4-ROX-071323	SVOCs	Benzyl alcohol	UJ
MW4-ROX-071323	PAHs	Pyrene	UJ
MW25-ROX-071323	VOCs	Chloromethane	UJ
MW25-ROX-071323	VOCs	Vinyl chloride	UJ
MW25-ROX-071323	SVOCs	Benzyl alcohol	UJ
MW25-ROX-071323	PAHs	Pyrene	UJ
MW7-ROX-071323	VOCs	Chloromethane	UJ
MW7-ROX-071323	VOCs	Vinyl chloride	UJ
MW7-ROX-071323	SVOCs	Benzyl alcohol	UJ
MW7-ROX-071323	PAHs	Pyrene	UJ
MW7-ROX-071323-DUP	VOCs	Chloromethane	UJ
MW7-ROX-071323-DUP	VOCs	Vinyl chloride	UJ
MW7-ROX-071323-DUP	SVOCs	Benzyl alcohol	UJ
MW7-ROX-071323-DUP	PAHs	Pyrene	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 7/28/2023 3:29:46 PM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-240560-1

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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Authorized for release by
Leah Klingensmith, Senior Project Manager
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(615)301-5038

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Job ID: 400-240560-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-240560-1

Receipt
The samples were received on 7/14/2023 9:08 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 2.5°C and 2.6°C

GC/MS VOA
Method 8260D: The initial cal bration 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 continuing calibration verification (CCV) associated with batch 400-634438 recovered above the upper control limit for n-Buty benzene. 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 400-634438 recovered outside acceptance criteria, low biased, for Chloromethane and Vinyl 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 one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-071323-8260-A (400-240560-1), MW4-ROX-071323-EB (400-240560-3), MW4-ROX-071323 (400-240560-4), MW25-ROX-071323 (400-240560-5), MW7-ROX-071323 (400-240560-6), MW7-ROX-071323-DUP (400-240560-7), TB-ROX-071323-8260-B (400-240560-8) and MW22-ROX-071323 (400-240560-10). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

Method 8260D: The following sample was diluted due to the abundance of non-target analytes: MW22-ROX-071323 (400-240560-10). Elevated reporting limits (RLs) are provided.

Method 8260D: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW7-ROX-071323 (400-240560-6) and MW7-ROX-071323-DUP (400-240560-7). Elevated reporting limits (RLs) are provided.

Method 8260D: The initial cal bration verification (ICV) analyzed in batch 400-625791 was outside method criteria for the following analyte(s): Hexachlorobutadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D: The method blank for analytical batch 400-634747 contained Trichloroethene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8260D: The following samples were diluted to bring the concentration of target analytes within the calibration range: P57-ROX-071323 (400-240560-11) and P57-ROX-071323- DUP (400-240560-12). Elevated reporting limits (RLs) are provided.

Method 8260D: Sample MW4-ROX-071323-EB (400-240560-3) contained 2-Butanone (MEK) between the method detection limit and the reporting limit. Reanalysis was performed with concurring results.

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: P57-ROX-071323 (400-240560-11) and P57-ROX-071323- DUP (400-240560-12). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-634747 recovered above the upper control limit for

Job ID: 400-240560-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

Bromomethane. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-634747 recovered outside acceptance criteria, low biased, for Bromochloromethane and 2-Chloroethyl vinyl ether. 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: Samples P57-ROX-071323 (400-240560-11) and P57-ROX-071323- DUP (400-240560-12) are duplicate samples but the results do not agree for Benzene, Ethylbenzene and Naphthalene. Reanalysis was performed with concurring results.

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

GC/MS Semi VOA

Method 8270E: Insufficient sample volume was available to perform a matrix sp ke/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 400-633899.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-634183 recovered outside acceptance criteria, low biased, for Benzyl alcohol. 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 400-634183 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 laboratory control sample duplicate (LCSD) for preparation batch 400-633899 and analytical batch 400-634183 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: 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: MW7-ROX-071323-DUP (400-240560-7) and P57-ROX-071323- DUP (400-240560-12). These results have been reported and qualified.

Method 8270E_SIM: Insufficient sample volume was available to perform a matrix spike/matrix sp ke duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 400-633899.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-634089 recovered outside acceptance criteria, low biased, for Pyrene. 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: (LCS 400-633899/6-A) and (LCSD 400-633899/7-A). These results have been reported and qualified.

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

GC Semi VOA

Method 8011: The continuing calibration verification (CCV) associated with batch 400-634252 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 QUARTERLY GW

Job ID: 400-240560-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-240560-1	TB-ROX-071323-8260-A	Water	07/13/23 12:00	07/14/23 09:08
400-240560-2	TB-ROX-071323-8011-A	Water	07/13/23 12:00	07/14/23 09:08
400-240560-3	MW4-ROX-071323-EB	Water	07/13/23 08:30	07/14/23 09:08
400-240560-4	MW4-ROX-071323	Water	07/13/23 09:25	07/14/23 09:08
400-240560-5	MW25-ROX-071323	Water	07/13/23 10:50	07/14/23 09:08
400-240560-6	MW7-ROX-071323	Water	07/13/23 12:05	07/14/23 09:08
400-240560-7	MW7-ROX-071323-DUP	Water	07/13/23 12:05	07/14/23 09:08
400-240560-8	TB-ROX-071323-8260-B	Water	07/13/23 12:00	07/14/23 09:08
400-240560-9	TB-ROX-071323-8011-B	Water	07/13/23 12:00	07/14/23 09:08
400-240560-10	MW22-ROX-071323	Water	07/13/23 09:35	07/14/23 09:08
400-240560-11	P57-ROX-071323	Water	07/13/23 13:00	07/14/23 09:08
400-240560-12	P57-ROX-071323- DUP	Water	07/13/23 13:00	07/14/23 09:08

Detection Summary

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

Job ID: 400-240560-1

Client Sample ID: TB-ROX-071323-8260-A — Lab Sample ID: 400-240560-1

No Detections.

Client Sample ID: TB-ROX-071323-8011-A — Lab Sample ID: 400-240560-2

No Detections.

Client Sample ID: MW4-ROX-071323-EB — Lab Sample ID: 400-240560-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	2.9	J	25	2.6	ug/L	1		8260D	Total/NA

Client Sample ID: MW4-ROX-071323 — Lab Sample ID: 400-240560-4

No Detections.

Client Sample ID: MW25-ROX-071323 — Lab Sample ID: 400-240560-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	62		25	10	ug/L	1		8260D	Total/NA
Benzene	27		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

Client Sample ID: MW7-ROX-071323 — Lab Sample ID: 400-240560-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	490000		5000	2500	ug/L	5000		8260D	Total/NA
Acenaphthene	0.16	J	0.21	0.10	ug/L	1		8270E S M	Total/NA
Anthracene	0.055	J	0.21	0.049	ug/L	1		8270E S M	Total/NA
Phenanthrene	0.11	J	0.21	0.095	ug/L	1		8270E S M	Total/NA
1-Methylnaphthalene	0.88		0.21	0.084	ug/L	1		8270E S M	Total/NA
2-Methylnaphthalene	1.3		0.21	0.069	ug/L	1		8270E S M	Total/NA
Diethyl phthalate	0.44	J	11	0.25	ug/L	1		8270E	Total/NA
Phenol	120		11	2.7	ug/L	1		8270E	Total/NA

Client Sample ID: MW7-ROX-071323-DUP — Lab Sample ID: 400-240560-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	490000		5000	2500	ug/L	5000		8260D	Total/NA
Anthracene	0.049	J	0.20	0.046	ug/L	1		8270E S M	Total/NA
Fluorene	0.095	J	0.20	0.088	ug/L	1		8270E S M	Total/NA
Phenanthrene	0.11	J	0.20	0.089	ug/L	1		8270E S M	Total/NA
1-Methylnaphthalene	0.87		0.20	0.079	ug/L	1		8270E S M	Total/NA
2-Methylnaphthalene	1.3		0.20	0.065	ug/L	1		8270E S M	Total/NA
Phenol	84		9.9	2.6	ug/L	1		8270E	Total/NA

Client Sample ID: TB-ROX-071323-8260-B — Lab Sample ID: 400-240560-8

No Detections.

Client Sample ID: TB-ROX-071323-8011-B — Lab Sample ID: 400-240560-9

No Detections.

Client Sample ID: MW22-ROX-071323 — Lab Sample ID: 400-240560-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	23	J	50	20	ug/L	2		8260D	Total/NA
Benzene	7.6		2.0	1.0	ug/L	2		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Pensacola

Client Sample ID: MW22-ROX-071323 (Continued)

Lab Sample ID: 400-240560-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	31		2.0	1.0	ug/L	2		8260D	Total/NA
Isopropylbenzene	13		2.0	1.1	ug/L	2		8260D	Total/NA
m-Xylene & p-Xylene	170		10	1.3	ug/L	2		8260D	Total/NA
Naphthalene	43		10	6.0	ug/L	2		8260D	Total/NA
n-Butylbenzene	1.9	J	2.0	1.5	ug/L	2		8260D	Total/NA
N-Propylbenzene	23		2.0	1.4	ug/L	2		8260D	Total/NA
o-Xylene	6.5	J	10	1.2	ug/L	2		8260D	Total/NA
tert-Butylbenzene	2.5		2.0	1.3	ug/L	2		8260D	Total/NA
Toluene	9.3		2.0	1.8	ug/L	2		8260D	Total/NA
1,2,4-Trimethylbenzene	71		2.0	1.6	ug/L	2		8260D	Total/NA
1,3,5-Trimethylbenzene	29		2.0	1.1	ug/L	2		8260D	Total/NA
Xylenes, Total	170		20	3.2	ug/L	2		8260D	Total/NA
1-Methylnaphthalene	5.9		0.20	0.080	ug/L	1		8270E S M	Total/NA
2-Methylnaphthalene	7.3		0.20	0.066	ug/L	1		8270E S M	Total/NA

Client Sample ID: P57-ROX-071323

Lab Sample ID: 400-240560-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	210		2.0	1.0	ug/L	2		8260D	Total/NA
2-Butanone (MEK)	5.7	J	50	5.2	ug/L	2		8260D	Total/NA
Ethylbenzene	2.8		2.0	1.0	ug/L	2		8260D	Total/NA
Isopropylbenzene	32		2.0	1.1	ug/L	2		8260D	Total/NA
m-Xylene & p-Xylene	1.5	J	10	1.3	ug/L	2		8260D	Total/NA
Naphthalene	23		10	6.0	ug/L	2		8260D	Total/NA
n-Butylbenzene	5.0		2.0	1.5	ug/L	2		8260D	Total/NA
N-Propylbenzene	42		2.0	1.4	ug/L	2		8260D	Total/NA
sec-Butylbenzene	7.5		2.0	1.4	ug/L	2		8260D	Total/NA
tert-Butylbenzene	8.5		2.0	1.3	ug/L	2		8260D	Total/NA
Toluene	4.4		2.0	1.8	ug/L	2		8260D	Total/NA
Trichloroethene	0.44	J B	2.0	0.30	ug/L	2		8260D	Total/NA
Acenaphthene	0.21	J	0.22	0.11	ug/L	1		8270E S M	Total/NA
Fluorene	0.33		0.22	0.099	ug/L	1		8270E S M	Total/NA
Phenanthrene	0.30		0.22	0.10	ug/L	1		8270E S M	Total/NA
1-Methylnaphthalene	18		0.22	0.089	ug/L	1		8270E S M	Total/NA
2-Methylnaphthalene	22		0.22	0.074	ug/L	1		8270E S M	Total/NA
Phenol	7.9	J	11	2.9	ug/L	1		8270E	Total/NA

Client Sample ID: P57-ROX-071323- DUP

Lab Sample ID: 400-240560-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	400		2.0	1.0	ug/L	2		8260D	Total/NA
Ethylbenzene	4.4		2.0	1.0	ug/L	2		8260D	Total/NA
Isopropylbenzene	38		2.0	1.1	ug/L	2		8260D	Total/NA
m-Xylene & p-Xylene	1.9	J	10	1.3	ug/L	2		8260D	Total/NA
Naphthalene	41		10	6.0	ug/L	2		8260D	Total/NA
n-Butylbenzene	5.6		2.0	1.5	ug/L	2		8260D	Total/NA
N-Propylbenzene	50		2.0	1.4	ug/L	2		8260D	Total/NA
sec-Butylbenzene	9.0		2.0	1.4	ug/L	2		8260D	Total/NA
tert-Butylbenzene	10		2.0	1.3	ug/L	2		8260D	Total/NA
Toluene	5.7		2.0	1.8	ug/L	2		8260D	Total/NA
Acenaphthene	0.22		0.20	0.098	ug/L	1		8270E S M	Total/NA
Fluorene	0.41		0.20	0.088	ug/L	1		8270E S M	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: P57-ROX-071323- DUP (Continued)

Lab Sample ID: 400-240560-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.34		0.20	0.089	ug/L	1		8270E S M	Total/NA
1-Methylnaphthalene	22		0.20	0.079	ug/L	1		8270E S M	Total/NA
2-Methylnaphthalene	26		0.20	0.065	ug/L	1		8270E S M	Total/NA
Phenol	7.2	J	9.9	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 QUARTERLY GW

Job ID: 400-240560-1

Client Sample ID: TB-ROX-071323-8260-A
Date Collected: 07/13/23 12:00
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-1
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			07/25/23 18:04	1
Acrolein	ND		20	3.3	ug/L			07/25/23 18:04	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 18:04	1
Benzene	ND		1.0	0.50	ug/L			07/25/23 18:04	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 18:04	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 18:04	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 18:04	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 18:04	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 18:04	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/25/23 18:04	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 18:04	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 18:04	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 18:04	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 18:04	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 18:04	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 18:04	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 18:04	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 18:04	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 18:04	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 18:04	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 18:04	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 18:04	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 18:04	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 18:04	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 18:04	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 18:04	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 18:04	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 18:04	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 18:04	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 18:04	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 18:04	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 18:04	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 18:04	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 18:04	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 18:04	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 18:04	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/25/23 18:04	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 18:04	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 18:04	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 18:04	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/25/23 18:04	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 18:04	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 18:04	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 18:04	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 18:04	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 18:04	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 18:04	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 18:04	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 18:04	1

Client: AECOM Technical Services Inc.
Job ID: 400-240560-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-071323-8260-A
Lab Sample ID: 400-240560-1
Date Collected: 07/13/23 12:00
Matrix: Water
Date Received: 07/14/23 09:08

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			07/25/23 18:04	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 18:04	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 18:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 18:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 18:04	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 18:04	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 18:04	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 18:04	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 18:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 18:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 18:04	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 18:04	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 18:04	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 18:04	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 18:04	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 18:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/25/23 18:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/25/23 18:04	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 18:04	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 18:04	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*72 - 130*		*07/25/23 18:04*	*1*
Dibromofluoromethane	*117*		*75 - 126*		*07/25/23 18:04*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/25/23 18:04*	*1*

Client: AECOM Technical Services Inc.
Job ID: 400-240560-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-071323-8011-A
Lab Sample ID: 400-240560-2
Date Collected: 07/13/23 12:00
Matrix: Water
Date Received: 07/14/23 09:08

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		07/20/23 08:04	07/24/23 09:35	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/20/23 08:04	07/24/23 09:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*61*		*51 - 149*	*07/20/23 08:04*	*07/24/23 09:35*	*1*

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

Job ID: 400-240560-1

Client Sample ID: MW4-ROX-071323-EB
Date Collected: 07/13/23 08:30
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-3
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			07/25/23 18:27	1
Acrolein	ND		20	3.3	ug/L			07/25/23 18:27	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 18:27	1
Benzene	ND		1.0	0.50	ug/L			07/25/23 18:27	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 18:27	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 18:27	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 18:27	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 18:27	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 18:27	1
2-Butanone (MEK)	**2.9**	**J**	25	2.6	ug/L			07/25/23 18:27	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 18:27	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 18:27	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 18:27	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 18:27	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 18:27	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 18:27	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 18:27	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 18:27	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 18:27	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 18:27	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 18:27	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 18:27	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 18:27	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 18:27	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 18:27	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 18:27	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 18:27	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 18:27	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 18:27	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 18:27	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 18:27	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 18:27	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 18:27	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 18:27	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 18:27	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 18:27	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/25/23 18:27	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 18:27	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 18:27	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 18:27	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/25/23 18:27	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 18:27	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 18:27	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 18:27	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 18:27	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 18:27	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 18:27	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 18:27	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 18:27	1

Client Sample ID: MW4-ROX-071323-EB
Date Collected: 07/13/23 08:30
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-3
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			07/25/23 18:27	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 18:27	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 18:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 18:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 18:27	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 18:27	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 18:27	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 18:27	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 18:27	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 18:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 18:27	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 18:27	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 18:27	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 18:27	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 18:27	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 18:27	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/25/23 18:27	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/25/23 18:27	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 18:27	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 18:27	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*07/25/23 18:27*	*1*
Dibromofluoromethane	*117*		*75 - 126*		*07/25/23 18:27*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/25/23 18:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/20/23 09:41	07/21/23 20:58	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/20/23 09:41	07/21/23 20:58	1
Anthracene	ND		0.20	0.047	ug/L		07/20/23 09:41	07/21/23 20:58	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/20/23 09:41	07/21/23 20:58	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/20/23 09:41	07/21/23 20:58	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/20/23 09:41	07/21/23 20:58	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/20/23 09:41	07/21/23 20:58	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/20/23 09:41	07/21/23 20:58	1
Chrysene	ND		0.20	0.033	ug/L		07/20/23 09:41	07/21/23 20:58	1
Dibenz(a,h)an hracene	ND		0.20	0.048	ug/L		07/20/23 09:41	07/21/23 20:58	1
Fluoranthene	ND		0.20	0.034	ug/L		07/20/23 09:41	07/21/23 20:58	1
Fluorene	ND		0.20	0.089	ug/L		07/20/23 09:41	07/21/23 20:58	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/20/23 09:41	07/21/23 20:58	1
Phenanthrene	ND		0.20	0.090	ug/L		07/20/23 09:41	07/21/23 20:58	1
Pyrene	ND		0.20	0.039	ug/L		07/20/23 09:41	07/21/23 20:58	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/20/23 09:41	07/21/23 20:58	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/20/23 09:41	07/21/23 20:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*73*		*18 - 147*	*07/20/23 09:41*	*07/21/23 20:58*	*1*
2-Fluorobiphenyl	*68*		*15 - 128*	*07/20/23 09:41*	*07/21/23 20:58*	*1*

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

Job ID: 400-240560-1

Client Sample ID: MW4-ROX-071323-EB
Date Collected: 07/13/23 08:30
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-3
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*51*		*10 - 144*	*07/20/23 09:41*	*07/21/23 20:58*	*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		07/20/23 09:41	07/21/23 23:06	1
Benzenethiol	ND	*-	10	1.7	ug/L		07/20/23 09:41	07/21/23 23:06	1
Benzoic acid	ND		30	7.3	ug/L		07/20/23 09:41	07/21/23 23:06	1
Benzyl alcohol	ND		10	2.0	ug/L		07/20/23 09:41	07/21/23 23:06	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/20/23 09:41	07/21/23 23:06	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/20/23 09:41	07/21/23 23:06	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/20/23 09:41	07/21/23 23:06	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/20/23 09:41	07/21/23 23:06	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/20/23 09:41	07/21/23 23:06	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/20/23 09:41	07/21/23 23:06	1
4-Chloroaniline	ND		10	3.4	ug/L		07/20/23 09:41	07/21/23 23:06	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/20/23 09:41	07/21/23 23:06	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/20/23 09:41	07/21/23 23:06	1
2-Chlorophenol	ND		10	2.2	ug/L		07/20/23 09:41	07/21/23 23:06	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/20/23 09:41	07/21/23 23:06	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/20/23 09:41	07/21/23 23:06	1
Dibenzofuran	ND		10	0.17	ug/L		07/20/23 09:41	07/21/23 23:06	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/20/23 09:41	07/21/23 23:06	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/20/23 09:41	07/21/23 23:06	1
Diethyl phthalate	ND		10	0.24	ug/L		07/20/23 09:41	07/21/23 23:06	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/20/23 09:41	07/21/23 23:06	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/20/23 09:41	07/21/23 23:06	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/20/23 09:41	07/21/23 23:06	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/20/23 09:41	07/21/23 23:06	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/20/23 09:41	07/21/23 23:06	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/20/23 09:41	07/21/23 23:06	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/20/23 09:41	07/21/23 23:06	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/20/23 09:41	07/21/23 23:06	1
1,4-Dioxane	ND		10	1.0	ug/L		07/20/23 09:41	07/21/23 23:06	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/20/23 09:41	07/21/23 23:06	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/20/23 09:41	07/21/23 23:06	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/20/23 09:41	07/21/23 23:06	1
Hexachloroethane	ND		10	4.2	ug/L		07/20/23 09:41	07/21/23 23:06	1
Indene	ND		10	1.0	ug/L		07/20/23 09:41	07/21/23 23:06	1
Isophorone	ND		10	0.14	ug/L		07/20/23 09:41	07/21/23 23:06	1
2-Methylphenol	ND		10	1.8	ug/L		07/20/23 09:41	07/21/23 23:06	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/20/23 09:41	07/21/23 23:06	1
2-Nitroaniline	ND		10	2.2	ug/L		07/20/23 09:41	07/21/23 23:06	1
3-Nitroaniline	ND		10	1.8	ug/L		07/20/23 09:41	07/21/23 23:06	1
4-Nitroaniline	ND		10	1.5	ug/L		07/20/23 09:41	07/21/23 23:06	1
Nitrobenzene	ND		10	0.13	ug/L		07/20/23 09:41	07/21/23 23:06	1
2-Nitrophenol	ND		10	5.2	ug/L		07/20/23 09:41	07/21/23 23:06	1
4-Nitrophenol	ND		10	2.1	ug/L		07/20/23 09:41	07/21/23 23:06	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/20/23 09:41	07/21/23 23:06	1

Client: AECOM Technical Services Inc.
Job ID: 400-240560-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: MW4-ROX-071323-EB
Lab Sample ID: 400-240560-3
Date Collected: 07/13/23 08:30
Matrix: Water
Date Received: 07/14/23 09:08

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		07/20/23 09:41	07/21/23 23:06	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/20/23 09:41	07/21/23 23:06	1
Pentachlorophenol	ND		20	1.4	ug/L		07/20/23 09:41	07/21/23 23:06	1
Phenol	ND		10	2.6	ug/L		07/20/23 09:41	07/21/23 23:06	1
Pyridine	ND		10	3.2	ug/L		07/20/23 09:41	07/21/23 23:06	1
Quinoline	ND		10	4.5	ug/L		07/20/23 09:41	07/21/23 23:06	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/20/23 09:41	07/21/23 23:06	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/20/23 09:41	07/21/23 23:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*46 - 124*	*07/20/23 09:41*	*07/21/23 23:06*	*1*
2-Fluorophenol	*22*		*13 - 113*	*07/20/23 09:41*	*07/21/23 23:06*	*1*
Nitrobenzene-d5	*57*		*36 - 126*	*07/20/23 09:41*	*07/21/23 23:06*	*1*
Phenol-d5	*49*		*17 - 127*	*07/20/23 09:41*	*07/21/23 23:06*	*1*
Terphenyl-d14	*85*		*44 - 149*	*07/20/23 09:41*	*07/21/23 23:06*	*1*
2,4,6-Tribromophenol	*58*		*26 - 150*	*07/20/23 09:41*	*07/21/23 23:06*	*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	0.016	ug/L		07/20/23 08:04	07/24/23 09:56	1
1,2-Dibromoethane	ND		0.019	0.014	ug/L		07/20/23 08:04	07/24/23 09:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*		*51 - 149*	*07/20/23 08:04*	*07/24/23 09:56*	*1*

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

Job ID: 400-240560-1

Client Sample ID: MW4-ROX-071323
Date Collected: 07/13/23 09:25
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-4
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			07/25/23 18:50	1
Acrolein	ND		20	3.3	ug/L			07/25/23 18:50	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 18:50	1
Benzene	ND		1.0	0.50	ug/L			07/25/23 18:50	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 18:50	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 18:50	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 18:50	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 18:50	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 18:50	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/25/23 18:50	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 18:50	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 18:50	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 18:50	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 18:50	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 18:50	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 18:50	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 18:50	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 18:50	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 18:50	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 18:50	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 18:50	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 18:50	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 18:50	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 18:50	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 18:50	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 18:50	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 18:50	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 18:50	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 18:50	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 18:50	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 18:50	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 18:50	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 18:50	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 18:50	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 18:50	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 18:50	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/25/23 18:50	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 18:50	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 18:50	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 18:50	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/25/23 18:50	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 18:50	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 18:50	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 18:50	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 18:50	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 18:50	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 18:50	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 18:50	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 18:50	1

Client Sample ID: MW4-ROX-071323
Date Collected: 07/13/23 09:25
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-4
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			07/25/23 18:50	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 18:50	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 18:50	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 18:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 18:50	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 18:50	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 18:50	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 18:50	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 18:50	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 18:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 18:50	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 18:50	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 18:50	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 18:50	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 18:50	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 18:50	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/25/23 18:50	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/25/23 18:50	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 18:50	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 18:50	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*07/25/23 18:50*	*1*
Dibromofluoromethane	*112*		*75 - 126*		*07/25/23 18:50*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/25/23 18:50*	*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		07/20/23 09:41	07/21/23 21:19	1
Acenaphthylene	ND		0.21	0.045	ug/L		07/20/23 09:41	07/21/23 21:19	1
Anthracene	ND		0.21	0.048	ug/L		07/20/23 09:41	07/21/23 21:19	1
Benzo[a]anthracene	ND		0.21	0.035	ug/L		07/20/23 09:41	07/21/23 21:19	1
Benzo[a]pyrene	ND		0.21	0.066	ug/L		07/20/23 09:41	07/21/23 21:19	1
Benzo[b]fluoranthene	ND		0.21	0.038	ug/L		07/20/23 09:41	07/21/23 21:19	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		07/20/23 09:41	07/21/23 21:19	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		07/20/23 09:41	07/21/23 21:19	1
Chrysene	ND		0.21	0.034	ug/L		07/20/23 09:41	07/21/23 21:19	1
Dibenz(a,h)an hracene	ND		0.21	0.049	ug/L		07/20/23 09:41	07/21/23 21:19	1
Fluoranthene	ND		0.21	0.035	ug/L		07/20/23 09:41	07/21/23 21:19	1
Fluorene	ND		0.21	0.091	ug/L		07/20/23 09:41	07/21/23 21:19	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.035	ug/L		07/20/23 09:41	07/21/23 21:19	1
Phenanthrene	ND		0.21	0.092	ug/L		07/20/23 09:41	07/21/23 21:19	1
Pyrene	ND		0.21	0.040	ug/L		07/20/23 09:41	07/21/23 21:19	1
1-Methylnaphthalene	ND		0.21	0.082	ug/L		07/20/23 09:41	07/21/23 21:19	1
2-Methylnaphthalene	ND		0.21	0.068	ug/L		07/20/23 09:41	07/21/23 21:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*58*		*18 - 147*	*07/20/23 09:41*	*07/21/23 21:19*	*1*
2-Fluorobiphenyl	*61*		*15 - 128*	*07/20/23 09:41*	*07/21/23 21:19*	*1*

Client Sample ID: MW4-ROX-071323
Date Collected: 07/13/23 09:25
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-4
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*50*		*10 - 144*	*07/20/23 09:41*	*07/21/23 21:19*	*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		07/20/23 09:41	07/21/23 23:28	1
Benzenethiol	ND	*-	10	1.7	ug/L		07/20/23 09:41	07/21/23 23:28	1
Benzoic acid	ND		31	7.5	ug/L		07/20/23 09:41	07/21/23 23:28	1
Benzyl alcohol	ND		10	2.1	ug/L		07/20/23 09:41	07/21/23 23:28	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/20/23 09:41	07/21/23 23:28	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		07/20/23 09:41	07/21/23 23:28	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/20/23 09:41	07/21/23 23:28	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/20/23 09:41	07/21/23 23:28	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/20/23 09:41	07/21/23 23:28	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/20/23 09:41	07/21/23 23:28	1
4-Chloroaniline	ND		10	3.5	ug/L		07/20/23 09:41	07/21/23 23:28	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/20/23 09:41	07/21/23 23:28	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/20/23 09:41	07/21/23 23:28	1
2-Chlorophenol	ND		10	2.3	ug/L		07/20/23 09:41	07/21/23 23:28	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/20/23 09:41	07/21/23 23:28	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/20/23 09:41	07/21/23 23:28	1
Dibenzofuran	ND		10	0.17	ug/L		07/20/23 09:41	07/21/23 23:28	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/20/23 09:41	07/21/23 23:28	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/20/23 09:41	07/21/23 23:28	1
Diethyl phthalate	ND		10	0.25	ug/L		07/20/23 09:41	07/21/23 23:28	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/20/23 09:41	07/21/23 23:28	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/20/23 09:41	07/21/23 23:28	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/20/23 09:41	07/21/23 23:28	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/20/23 09:41	07/21/23 23:28	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/20/23 09:41	07/21/23 23:28	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/20/23 09:41	07/21/23 23:28	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/20/23 09:41	07/21/23 23:28	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/20/23 09:41	07/21/23 23:28	1
1,4-Dioxane	ND		10	1.0	ug/L		07/20/23 09:41	07/21/23 23:28	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/20/23 09:41	07/21/23 23:28	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/20/23 09:41	07/21/23 23:28	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/20/23 09:41	07/21/23 23:28	1
Hexachloroethane	ND		10	4.3	ug/L		07/20/23 09:41	07/21/23 23:28	1
Indene	ND		10	1.0	ug/L		07/20/23 09:41	07/21/23 23:28	1
Isophorone	ND		10	0.14	ug/L		07/20/23 09:41	07/21/23 23:28	1
2-Methylphenol	ND		10	1.8	ug/L		07/20/23 09:41	07/21/23 23:28	1
3 & 4 Methylphenol	ND		21	0.40	ug/L		07/20/23 09:41	07/21/23 23:28	1
2-Nitroaniline	ND		10	2.3	ug/L		07/20/23 09:41	07/21/23 23:28	1
3-Nitroaniline	ND		10	1.8	ug/L		07/20/23 09:41	07/21/23 23:28	1
4-Nitroaniline	ND		10	1.5	ug/L		07/20/23 09:41	07/21/23 23:28	1
Nitrobenzene	ND		10	0.13	ug/L		07/20/23 09:41	07/21/23 23:28	1
2-Nitrophenol	ND		10	5.3	ug/L		07/20/23 09:41	07/21/23 23:28	1
4-Nitrophenol	ND		10	2.2	ug/L		07/20/23 09:41	07/21/23 23:28	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/20/23 09:41	07/21/23 23:28	1

Client Sample ID: MW4-ROX-071323
Date Collected: 07/13/23 09:25
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-4
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		07/20/23 09:41	07/21/23 23:28	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/20/23 09:41	07/21/23 23:28	1
Pentachlorophenol	ND		21	1.4	ug/L		07/20/23 09:41	07/21/23 23:28	1
Phenol	ND		10	2.7	ug/L		07/20/23 09:41	07/21/23 23:28	1
Pyridine	ND		10	3.3	ug/L		07/20/23 09:41	07/21/23 23:28	1
Quinoline	ND		10	4.6	ug/L		07/20/23 09:41	07/21/23 23:28	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/20/23 09:41	07/21/23 23:28	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/20/23 09:41	07/21/23 23:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*46 - 124*	*07/20/23 09:41*	*07/21/23 23:28*	*1*
2-Fluorophenol	*18*		*13 - 113*	*07/20/23 09:41*	*07/21/23 23:28*	*1*
Nitrobenzene-d5	*62*		*36 - 126*	*07/20/23 09:41*	*07/21/23 23:28*	*1*
Phenol-d5	*44*		*17 - 127*	*07/20/23 09:41*	*07/21/23 23:28*	*1*
Terphenyl-d14	*81*		*44 - 149*	*07/20/23 09:41*	*07/21/23 23:28*	*1*
2,4,6-Tribromophenol	*75*		*26 - 150*	*07/20/23 09:41*	*07/21/23 23:28*	*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		07/20/23 08:04	07/24/23 10:17	1
1,2-Dibromoethane	ND		0.019	0.014	ug/L		07/20/23 08:04	07/24/23 10:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*71*		*51 - 149*	*07/20/23 08:04*	*07/24/23 10:17*	*1*

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

Job ID: 400-240560-1

Client Sample ID: MW25-ROX-071323
Date Collected: 07/13/23 10:50
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**62**		25	10	ug/L			07/25/23 19:13	1
Acrolein	ND		20	3.3	ug/L			07/25/23 19:13	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 19:13	1
Benzene	**27**		1.0	0.50	ug/L			07/25/23 19:13	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 19:13	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 19:13	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 19:13	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 19:13	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 19:13	1
2-Butanone (MEK)	**5.8**	**J**	25	2.6	ug/L			07/25/23 19:13	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 19:13	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 19:13	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 19:13	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 19:13	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 19:13	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 19:13	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 19:13	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 19:13	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 19:13	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 19:13	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 19:13	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 19:13	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 19:13	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 19:13	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 19:13	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 19:13	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 19:13	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 19:13	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 19:13	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 19:13	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 19:13	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 19:13	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 19:13	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 19:13	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 19:13	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 19:13	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/25/23 19:13	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 19:13	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 19:13	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 19:13	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/25/23 19:13	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 19:13	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 19:13	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 19:13	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 19:13	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 19:13	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 19:13	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 19:13	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 19:13	1

Client Sample ID: MW25-ROX-071323
Date Collected: 07/13/23 10:50
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-5
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			07/25/23 19:13	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 19:13	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 19:13	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 19:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 19:13	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 19:13	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 19:13	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 19:13	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 19:13	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 19:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 19:13	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 19:13	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 19:13	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 19:13	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 19:13	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 19:13	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/25/23 19:13	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/25/23 19:13	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 19:13	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 19:13	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*72 - 130*		*07/25/23 19:13*	*1*
Dibromofluoromethane	*111*		*75 - 126*		*07/25/23 19:13*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/25/23 19:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.10	ug/L		07/20/23 09:41	07/21/23 21:41	1
Acenaphthylene	ND		0.21	0.046	ug/L		07/20/23 09:41	07/21/23 21:41	1
Anthracene	ND		0.21	0.049	ug/L		07/20/23 09:41	07/21/23 21:41	1
Benzo[a]anthracene	ND		0.21	0.036	ug/L		07/20/23 09:41	07/21/23 21:41	1
Benzo[a]pyrene	ND		0.21	0.067	ug/L		07/20/23 09:41	07/21/23 21:41	1
Benzo[b]fluoranthene	ND		0.21	0.039	ug/L		07/20/23 09:41	07/21/23 21:41	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		07/20/23 09:41	07/21/23 21:41	1
Benzo[k]fluoranthene	ND		0.21	0.065	ug/L		07/20/23 09:41	07/21/23 21:41	1
Chrysene	ND		0.21	0.035	ug/L		07/20/23 09:41	07/21/23 21:41	1
Dibenz(a,h)an hracene	ND		0.21	0.050	ug/L		07/20/23 09:41	07/21/23 21:41	1
Fluoranthene	ND		0.21	0.036	ug/L		07/20/23 09:41	07/21/23 21:41	1
Fluorene	ND		0.21	0.093	ug/L		07/20/23 09:41	07/21/23 21:41	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.036	ug/L		07/20/23 09:41	07/21/23 21:41	1
Phenanthrene	ND		0.21	0.094	ug/L		07/20/23 09:41	07/21/23 21:41	1
Pyrene	ND		0.21	0.041	ug/L		07/20/23 09:41	07/21/23 21:41	1
1-Methylnaphthalene	ND		0.21	0.084	ug/L		07/20/23 09:41	07/21/23 21:41	1
2-Methylnaphthalene	ND		0.21	0.069	ug/L		07/20/23 09:41	07/21/23 21:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*51*		*18 - 147*	*07/20/23 09:41*	*07/21/23 21:41*	*1*
2-Fluorobiphenyl	*59*		*15 - 128*	*07/20/23 09:41*	*07/21/23 21:41*	*1*

Client Sample ID: MW25-ROX-071323
Date Collected: 07/13/23 10:50
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-5
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*48*		*10 - 144*	*07/20/23 09:41*	*07/21/23 21:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	4.0	ug/L		07/20/23 09:41	07/21/23 23:51	1
Benzenethiol	ND	*-	10	1.8	ug/L		07/20/23 09:41	07/21/23 23:51	1
Benzoic acid	ND		31	7.7	ug/L		07/20/23 09:41	07/21/23 23:51	1
Benzyl alcohol	ND		10	2.1	ug/L		07/20/23 09:41	07/21/23 23:51	1
Bis(2-chloroethoxy)methane	ND		10	0.17	ug/L		07/20/23 09:41	07/21/23 23:51	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		07/20/23 09:41	07/21/23 23:51	1
bis (2-chloroisopropyl) ether	ND		10	0.17	ug/L		07/20/23 09:41	07/21/23 23:51	1
Bis(2-ethylhexyl) phthalate	ND		10	5.2	ug/L		07/20/23 09:41	07/21/23 23:51	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/20/23 09:41	07/21/23 23:51	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		07/20/23 09:41	07/21/23 23:51	1
4-Chloroaniline	ND		10	3.6	ug/L		07/20/23 09:41	07/21/23 23:51	1
4-Chloro-3-methylphenol	ND		10	4.0	ug/L		07/20/23 09:41	07/21/23 23:51	1
2-Chloronaphthalene	ND		10	0.15	ug/L		07/20/23 09:41	07/21/23 23:51	1
2-Chlorophenol	ND		10	2.3	ug/L		07/20/23 09:41	07/21/23 23:51	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/20/23 09:41	07/21/23 23:51	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/20/23 09:41	07/21/23 23:51	1
Dibenzofuran	ND		10	0.18	ug/L		07/20/23 09:41	07/21/23 23:51	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/20/23 09:41	07/21/23 23:51	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/20/23 09:41	07/21/23 23:51	1
Diethyl phthalate	ND		10	0.25	ug/L		07/20/23 09:41	07/21/23 23:51	1
2,4-Dimethylphenol	ND		10	3.7	ug/L		07/20/23 09:41	07/21/23 23:51	1
Dimethyl phthalate	ND		10	0.18	ug/L		07/20/23 09:41	07/21/23 23:51	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/20/23 09:41	07/21/23 23:51	1
4,6-Dinitro-ortho-cresol	ND		10	1.7	ug/L		07/20/23 09:41	07/21/23 23:51	1
2,4-Dinitrophenol	ND		31	3.6	ug/L		07/20/23 09:41	07/21/23 23:51	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/20/23 09:41	07/21/23 23:51	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/20/23 09:41	07/21/23 23:51	1
Di-n-octyl phthalate	ND		10	0.18	ug/L		07/20/23 09:41	07/21/23 23:51	1
1,4-Dioxane	ND		10	1.0	ug/L		07/20/23 09:41	07/21/23 23:51	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/20/23 09:41	07/21/23 23:51	1
Hexachlorobenzene	ND		10	0.18	ug/L		07/20/23 09:41	07/21/23 23:51	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/20/23 09:41	07/21/23 23:51	1
Hexachloroethane	ND		10	4.4	ug/L		07/20/23 09:41	07/21/23 23:51	1
Indene	ND		10	1.0	ug/L		07/20/23 09:41	07/21/23 23:51	1
Isophorone	ND		10	0.15	ug/L		07/20/23 09:41	07/21/23 23:51	1
2-Methylphenol	ND		10	1.9	ug/L		07/20/23 09:41	07/21/23 23:51	1
3 & 4 Methylphenol	ND		21	0.41	ug/L		07/20/23 09:41	07/21/23 23:51	1
2-Nitroaniline	ND		10	2.3	ug/L		07/20/23 09:41	07/21/23 23:51	1
3-Nitroaniline	ND		10	1.9	ug/L		07/20/23 09:41	07/21/23 23:51	1
4-Nitroaniline	ND		10	1.6	ug/L		07/20/23 09:41	07/21/23 23:51	1
Nitrobenzene	ND		10	0.14	ug/L		07/20/23 09:41	07/21/23 23:51	1
2-Nitrophenol	ND		10	5.5	ug/L		07/20/23 09:41	07/21/23 23:51	1
4-Nitrophenol	ND		10	2.2	ug/L		07/20/23 09:41	07/21/23 23:51	1
N-Nitrosodimethylamine	ND		10	3.7	ug/L		07/20/23 09:41	07/21/23 23:51	1

Client Sample ID: MW25-ROX-071323
Date Collected: 07/13/23 10:50
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-5
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	3.5	ug/L		07/20/23 09:41	07/21/23 23:51	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		07/20/23 09:41	07/21/23 23:51	1
Pentachlorophenol	ND		21	1.5	ug/L		07/20/23 09:41	07/21/23 23:51	1
Phenol	ND		10	2.7	ug/L		07/20/23 09:41	07/21/23 23:51	1
Pyridine	ND		10	3.4	ug/L		07/20/23 09:41	07/21/23 23:51	1
Quinoline	ND		10	4.7	ug/L		07/20/23 09:41	07/21/23 23:51	1
2,4,5-Trichlorophenol	ND		10	3.9	ug/L		07/20/23 09:41	07/21/23 23:51	1
2,4,6-Trichlorophenol	ND		10	3.7	ug/L		07/20/23 09:41	07/21/23 23:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*46 - 124*	*07/20/23 09:41*	*07/21/23 23:51*	*1*
2-Fluorophenol	*25*		*13 - 113*	*07/20/23 09:41*	*07/21/23 23:51*	*1*
Nitrobenzene-d5	*60*		*36 - 126*	*07/20/23 09:41*	*07/21/23 23:51*	*1*
Phenol-d5	*55*		*17 - 127*	*07/20/23 09:41*	*07/21/23 23:51*	*1*
Terphenyl-d14	*67*		*44 - 149*	*07/20/23 09:41*	*07/21/23 23:51*	*1*
2,4,6-Tribromophenol	*87*		*26 - 150*	*07/20/23 09:41*	*07/21/23 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		0.029	0.016	ug/L		07/20/23 08:04	07/24/23 10:38	1
1,2-Dibromoethane	ND		0.019	0.014	ug/L		07/20/23 08:04	07/24/23 10:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*70*		*51 - 149*	*07/20/23 08:04*	*07/24/23 10:38*	*1*

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

Job ID: 400-240560-1

Client Sample ID: MW7-ROX-071323
Date Collected: 07/13/23 12:05
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130000	50000	ug/L			07/25/23 21:07	5000
Acrolein	ND		100000	17000	ug/L			07/25/23 21:07	5000
Acrylonitrile	ND		50000	14000	ug/L			07/25/23 21:07	5000
Benzene	**490000**		5000	2500	ug/L			07/25/23 21:07	5000
Bromobenzene	ND		5000	2700	ug/L			07/25/23 21:07	5000
Bromochloromethane	ND		5000	1100	ug/L			07/25/23 21:07	5000
Bromodichloromethane	ND		5000	2500	ug/L			07/25/23 21:07	5000
Bromoform	ND		25000	1300	ug/L			07/25/23 21:07	5000
Bromomethane	ND		5000	4900	ug/L			07/25/23 21:07	5000
2-Butanone (MEK)	ND		130000	13000	ug/L			07/25/23 21:07	5000
Carbon disulfide	ND		5000	2500	ug/L			07/25/23 21:07	5000
Carbon tetrachloride	ND		5000	950	ug/L			07/25/23 21:07	5000
Chlorobenzene	ND		5000	750	ug/L			07/25/23 21:07	5000
Chloroethane	ND		5000	3800	ug/L			07/25/23 21:07	5000
2-Chloroethyl vinyl ether	ND		25000	10000	ug/L			07/25/23 21:07	5000
Chloroform	ND		5000	4500	ug/L			07/25/23 21:07	5000
1-Chlorohexane	ND		5000	1600	ug/L			07/25/23 21:07	5000
Chloromethane	ND		5000	4500	ug/L			07/25/23 21:07	5000
cis-1,2-Dichloroethene	ND		5000	1000	ug/L			07/25/23 21:07	5000
cis-1,3-Dichloropropene	ND		25000	2500	ug/L			07/25/23 21:07	5000
Dibromochloromethane	ND		5000	1200	ug/L			07/25/23 21:07	5000
1,2-Dichlorobenzene	ND		5000	2500	ug/L			07/25/23 21:07	5000
1,3-Dichlorobenzene	ND		5000	2700	ug/L			07/25/23 21:07	5000
1,4-Dichlorobenzene	ND		5000	3200	ug/L			07/25/23 21:07	5000
Dichlorodifluoromethane	ND		5000	4300	ug/L			07/25/23 21:07	5000
1,1-Dichloroethane	ND		5000	2500	ug/L			07/25/23 21:07	5000
1,2-Dichloroethane	ND		5000	950	ug/L			07/25/23 21:07	5000
1,1-Dichloroethene	ND		5000	2500	ug/L			07/25/23 21:07	5000
1,2-Dichloropropane	ND		5000	2500	ug/L			07/25/23 21:07	5000
1,3-Dichloropropane	ND		5000	2500	ug/L			07/25/23 21:07	5000
2,2-Dichloropropane	ND		5000	2500	ug/L			07/25/23 21:07	5000
1,1-Dichloropropene	ND		5000	2500	ug/L			07/25/23 21:07	5000
Ethylbenzene	ND		5000	2500	ug/L			07/25/23 21:07	5000
Ethyl methacrylate	ND		5000	3000	ug/L			07/25/23 21:07	5000
Hexachlorobutadiene	ND		25000	4500	ug/L			07/25/23 21:07	5000
2-Hexanone	ND		130000	7000	ug/L			07/25/23 21:07	5000
Isopropylbenzene	ND		5000	2700	ug/L			07/25/23 21:07	5000
Methylene bromide	ND		25000	1100	ug/L			07/25/23 21:07	5000
Methylene Chloride	ND		25000	15000	ug/L			07/25/23 21:07	5000
4-Methyl-2-pentanone (MIBK)	ND		130000	9000	ug/L			07/25/23 21:07	5000
Methyl tert-butyl ether	ND		5000	1100	ug/L			07/25/23 21:07	5000
m-Xylene & p-Xylene	ND		25000	3200	ug/L			07/25/23 21:07	5000
Naphthalene	ND		25000	15000	ug/L			07/25/23 21:07	5000
n-Butylbenzene	ND		5000	3800	ug/L			07/25/23 21:07	5000
N-Propylbenzene	ND		5000	3500	ug/L			07/25/23 21:07	5000
o-Chlorotoluene	ND		5000	2900	ug/L			07/25/23 21:07	5000
o-Xylene	ND		25000	3000	ug/L			07/25/23 21:07	5000
p-Chlorotoluene	ND		5000	2800	ug/L			07/25/23 21:07	5000
p-Isopropyltoluene	ND		5000	3600	ug/L			07/25/23 21:07	5000

Client Sample ID: MW7-ROX-071323
Date Collected: 07/13/23 12:05
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-6
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		5000	3500	ug/L			07/25/23 21:07	5000
Styrene	ND		5000	5000	ug/L			07/25/23 21:07	5000
tert-Butylbenzene	ND		5000	3200	ug/L			07/25/23 21:07	5000
1,1,1,2-Tetrachloroethane	ND		5000	800	ug/L			07/25/23 21:07	5000
1,1,2,2-Tetrachloroethane	ND		5000	2500	ug/L			07/25/23 21:07	5000
Tetrachloroethene	ND		5000	4500	ug/L			07/25/23 21:07	5000
Toluene	ND		5000	4500	ug/L			07/25/23 21:07	5000
trans-1,2-Dichloroethene	ND		5000	2500	ug/L			07/25/23 21:07	5000
trans-1,3-Dichloropropene	ND		25000	1000	ug/L			07/25/23 21:07	5000
1,2,3-Trichlorobenzene	ND		5000	4500	ug/L			07/25/23 21:07	5000
1,2,4-Trichlorobenzene	ND		5000	4100	ug/L			07/25/23 21:07	5000
1,1,1-Trichloroethane	ND		5000	900	ug/L			07/25/23 21:07	5000
1,1,2-Trichloroethane	ND		25000	1100	ug/L			07/25/23 21:07	5000
Trichloroethene	ND		5000	750	ug/L			07/25/23 21:07	5000
Trichlorofluoromethane	ND		5000	2600	ug/L			07/25/23 21:07	5000
1,2,3-Trichloropropane	ND		25000	4200	ug/L			07/25/23 21:07	5000
1,2,4-Trimethylbenzene	ND		5000	4100	ug/L			07/25/23 21:07	5000
1,3,5-Trimethylbenzene	ND		5000	2800	ug/L			07/25/23 21:07	5000
Vinyl acetate	ND		130000	4700	ug/L			07/25/23 21:07	5000
Vinyl chloride	ND		5000	2500	ug/L			07/25/23 21:07	5000
Xylenes, Total	ND		50000	8000	ug/L			07/25/23 21:07	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*07/25/23 21:07*	*5000*
Dibromofluoromethane	*115*		*75 - 126*		*07/25/23 21:07*	*5000*
Toluene-d8 (Surr)	*100*		*64 - 132*		*07/25/23 21:07*	*5000*

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**	0.21	0.10	ug/L		07/20/23 09:41	07/21/23 22:02	1
Acenaphthylene	ND		0.21	0.046	ug/L		07/20/23 09:41	07/21/23 22:02	1
Anthracene	**0.055**	**J**	0.21	0.049	ug/L		07/20/23 09:41	07/21/23 22:02	1
Benzo[a]anthracene	ND		0.21	0.036	ug/L		07/20/23 09:41	07/21/23 22:02	1
Benzo[a]pyrene	ND		0.21	0.067	ug/L		07/20/23 09:41	07/21/23 22:02	1
Benzo[b]fluoranthene	ND		0.21	0.039	ug/L		07/20/23 09:41	07/21/23 22:02	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		07/20/23 09:41	07/21/23 22:02	1
Benzo[k]fluoranthene	ND		0.21	0.065	ug/L		07/20/23 09:41	07/21/23 22:02	1
Chrysene	ND		0.21	0.035	ug/L		07/20/23 09:41	07/21/23 22:02	1
Dibenz(a,h)an hracene	ND		0.21	0.050	ug/L		07/20/23 09:41	07/21/23 22:02	1
Fluoranthene	ND		0.21	0.036	ug/L		07/20/23 09:41	07/21/23 22:02	1
Fluorene	ND		0.21	0.093	ug/L		07/20/23 09:41	07/21/23 22:02	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.036	ug/L		07/20/23 09:41	07/21/23 22:02	1
Phenanthrene	**0.11**	**J**	0.21	0.095	ug/L		07/20/23 09:41	07/21/23 22:02	1
Pyrene	ND		0.21	0.041	ug/L		07/20/23 09:41	07/21/23 22:02	1
1-Methylnaphthalene	**0.88**		0.21	0.084	ug/L		07/20/23 09:41	07/21/23 22:02	1
2-Methylnaphthalene	**1.3**		0.21	0.069	ug/L		07/20/23 09:41	07/21/23 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*61*		*18 - 147*	*07/20/23 09:41*	*07/21/23 22:02*	*1*
2-Fluorobiphenyl	*57*		*15 - 128*	*07/20/23 09:41*	*07/21/23 22:02*	*1*

Client Sample ID: MW7-ROX-071323
Date Collected: 07/13/23 12:05
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-6
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*39*		*10 - 144*	*07/20/23 09:41*	*07/21/23 22:02*	*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		07/20/23 09:41	07/22/23 00:13	1
Benzenethiol	ND	*-	11	1.8	ug/L		07/20/23 09:41	07/22/23 00:13	1
Benzoic acid	ND		32	7.7	ug/L		07/20/23 09:41	07/22/23 00:13	1
Benzyl alcohol	ND		11	2.1	ug/L		07/20/23 09:41	07/22/23 00:13	1
Bis(2-chloroethoxy)methane	ND		11	0.17	ug/L		07/20/23 09:41	07/22/23 00:13	1
Bis(2-chloroethyl)ether	ND		11	2.8	ug/L		07/20/23 09:41	07/22/23 00:13	1
bis (2-chloroisopropyl) ether	ND		11	0.17	ug/L		07/20/23 09:41	07/22/23 00:13	1
Bis(2-ethylhexyl) phthalate	ND		11	5.3	ug/L		07/20/23 09:41	07/22/23 00:13	1
4-Bromophenyl phenyl ether	ND		11	0.21	ug/L		07/20/23 09:41	07/22/23 00:13	1
Butyl benzyl phthalate	ND		11	0.20	ug/L		07/20/23 09:41	07/22/23 00:13	1
4-Chloroaniline	ND		11	3.6	ug/L		07/20/23 09:41	07/22/23 00:13	1
4-Chloro-3-methylphenol	ND		11	4.0	ug/L		07/20/23 09:41	07/22/23 00:13	1
2-Chloronaphthalene	ND		11	0.15	ug/L		07/20/23 09:41	07/22/23 00:13	1
2-Chlorophenol	ND		11	2.3	ug/L		07/20/23 09:41	07/22/23 00:13	1
4-Chlorophenyl phenyl ether	ND		11	2.1	ug/L		07/20/23 09:41	07/22/23 00:13	1
Dibenz[a,h]acridine	ND		11	1.1	ug/L		07/20/23 09:41	07/22/23 00:13	1
Dibenzofuran	ND		11	0.18	ug/L		07/20/23 09:41	07/22/23 00:13	1
3,3'-Dichlorobenzidine	ND		11	2.7	ug/L		07/20/23 09:41	07/22/23 00:13	1
2,4-Dichlorophenol	ND		11	3.2	ug/L		07/20/23 09:41	07/22/23 00:13	1
Diethyl phthalate	**0.44**	**J**	11	0.25	ug/L		07/20/23 09:41	07/22/23 00:13	1
2,4-Dimethylphenol	ND		11	3.7	ug/L		07/20/23 09:41	07/22/23 00:13	1
Dimethyl phthalate	ND		11	0.18	ug/L		07/20/23 09:41	07/22/23 00:13	1
Di-n-butyl phthalate	ND		11	2.8	ug/L		07/20/23 09:41	07/22/23 00:13	1
4,6-Dinitro-ortho-cresol	ND		11	1.7	ug/L		07/20/23 09:41	07/22/23 00:13	1
2,4-Dinitrophenol	ND		32	3.6	ug/L		07/20/23 09:41	07/22/23 00:13	1
2,4-Dinitrotoluene	ND		11	2.0	ug/L		07/20/23 09:41	07/22/23 00:13	1
2,6-Dinitrotoluene	ND		11	2.0	ug/L		07/20/23 09:41	07/22/23 00:13	1
Di-n-octyl phthalate	ND		11	0.18	ug/L		07/20/23 09:41	07/22/23 00:13	1
1,4-Dioxane	ND		11	1.1	ug/L		07/20/23 09:41	07/22/23 00:13	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	1.1	ug/L		07/20/23 09:41	07/22/23 00:13	1
Hexachlorobenzene	ND		11	0.18	ug/L		07/20/23 09:41	07/22/23 00:13	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/20/23 09:41	07/22/23 00:13	1
Hexachloroethane	ND		11	4.4	ug/L		07/20/23 09:41	07/22/23 00:13	1
Indene	ND		11	1.1	ug/L		07/20/23 09:41	07/22/23 00:13	1
Isophorone	ND		11	0.15	ug/L		07/20/23 09:41	07/22/23 00:13	1
2-Methylphenol	ND		11	1.9	ug/L		07/20/23 09:41	07/22/23 00:13	1
3 & 4 Methylphenol	ND		21	0.41	ug/L		07/20/23 09:41	07/22/23 00:13	1
2-Nitroaniline	ND		11	2.3	ug/L		07/20/23 09:41	07/22/23 00:13	1
3-Nitroaniline	ND		11	1.9	ug/L		07/20/23 09:41	07/22/23 00:13	1
4-Nitroaniline	ND		11	1.6	ug/L		07/20/23 09:41	07/22/23 00:13	1
Nitrobenzene	ND		11	0.14	ug/L		07/20/23 09:41	07/22/23 00:13	1
2-Nitrophenol	ND		11	5.5	ug/L		07/20/23 09:41	07/22/23 00:13	1
4-Nitrophenol	ND		11	2.2	ug/L		07/20/23 09:41	07/22/23 00:13	1
N-Nitrosodimethylamine	ND		11	3.7	ug/L		07/20/23 09:41	07/22/23 00:13	1

Client Sample ID: MW7-ROX-071323
Lab Sample ID: 400-240560-6
Date Collected: 07/13/23 12:05
Matrix: Water
Date Received: 07/14/23 09:08

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	3.5	ug/L		07/20/23 09:41	07/22/23 00:13	1
N-Nitrosodiphenylamine	ND		11	0.19	ug/L		07/20/23 09:41	07/22/23 00:13	1
Pentachlorophenol	ND		21	1.5	ug/L		07/20/23 09:41	07/22/23 00:13	1
Phenol	**120**		11	2.7	ug/L		07/20/23 09:41	07/22/23 00:13	1
Pyridine	ND		11	3.4	ug/L		07/20/23 09:41	07/22/23 00:13	1
Quinoline	ND		11	4.7	ug/L		07/20/23 09:41	07/22/23 00:13	1
2,4,5-Trichlorophenol	ND		11	3.9	ug/L		07/20/23 09:41	07/22/23 00:13	1
2,4,6-Trichlorophenol	ND		11	3.7	ug/L		07/20/23 09:41	07/22/23 00:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*46 - 124*	*07/20/23 09:41*	*07/22/23 00:13*	*1*
2-Fluorophenol	*20*		*13 - 113*	*07/20/23 09:41*	*07/22/23 00:13*	*1*
Nitrobenzene-d5	*62*		*36 - 126*	*07/20/23 09:41*	*07/22/23 00:13*	*1*
Phenol-d5	*56*		*17 - 127*	*07/20/23 09:41*	*07/22/23 00:13*	*1*
Terphenyl-d14	*85*		*44 - 149*	*07/20/23 09:41*	*07/22/23 00:13*	*1*
2,4,6-Tribromophenol	*94*		*26 - 150*	*07/20/23 09:41*	*07/22/23 00:13*	*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		07/20/23 08:04	07/24/23 11:41	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/20/23 08:04	07/24/23 11:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*70*		*51 - 149*	*07/20/23 08:04*	*07/24/23 11:41*	*1*

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

Job ID: 400-240560-1

Client Sample ID: MW7-ROX-071323-DUP
Date Collected: 07/13/23 12:05
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130000	50000	ug/L			07/25/23 21:30	5000
Acrolein	ND		100000	17000	ug/L			07/25/23 21:30	5000
Acrylonitrile	ND		50000	14000	ug/L			07/25/23 21:30	5000
Benzene	**490000**		5000	2500	ug/L			07/25/23 21:30	5000
Bromobenzene	ND		5000	2700	ug/L			07/25/23 21:30	5000
Bromochloromethane	ND		5000	1100	ug/L			07/25/23 21:30	5000
Bromodichloromethane	ND		5000	2500	ug/L			07/25/23 21:30	5000
Bromoform	ND		25000	1300	ug/L			07/25/23 21:30	5000
Bromomethane	ND		5000	4900	ug/L			07/25/23 21:30	5000
2-Butanone (MEK)	ND		130000	13000	ug/L			07/25/23 21:30	5000
Carbon disulfide	ND		5000	2500	ug/L			07/25/23 21:30	5000
Carbon tetrachloride	ND		5000	950	ug/L			07/25/23 21:30	5000
Chlorobenzene	ND		5000	750	ug/L			07/25/23 21:30	5000
Chloroethane	ND		5000	3800	ug/L			07/25/23 21:30	5000
2-Chloroethyl vinyl ether	ND		25000	10000	ug/L			07/25/23 21:30	5000
Chloroform	ND		5000	4500	ug/L			07/25/23 21:30	5000
1-Chlorohexane	ND		5000	1600	ug/L			07/25/23 21:30	5000
Chloromethane	ND		5000	4500	ug/L			07/25/23 21:30	5000
cis-1,2-Dichloroethene	ND		5000	1000	ug/L			07/25/23 21:30	5000
cis-1,3-Dichloropropene	ND		25000	2500	ug/L			07/25/23 21:30	5000
Dibromochloromethane	ND		5000	1200	ug/L			07/25/23 21:30	5000
1,2-Dichlorobenzene	ND		5000	2500	ug/L			07/25/23 21:30	5000
1,3-Dichlorobenzene	ND		5000	2700	ug/L			07/25/23 21:30	5000
1,4-Dichlorobenzene	ND		5000	3200	ug/L			07/25/23 21:30	5000
Dichlorodifluoromethane	ND		5000	4300	ug/L			07/25/23 21:30	5000
1,1-Dichloroethane	ND		5000	2500	ug/L			07/25/23 21:30	5000
1,2-Dichloroethane	ND		5000	950	ug/L			07/25/23 21:30	5000
1,1-Dichloroethene	ND		5000	2500	ug/L			07/25/23 21:30	5000
1,2-Dichloropropane	ND		5000	2500	ug/L			07/25/23 21:30	5000
1,3-Dichloropropane	ND		5000	2500	ug/L			07/25/23 21:30	5000
2,2-Dichloropropane	ND		5000	2500	ug/L			07/25/23 21:30	5000
1,1-Dichloropropene	ND		5000	2500	ug/L			07/25/23 21:30	5000
Ethylbenzene	ND		5000	2500	ug/L			07/25/23 21:30	5000
Ethyl methacrylate	ND		5000	3000	ug/L			07/25/23 21:30	5000
Hexachlorobutadiene	ND		25000	4500	ug/L			07/25/23 21:30	5000
2-Hexanone	ND		130000	7000	ug/L			07/25/23 21:30	5000
Isopropylbenzene	ND		5000	2700	ug/L			07/25/23 21:30	5000
Methylene bromide	ND		25000	1100	ug/L			07/25/23 21:30	5000
Methylene Chloride	ND		25000	15000	ug/L			07/25/23 21:30	5000
4-Methyl-2-pentanone (MIBK)	ND		130000	9000	ug/L			07/25/23 21:30	5000
Methyl tert-butyl ether	ND		5000	1100	ug/L			07/25/23 21:30	5000
m-Xylene & p-Xylene	ND		25000	3200	ug/L			07/25/23 21:30	5000
Naphthalene	ND		25000	15000	ug/L			07/25/23 21:30	5000
n-Butylbenzene	ND		5000	3800	ug/L			07/25/23 21:30	5000
N-Propylbenzene	ND		5000	3500	ug/L			07/25/23 21:30	5000
o-Chlorotoluene	ND		5000	2900	ug/L			07/25/23 21:30	5000
o-Xylene	ND		25000	3000	ug/L			07/25/23 21:30	5000
p-Chlorotoluene	ND		5000	2800	ug/L			07/25/23 21:30	5000
p-Isopropyltoluene	ND		5000	3600	ug/L			07/25/23 21:30	5000

Client Sample ID: MW7-ROX-071323-DUP
Date Collected: 07/13/23 12:05
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-7
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		5000	3500	ug/L			07/25/23 21:30	5000
Styrene	ND		5000	5000	ug/L			07/25/23 21:30	5000
tert-Butylbenzene	ND		5000	3200	ug/L			07/25/23 21:30	5000
1,1,1,2-Tetrachloroethane	ND		5000	800	ug/L			07/25/23 21:30	5000
1,1,2,2-Tetrachloroethane	ND		5000	2500	ug/L			07/25/23 21:30	5000
Tetrachloroethene	ND		5000	4500	ug/L			07/25/23 21:30	5000
Toluene	ND		5000	4500	ug/L			07/25/23 21:30	5000
trans-1,2-Dichloroethene	ND		5000	2500	ug/L			07/25/23 21:30	5000
trans-1,3-Dichloropropene	ND		25000	1000	ug/L			07/25/23 21:30	5000
1,2,3-Trichlorobenzene	ND		5000	4500	ug/L			07/25/23 21:30	5000
1,2,4-Trichlorobenzene	ND		5000	4100	ug/L			07/25/23 21:30	5000
1,1,1-Trichloroethane	ND		5000	900	ug/L			07/25/23 21:30	5000
1,1,2-Trichloroethane	ND		25000	1100	ug/L			07/25/23 21:30	5000
Trichloroethene	ND		5000	750	ug/L			07/25/23 21:30	5000
Trichlorofluoromethane	ND		5000	2600	ug/L			07/25/23 21:30	5000
1,2,3-Trichloropropane	ND		25000	4200	ug/L			07/25/23 21:30	5000
1,2,4-Trimethylbenzene	ND		5000	4100	ug/L			07/25/23 21:30	5000
1,3,5-Trimethylbenzene	ND		5000	2800	ug/L			07/25/23 21:30	5000
Vinyl acetate	ND		130000	4700	ug/L			07/25/23 21:30	5000
Vinyl chloride	ND		5000	2500	ug/L			07/25/23 21:30	5000
Xylenes, Total	ND		50000	8000	ug/L			07/25/23 21:30	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*07/25/23 21:30*	*5000*
Dibromofluoromethane	*114*		*75 - 126*		*07/25/23 21:30*	*5000*
Toluene-d8 (Surr)	*100*		*64 - 132*		*07/25/23 21:30*	*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	0.098	ug/L		07/20/23 09:41	07/21/23 22:23	1
Acenaphthylene	ND		0.20	0.043	ug/L		07/20/23 09:41	07/21/23 22:23	1
Anthracene	**0.049**	**J**	0.20	0.046	ug/L		07/20/23 09:41	07/21/23 22:23	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/20/23 09:41	07/21/23 22:23	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/20/23 09:41	07/21/23 22:23	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/20/23 09:41	07/21/23 22:23	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/20/23 09:41	07/21/23 22:23	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		07/20/23 09:41	07/21/23 22:23	1
Chrysene	ND		0.20	0.033	ug/L		07/20/23 09:41	07/21/23 22:23	1
Dibenz(a,h)an hracene	ND		0.20	0.047	ug/L		07/20/23 09:41	07/21/23 22:23	1
Fluoranthene	ND		0.20	0.034	ug/L		07/20/23 09:41	07/21/23 22:23	1
Fluorene	**0.095**	**J**	0.20	0.088	ug/L		07/20/23 09:41	07/21/23 22:23	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/20/23 09:41	07/21/23 22:23	1
Phenanthrene	**0.11**	**J**	0.20	0.089	ug/L		07/20/23 09:41	07/21/23 22:23	1
Pyrene	ND		0.20	0.039	ug/L		07/20/23 09:41	07/21/23 22:23	1
1-Methylnaphthalene	**0.87**		0.20	0.079	ug/L		07/20/23 09:41	07/21/23 22:23	1
2-Methylnaphthalene	**1.3**		0.20	0.065	ug/L		07/20/23 09:41	07/21/23 22:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*60*		*18 - 147*	*07/20/23 09:41*	*07/21/23 22:23*	*1*
2-Fluorobiphenyl	*63*		*15 - 128*	*07/20/23 09:41*	*07/21/23 22:23*	*1*

Client Sample ID: MW7-ROX-071323-DUP
Date Collected: 07/13/23 12:05
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-7
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*40*		*10 - 144*	*07/20/23 09:41*	*07/21/23 22:23*	*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		07/20/23 09:41	07/22/23 00:36	1
Benzenethiol	ND	*-	9.9	1.7	ug/L		07/20/23 09:41	07/22/23 00:36	1
Benzoic acid	ND		30	7.2	ug/L		07/20/23 09:41	07/22/23 00:36	1
Benzyl alcohol	ND		9.9	2.0	ug/L		07/20/23 09:41	07/22/23 00:36	1
Bis(2-chloroethoxy)methane	ND		9.9	0.16	ug/L		07/20/23 09:41	07/22/23 00:36	1
Bis(2-chloroethyl)ether	ND		9.9	2.7	ug/L		07/20/23 09:41	07/22/23 00:36	1
bis (2-chloroisopropyl) ether	ND		9.9	0.16	ug/L		07/20/23 09:41	07/22/23 00:36	1
Bis(2-ethylhexyl) phthalate	ND		9.9	4.9	ug/L		07/20/23 09:41	07/22/23 00:36	1
4-Bromophenyl phenyl ether	ND		9.9	0.20	ug/L		07/20/23 09:41	07/22/23 00:36	1
Butyl benzyl phthalate	ND		9.9	0.19	ug/L		07/20/23 09:41	07/22/23 00:36	1
4-Chloroaniline	ND		9.9	3.4	ug/L		07/20/23 09:41	07/22/23 00:36	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		07/20/23 09:41	07/22/23 00:36	1
2-Chloronaphthalene	ND		9.9	0.14	ug/L		07/20/23 09:41	07/22/23 00:36	1
2-Chlorophenol	ND		9.9	2.2	ug/L		07/20/23 09:41	07/22/23 00:36	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		07/20/23 09:41	07/22/23 00:36	1
Dibenz[a,h]acridine	ND		9.9	0.99	ug/L		07/20/23 09:41	07/22/23 00:36	1
Dibenzofuran	ND		9.9	0.17	ug/L		07/20/23 09:41	07/22/23 00:36	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		07/20/23 09:41	07/22/23 00:36	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		07/20/23 09:41	07/22/23 00:36	1
Diethyl phthalate	ND		9.9	0.24	ug/L		07/20/23 09:41	07/22/23 00:36	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		07/20/23 09:41	07/22/23 00:36	1
Dimethyl phthalate	ND		9.9	0.17	ug/L		07/20/23 09:41	07/22/23 00:36	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		07/20/23 09:41	07/22/23 00:36	1
4,6-Dinitro-ortho-cresol	ND		9.9	1.6	ug/L		07/20/23 09:41	07/22/23 00:36	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/20/23 09:41	07/22/23 00:36	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		07/20/23 09:41	07/22/23 00:36	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		07/20/23 09:41	07/22/23 00:36	1
Di-n-octyl phthalate	ND		9.9	0.17	ug/L		07/20/23 09:41	07/22/23 00:36	1
1,4-Dioxane	ND		9.9	0.99	ug/L		07/20/23 09:41	07/22/23 00:36	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		07/20/23 09:41	07/22/23 00:36	1
Hexachlorobenzene	ND		9.9	0.17	ug/L		07/20/23 09:41	07/22/23 00:36	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/20/23 09:41	07/22/23 00:36	1
Hexachloroethane	ND		9.9	4.2	ug/L		07/20/23 09:41	07/22/23 00:36	1
Indene	ND		9.9	0.99	ug/L		07/20/23 09:41	07/22/23 00:36	1
Isophorone	ND		9.9	0.14	ug/L		07/20/23 09:41	07/22/23 00:36	1
2-Methylphenol	ND		9.9	1.8	ug/L		07/20/23 09:41	07/22/23 00:36	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/20/23 09:41	07/22/23 00:36	1
2-Nitroaniline	ND		9.9	2.2	ug/L		07/20/23 09:41	07/22/23 00:36	1
3-Nitroaniline	ND		9.9	1.8	ug/L		07/20/23 09:41	07/22/23 00:36	1
4-Nitroaniline	ND		9.9	1.5	ug/L		07/20/23 09:41	07/22/23 00:36	1
Nitrobenzene	ND		9.9	0.13	ug/L		07/20/23 09:41	07/22/23 00:36	1
2-Nitrophenol	ND		9.9	5.1	ug/L		07/20/23 09:41	07/22/23 00:36	1
4-Nitrophenol	ND		9.9	2.1	ug/L		07/20/23 09:41	07/22/23 00:36	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		07/20/23 09:41	07/22/23 00:36	1

Client: AECOM Technical Services Inc.
Job ID: 400-240560-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: MW7-ROX-071323-DUP
Lab Sample ID: 400-240560-7
Date Collected: 07/13/23 12:05
Matrix: Water
Date Received: 07/14/23 09:08

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		07/20/23 09:41	07/22/23 00:36	1
N-Nitrosodiphenylamine	ND		9.9	0.18	ug/L		07/20/23 09:41	07/22/23 00:36	1
Pentachlorophenol	ND		20	1.4	ug/L		07/20/23 09:41	07/22/23 00:36	1
Phenol	**84**		9.9	2.6	ug/L		07/20/23 09:41	07/22/23 00:36	1
Pyridine	ND		9.9	3.2	ug/L		07/20/23 09:41	07/22/23 00:36	1
Quinoline	ND		9.9	4.4	ug/L		07/20/23 09:41	07/22/23 00:36	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		07/20/23 09:41	07/22/23 00:36	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		07/20/23 09:41	07/22/23 00:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*46 - 124*	*07/20/23 09:41*	*07/22/23 00:36*	*1*
2-Fluorophenol	*11*	*S1-*	*13 - 113*	*07/20/23 09:41*	*07/22/23 00:36*	*1*
Nitrobenzene-d5	*62*		*36 - 126*	*07/20/23 09:41*	*07/22/23 00:36*	*1*
Phenol-d5	*40*		*17 - 127*	*07/20/23 09:41*	*07/22/23 00:36*	*1*
Terphenyl-d14	*77*		*44 - 149*	*07/20/23 09:41*	*07/22/23 00:36*	*1*
2,4,6-Tribromophenol	*88*		*26 - 150*	*07/20/23 09:41*	*07/22/23 00:36*	*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		07/20/23 08:04	07/24/23 11:20	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/20/23 08:04	07/24/23 11:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*64*		*51 - 149*	*07/20/23 08:04*	*07/24/23 11:20*	*1*

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

Job ID: 400-240560-1

Client Sample ID: TB-ROX-071323-8260-B
Date Collected: 07/13/23 12:00
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-8
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			07/25/23 19:36	1
Acrolein	ND		20	3.3	ug/L			07/25/23 19:36	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 19:36	1
Benzene	ND		1.0	0.50	ug/L			07/25/23 19:36	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 19:36	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 19:36	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 19:36	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 19:36	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 19:36	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/25/23 19:36	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 19:36	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 19:36	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 19:36	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 19:36	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 19:36	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 19:36	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 19:36	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 19:36	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 19:36	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 19:36	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 19:36	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 19:36	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 19:36	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 19:36	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 19:36	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 19:36	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 19:36	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 19:36	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 19:36	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 19:36	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 19:36	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 19:36	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 19:36	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 19:36	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 19:36	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 19:36	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/25/23 19:36	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 19:36	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 19:36	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 19:36	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/25/23 19:36	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 19:36	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 19:36	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 19:36	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 19:36	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 19:36	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 19:36	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 19:36	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 19:36	1

Client: AECOM Technical Services Inc.
Job ID: 400-240560-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-071323-8260-B
Lab Sample ID: 400-240560-8
Date Collected: 07/13/23 12:00
Matrix: Water
Date Received: 07/14/23 09:08

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			07/25/23 19:36	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 19:36	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 19:36	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 19:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 19:36	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 19:36	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 19:36	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 19:36	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 19:36	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 19:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 19:36	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 19:36	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 19:36	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 19:36	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 19:36	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 19:36	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/25/23 19:36	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/25/23 19:36	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 19:36	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 19:36	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*72 - 130*		*07/25/23 19:36*	*1*
Dibromofluoromethane	*117*		*75 - 126*		*07/25/23 19:36*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*07/25/23 19:36*	*1*

Client: AECOM Technical Services Inc.
Job ID: 400-240560-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-071323-8011-B
Lab Sample ID: 400-240560-9
Date Collected: 07/13/23 12:00
Matrix: Water
Date Received: 07/14/23 09:08

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		07/20/23 08:04	07/24/23 10:59	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/20/23 08:04	07/24/23 10:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*69*		*51 - 149*	*07/20/23 08:04*	*07/24/23 10:59*	*1*

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

Job ID: 400-240560-1

Client Sample ID: MW22-ROX-071323
Date Collected: 07/13/23 09:35
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**23**	**J**	50	20	ug/L			07/25/23 20:44	2
Acrolein	ND		40	6.6	ug/L			07/25/23 20:44	2
Acrylonitrile	ND		20	5.6	ug/L			07/25/23 20:44	2
Benzene	**7.6**		2.0	1.0	ug/L			07/25/23 20:44	2
Bromobenzene	ND		2.0	1.1	ug/L			07/25/23 20:44	2
Bromochloromethane	ND		2.0	0.42	ug/L			07/25/23 20:44	2
Bromodichloromethane	ND		2.0	1.0	ug/L			07/25/23 20:44	2
Bromoform	ND		10	0.50	ug/L			07/25/23 20:44	2
Bromomethane	ND		2.0	2.0	ug/L			07/25/23 20:44	2
2-Butanone (MEK)	ND		50	5.2	ug/L			07/25/23 20:44	2
Carbon disulfide	ND		2.0	1.0	ug/L			07/25/23 20:44	2
Carbon tetrachloride	ND		2.0	0.38	ug/L			07/25/23 20:44	2
Chlorobenzene	ND		2.0	0.30	ug/L			07/25/23 20:44	2
Chloroethane	ND		2.0	1.5	ug/L			07/25/23 20:44	2
2-Chloroethyl vinyl ether	ND		10	4.0	ug/L			07/25/23 20:44	2
Chloroform	ND		2.0	1.8	ug/L			07/25/23 20:44	2
1-Chlorohexane	ND		2.0	0.64	ug/L			07/25/23 20:44	2
Chloromethane	ND		2.0	1.8	ug/L			07/25/23 20:44	2
cis-1,2-Dichloroethene	ND		2.0	0.40	ug/L			07/25/23 20:44	2
cis-1,3-Dichloropropene	ND		10	1.0	ug/L			07/25/23 20:44	2
Dibromochloromethane	ND		2.0	0.48	ug/L			07/25/23 20:44	2
1,2-Dichlorobenzene	ND		2.0	1.0	ug/L			07/25/23 20:44	2
1,3-Dichlorobenzene	ND		2.0	1.1	ug/L			07/25/23 20:44	2
1,4-Dichlorobenzene	ND		2.0	1.3	ug/L			07/25/23 20:44	2
Dichlorodifluoromethane	ND		2.0	1.7	ug/L			07/25/23 20:44	2
1,1-Dichloroethane	ND		2.0	1.0	ug/L			07/25/23 20:44	2
1,2-Dichloroethane	ND		2.0	0.38	ug/L			07/25/23 20:44	2
1,1-Dichloroethene	ND		2.0	1.0	ug/L			07/25/23 20:44	2
1,2-Dichloropropane	ND		2.0	1.0	ug/L			07/25/23 20:44	2
1,3-Dichloropropane	ND		2.0	1.0	ug/L			07/25/23 20:44	2
2,2-Dichloropropane	ND		2.0	1.0	ug/L			07/25/23 20:44	2
1,1-Dichloropropene	ND		2.0	1.0	ug/L			07/25/23 20:44	2
Ethylbenzene	**31**		2.0	1.0	ug/L			07/25/23 20:44	2
Ethyl methacrylate	ND		2.0	1.2	ug/L			07/25/23 20:44	2
Hexachlorobutadiene	ND		10	1.8	ug/L			07/25/23 20:44	2
2-Hexanone	ND		50	2.8	ug/L			07/25/23 20:44	2
Isopropylbenzene	**13**		2.0	1.1	ug/L			07/25/23 20:44	2
Methylene bromide	ND		10	0.44	ug/L			07/25/23 20:44	2
Methylene Chloride	ND		10	6.0	ug/L			07/25/23 20:44	2
4-Methyl-2-pentanone (MIBK)	ND		50	3.6	ug/L			07/25/23 20:44	2
Methyl tert-butyl ether	ND		2.0	0.44	ug/L			07/25/23 20:44	2
m-Xylene & p-Xylene	**170**		10	1.3	ug/L			07/25/23 20:44	2
Naphthalene	**43**		10	6.0	ug/L			07/25/23 20:44	2
n-Butylbenzene	**1.9**	**J**	2.0	1.5	ug/L			07/25/23 20:44	2
N-Propylbenzene	**23**		2.0	1.4	ug/L			07/25/23 20:44	2
o-Chlorotoluene	ND		2.0	1.1	ug/L			07/25/23 20:44	2
o-Xylene	**6.5**	**J**	10	1.2	ug/L			07/25/23 20:44	2
p-Chlorotoluene	ND		2.0	1.1	ug/L			07/25/23 20:44	2
p-Isopropyltoluene	ND		2.0	1.4	ug/L			07/25/23 20:44	2

Client Sample ID: MW22-ROX-071323
Date Collected: 07/13/23 09:35
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-10
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		2.0	1.4	ug/L			07/25/23 20:44	2
Styrene	ND		2.0	2.0	ug/L			07/25/23 20:44	2
tert-Butylbenzene	**2.5**		2.0	1.3	ug/L			07/25/23 20:44	2
1,1,1,2-Tetrachloroethane	ND		2.0	0.32	ug/L			07/25/23 20:44	2
1,1,2,2-Tetrachloroethane	ND		2.0	1.0	ug/L			07/25/23 20:44	2
Tetrachloroethene	ND		2.0	1.8	ug/L			07/25/23 20:44	2
Toluene	**9.3**		2.0	1.8	ug/L			07/25/23 20:44	2
trans-1,2-Dichloroethene	ND		2.0	1.0	ug/L			07/25/23 20:44	2
trans-1,3-Dichloropropene	ND		10	0.40	ug/L			07/25/23 20:44	2
1,2,3-Trichlorobenzene	ND		2.0	1.8	ug/L			07/25/23 20:44	2
1,2,4-Trichlorobenzene	ND		2.0	1.6	ug/L			07/25/23 20:44	2
1,1,1-Trichloroethane	ND		2.0	0.36	ug/L			07/25/23 20:44	2
1,1,2-Trichloroethane	ND		10	0.42	ug/L			07/25/23 20:44	2
Trichloroethene	ND		2.0	0.30	ug/L			07/25/23 20:44	2
Trichlorofluoromethane	ND		2.0	1.0	ug/L			07/25/23 20:44	2
1,2,3-Trichloropropane	ND		10	1.7	ug/L			07/25/23 20:44	2
1,2,4-Trimethylbenzene	**71**		2.0	1.6	ug/L			07/25/23 20:44	2
1,3,5-Trimethylbenzene	**29**		2.0	1.1	ug/L			07/25/23 20:44	2
Vinyl acetate	ND		50	1.9	ug/L			07/25/23 20:44	2
Vinyl chloride	ND		2.0	1.0	ug/L			07/25/23 20:44	2
Xylenes, Total	**170**		20	3.2	ug/L			07/25/23 20:44	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/25/23 20:44*	*2*
Dibromofluoromethane	*112*		*75 - 126*		*07/25/23 20:44*	*2*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/25/23 20:44*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		07/20/23 09:41	07/25/23 16:28	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/20/23 09:41	07/25/23 16:28	1
Anthracene	ND		0.20	0.047	ug/L		07/20/23 09:41	07/25/23 16:28	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/20/23 09:41	07/25/23 16:28	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/20/23 09:41	07/25/23 16:28	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/20/23 09:41	07/25/23 16:28	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/20/23 09:41	07/25/23 16:28	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/20/23 09:41	07/25/23 16:28	1
Chrysene	ND		0.20	0.033	ug/L		07/20/23 09:41	07/25/23 16:28	1
Dibenz(a,h)an hracene	ND		0.20	0.048	ug/L		07/20/23 09:41	07/25/23 16:28	1
Fluoranthene	ND		0.20	0.034	ug/L		07/20/23 09:41	07/25/23 16:28	1
Fluorene	ND		0.20	0.090	ug/L		07/20/23 09:41	07/25/23 16:28	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/20/23 09:41	07/25/23 16:28	1
Phenanthrene	ND		0.20	0.091	ug/L		07/20/23 09:41	07/25/23 16:28	1
Pyrene	ND		0.20	0.039	ug/L		07/20/23 09:41	07/25/23 16:28	1
1-Methylnaphthalene	**5.9**		0.20	0.080	ug/L		07/20/23 09:41	07/25/23 16:28	1
2-Methylnaphthalene	**7.3**		0.20	0.066	ug/L		07/20/23 09:41	07/25/23 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*62*		*18 - 147*	*07/20/23 09:41*	*07/25/23 16:28*	*1*
2-Fluorobiphenyl	*62*		*15 - 128*	*07/20/23 09:41*	*07/25/23 16:28*	*1*

Client Sample ID: MW22-ROX-071323
Date Collected: 07/13/23 09:35
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-10
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*	*07/20/23 09:41*	*07/25/23 16:28*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/20/23 09:41	07/22/23 00:58	1
Benzenethiol	ND	*-	10	1.7	ug/L		07/20/23 09:41	07/22/23 00:58	1
Benzoic acid	ND		30	7.3	ug/L		07/20/23 09:41	07/22/23 00:58	1
Benzyl alcohol	ND		10	2.0	ug/L		07/20/23 09:41	07/22/23 00:58	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/20/23 09:41	07/22/23 00:58	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/20/23 09:41	07/22/23 00:58	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/20/23 09:41	07/22/23 00:58	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/20/23 09:41	07/22/23 00:58	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/20/23 09:41	07/22/23 00:58	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/20/23 09:41	07/22/23 00:58	1
4-Chloroaniline	ND		10	3.4	ug/L		07/20/23 09:41	07/22/23 00:58	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/20/23 09:41	07/22/23 00:58	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/20/23 09:41	07/22/23 00:58	1
2-Chlorophenol	ND		10	2.2	ug/L		07/20/23 09:41	07/22/23 00:58	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/20/23 09:41	07/22/23 00:58	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/20/23 09:41	07/22/23 00:58	1
Dibenzofuran	ND		10	0.17	ug/L		07/20/23 09:41	07/22/23 00:58	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/20/23 09:41	07/22/23 00:58	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/20/23 09:41	07/22/23 00:58	1
Diethyl phthalate	ND		10	0.24	ug/L		07/20/23 09:41	07/22/23 00:58	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/20/23 09:41	07/22/23 00:58	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/20/23 09:41	07/22/23 00:58	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/20/23 09:41	07/22/23 00:58	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/20/23 09:41	07/22/23 00:58	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/20/23 09:41	07/22/23 00:58	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/20/23 09:41	07/22/23 00:58	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/20/23 09:41	07/22/23 00:58	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/20/23 09:41	07/22/23 00:58	1
1,4-Dioxane	ND		10	1.0	ug/L		07/20/23 09:41	07/22/23 00:58	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/20/23 09:41	07/22/23 00:58	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/20/23 09:41	07/22/23 00:58	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/20/23 09:41	07/22/23 00:58	1
Hexachloroethane	ND		10	4.2	ug/L		07/20/23 09:41	07/22/23 00:58	1
Indene	ND		10	1.0	ug/L		07/20/23 09:41	07/22/23 00:58	1
Isophorone	ND		10	0.14	ug/L		07/20/23 09:41	07/22/23 00:58	1
2-Methylphenol	ND		10	1.8	ug/L		07/20/23 09:41	07/22/23 00:58	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/20/23 09:41	07/22/23 00:58	1
2-Nitroaniline	ND		10	2.2	ug/L		07/20/23 09:41	07/22/23 00:58	1
3-Nitroaniline	ND		10	1.8	ug/L		07/20/23 09:41	07/22/23 00:58	1
4-Nitroaniline	ND		10	1.5	ug/L		07/20/23 09:41	07/22/23 00:58	1
Nitrobenzene	ND		10	0.13	ug/L		07/20/23 09:41	07/22/23 00:58	1
2-Nitrophenol	ND		10	5.2	ug/L		07/20/23 09:41	07/22/23 00:58	1
4-Nitrophenol	ND		10	2.1	ug/L		07/20/23 09:41	07/22/23 00:58	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/20/23 09:41	07/22/23 00:58	1

Client: AECOM Technical Services Inc.
Job ID: 400-240560-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: MW22-ROX-071323
Lab Sample ID: 400-240560-10
Date Collected: 07/13/23 09:35
Matrix: Water
Date Received: 07/14/23 09:08

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		07/20/23 09:41	07/22/23 00:58	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/20/23 09:41	07/22/23 00:58	1
Pentachlorophenol	ND		20	1.4	ug/L		07/20/23 09:41	07/22/23 00:58	1
Phenol	ND		10	2.6	ug/L		07/20/23 09:41	07/22/23 00:58	1
Pyridine	ND		10	3.2	ug/L		07/20/23 09:41	07/22/23 00:58	1
Quinoline	ND		10	4.5	ug/L		07/20/23 09:41	07/22/23 00:58	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/20/23 09:41	07/22/23 00:58	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/20/23 09:41	07/22/23 00:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*46 - 124*	*07/20/23 09:41*	*07/22/23 00:58*	*1*
2-Fluorophenol	*33*		*13 - 113*	*07/20/23 09:41*	*07/22/23 00:58*	*1*
Nitrobenzene-d5	*65*		*36 - 126*	*07/20/23 09:41*	*07/22/23 00:58*	*1*
Phenol-d5	*57*		*17 - 127*	*07/20/23 09:41*	*07/22/23 00:58*	*1*
Terphenyl-d14	*84*		*44 - 149*	*07/20/23 09:41*	*07/22/23 00:58*	*1*
2,4,6-Tribromophenol	*85*		*26 - 150*	*07/20/23 09:41*	*07/22/23 00:58*	*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		07/20/23 08:04	07/24/23 12:23	1
1,2-Dibromoethane	ND		0.019	0.014	ug/L		07/20/23 08:04	07/24/23 12:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*07/20/23 08:04*	*07/24/23 12:23*	*1*

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

Job ID: 400-240560-1

Client Sample ID: P57-ROX-071323
Date Collected: 07/13/23 13:00
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		50	20	ug/L			07/27/23 13:57	2
Acrolein	ND		40	6.6	ug/L			07/27/23 13:57	2
Acrylonitrile	ND		20	5.6	ug/L			07/27/23 13:57	2
Benzene	**210**		2.0	1.0	ug/L			07/27/23 13:57	2
Bromobenzene	ND		2.0	1.1	ug/L			07/27/23 13:57	2
Bromochloromethane	ND		2.0	0.42	ug/L			07/27/23 13:57	2
Bromodichloromethane	ND		2.0	1.0	ug/L			07/27/23 13:57	2
Bromoform	ND		10	0.50	ug/L			07/27/23 13:57	2
Bromomethane	ND		2.0	2.0	ug/L			07/27/23 13:57	2
2-Butanone (MEK)	**5.7**	**J**	50	5.2	ug/L			07/27/23 13:57	2
Carbon disulfide	ND		2.0	1.0	ug/L			07/27/23 13:57	2
Carbon tetrachloride	ND		2.0	0.38	ug/L			07/27/23 13:57	2
Chlorobenzene	ND		2.0	0.30	ug/L			07/27/23 13:57	2
Chloroethane	ND		2.0	1.5	ug/L			07/27/23 13:57	2
2-Chloroethyl vinyl ether	ND		10	4.0	ug/L			07/27/23 13:57	2
Chloroform	ND		2.0	1.8	ug/L			07/27/23 13:57	2
1-Chlorohexane	ND		2.0	0.64	ug/L			07/27/23 13:57	2
Chloromethane	ND		2.0	1.8	ug/L			07/27/23 13:57	2
cis-1,2-Dichloroethene	ND		2.0	0.40	ug/L			07/27/23 13:57	2
cis-1,3-Dichloropropene	ND		10	1.0	ug/L			07/27/23 13:57	2
Dibromochloromethane	ND		2.0	0.48	ug/L			07/27/23 13:57	2
1,2-Dichlorobenzene	ND		2.0	1.0	ug/L			07/27/23 13:57	2
1,3-Dichlorobenzene	ND		2.0	1.1	ug/L			07/27/23 13:57	2
1,4-Dichlorobenzene	ND		2.0	1.3	ug/L			07/27/23 13:57	2
Dichlorodifluoromethane	ND		2.0	1.7	ug/L			07/27/23 13:57	2
1,1-Dichloroethane	ND		2.0	1.0	ug/L			07/27/23 13:57	2
1,2-Dichloroethane	ND		2.0	0.38	ug/L			07/27/23 13:57	2
1,1-Dichloroethene	ND		2.0	1.0	ug/L			07/27/23 13:57	2
1,2-Dichloropropane	ND		2.0	1.0	ug/L			07/27/23 13:57	2
1,3-Dichloropropane	ND		2.0	1.0	ug/L			07/27/23 13:57	2
2,2-Dichloropropane	ND		2.0	1.0	ug/L			07/27/23 13:57	2
1,1-Dichloropropene	ND		2.0	1.0	ug/L			07/27/23 13:57	2
Ethylbenzene	**2.8**		2.0	1.0	ug/L			07/27/23 13:57	2
Ethyl methacrylate	ND		2.0	1.2	ug/L			07/27/23 13:57	2
Hexachlorobutadiene	ND		10	1.8	ug/L			07/27/23 13:57	2
2-Hexanone	ND		50	2.8	ug/L			07/27/23 13:57	2
Isopropylbenzene	**32**		2.0	1.1	ug/L			07/27/23 13:57	2
Methylene bromide	ND		10	0.44	ug/L			07/27/23 13:57	2
Methylene Chloride	ND		10	6.0	ug/L			07/27/23 13:57	2
4-Methyl-2-pentanone (MIBK)	ND		50	3.6	ug/L			07/27/23 13:57	2
Methyl tert-butyl ether	ND		2.0	0.44	ug/L			07/27/23 13:57	2
m-Xylene & p-Xylene	**1.5**	**J**	10	1.3	ug/L			07/27/23 13:57	2
Naphthalene	**23**		10	6.0	ug/L			07/27/23 13:57	2
n-Butylbenzene	**5.0**		2.0	1.5	ug/L			07/27/23 13:57	2
N-Propylbenzene	**42**		2.0	1.4	ug/L			07/27/23 13:57	2
o-Chlorotoluene	ND		2.0	1.1	ug/L			07/27/23 13:57	2
o-Xylene	ND		10	1.2	ug/L			07/27/23 13:57	2
p-Chlorotoluene	ND		2.0	1.1	ug/L			07/27/23 13:57	2
p-Isopropyltoluene	ND		2.0	1.4	ug/L			07/27/23 13:57	2

Client Sample ID: P57-ROX-071323
Date Collected: 07/13/23 13:00
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-11
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	**7.5**		2.0	1.4	ug/L			07/27/23 13:57	2
Styrene	ND		2.0	2.0	ug/L			07/27/23 13:57	2
tert-Butylbenzene	**8.5**		2.0	1.3	ug/L			07/27/23 13:57	2
1,1,1,2-Tetrachloroethane	ND		2.0	0.32	ug/L			07/27/23 13:57	2
1,1,2,2-Tetrachloroethane	ND		2.0	1.0	ug/L			07/27/23 13:57	2
Tetrachloroethene	ND		2.0	1.8	ug/L			07/27/23 13:57	2
Toluene	**4.4**		2.0	1.8	ug/L			07/27/23 13:57	2
trans-1,2-Dichloroethene	ND		2.0	1.0	ug/L			07/27/23 13:57	2
trans-1,3-Dichloropropene	ND		10	0.40	ug/L			07/27/23 13:57	2
1,2,3-Trichlorobenzene	ND		2.0	1.8	ug/L			07/27/23 13:57	2
1,2,4-Trichlorobenzene	ND		2.0	1.6	ug/L			07/27/23 13:57	2
1,1,1-Trichloroethane	ND		2.0	0.36	ug/L			07/27/23 13:57	2
1,1,2-Trichloroethane	ND		10	0.42	ug/L			07/27/23 13:57	2
Trichloroethene	**0.44**	**J B**	2.0	0.30	ug/L			07/27/23 13:57	2
Trichlorofluoromethane	ND		2.0	1.0	ug/L			07/27/23 13:57	2
1,2,3-Trichloropropane	ND		10	1.7	ug/L			07/27/23 13:57	2
1,2,4-Trimethylbenzene	ND		2.0	1.6	ug/L			07/27/23 13:57	2
1,3,5-Trimethylbenzene	ND		2.0	1.1	ug/L			07/27/23 13:57	2
Vinyl acetate	ND		50	1.9	ug/L			07/27/23 13:57	2
Vinyl chloride	ND		2.0	1.0	ug/L			07/27/23 13:57	2
Xylenes, Total	ND		20	3.2	ug/L			07/27/23 13:57	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*07/27/23 13:57*	*2*
Dibromofluoromethane	*109*		*75 - 126*		*07/27/23 13:57*	*2*
Toluene-d8 (Surr)	*110*		*64 - 132*		*07/27/23 13:57*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.21**	**J**	0.22	0.11	ug/L		07/20/23 09:41	07/25/23 16:50	1
Acenaphthylene	ND		0.22	0.049	ug/L		07/20/23 09:41	07/25/23 16:50	1
Anthracene	ND		0.22	0.052	ug/L		07/20/23 09:41	07/25/23 16:50	1
Benzo[a]anthracene	ND		0.22	0.038	ug/L		07/20/23 09:41	07/25/23 16:50	1
Benzo[a]pyrene	ND		0.22	0.071	ug/L		07/20/23 09:41	07/25/23 16:50	1
Benzo[b]fluoranthene	ND		0.22	0.041	ug/L		07/20/23 09:41	07/25/23 16:50	1
Benzo[g,h,i]perylene	ND		0.22	0.030	ug/L		07/20/23 09:41	07/25/23 16:50	1
Benzo[k]fluoranthene	ND		0.22	0.069	ug/L		07/20/23 09:41	07/25/23 16:50	1
Chrysene	ND		0.22	0.037	ug/L		07/20/23 09:41	07/25/23 16:50	1
Dibenz(a,h)an hracene	ND		0.22	0.053	ug/L		07/20/23 09:41	07/25/23 16:50	1
Fluoranthene	ND		0.22	0.038	ug/L		07/20/23 09:41	07/25/23 16:50	1
Fluorene	**0.33**		0.22	0.099	ug/L		07/20/23 09:41	07/25/23 16:50	1
Indeno[1,2,3-cd]pyrene	ND		0.22	0.038	ug/L		07/20/23 09:41	07/25/23 16:50	1
Phenanthrene	**0.30**		0.22	0.10	ug/L		07/20/23 09:41	07/25/23 16:50	1
Pyrene	ND		0.22	0.043	ug/L		07/20/23 09:41	07/25/23 16:50	1
1-Methylnaphthalene	**18**		0.22	0.089	ug/L		07/20/23 09:41	07/25/23 16:50	1
2-Methylnaphthalene	**22**		0.22	0.074	ug/L		07/20/23 09:41	07/25/23 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*61*		*18 - 147*	*07/20/23 09:41*	*07/25/23 16:50*	*1*
2-Fluorobiphenyl	*47*		*15 - 128*	*07/20/23 09:41*	*07/25/23 16:50*	*1*

Client Sample ID: P57-ROX-071323
Date Collected: 07/13/23 13:00
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-11
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*	*07/20/23 09:41*	*07/25/23 16:50*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	4.2	ug/L		07/20/23 09:41	07/22/23 01:21	1
Benzenethiol	ND		11	1.9	ug/L		07/20/23 09:41	07/22/23 01:21	1
Benzoic acid	ND		33	8.1	ug/L		07/20/23 09:41	07/22/23 01:21	1
Benzyl alcohol	ND		11	2.2	ug/L		07/20/23 09:41	07/22/23 01:21	1
Bis(2-chloroethoxy)methane	ND		11	0.18	ug/L		07/20/23 09:41	07/22/23 01:21	1
Bis(2-chloroethyl)ether	ND		11	3.0	ug/L		07/20/23 09:41	07/22/23 01:21	1
bis (2-chloroisopropyl) ether	ND		11	0.18	ug/L		07/20/23 09:41	07/22/23 01:21	1
Bis(2-ethylhexyl) phthalate	ND		11	5.6	ug/L		07/20/23 09:41	07/22/23 01:21	1
4-Bromophenyl phenyl ether	ND		11	0.22	ug/L		07/20/23 09:41	07/22/23 01:21	1
Butyl benzyl phthalate	ND		11	0.21	ug/L		07/20/23 09:41	07/22/23 01:21	1
4-Chloroaniline	ND		11	3.8	ug/L		07/20/23 09:41	07/22/23 01:21	1
4-Chloro-3-methylphenol	ND		11	4.2	ug/L		07/20/23 09:41	07/22/23 01:21	1
2-Chloronaphthalene	ND		11	0.16	ug/L		07/20/23 09:41	07/22/23 01:21	1
2-Chlorophenol	ND		11	2.5	ug/L		07/20/23 09:41	07/22/23 01:21	1
4-Chlorophenyl phenyl ether	ND		11	2.2	ug/L		07/20/23 09:41	07/22/23 01:21	1
Dibenz[a,h]acridine	ND		11	1.1	ug/L		07/20/23 09:41	07/22/23 01:21	1
Dibenzofuran	ND		11	0.19	ug/L		07/20/23 09:41	07/22/23 01:21	1
3,3'-Dichlorobenzidine	ND		11	2.9	ug/L		07/20/23 09:41	07/22/23 01:21	1
2,4-Dichlorophenol	ND		11	3.3	ug/L		07/20/23 09:41	07/22/23 01:21	1
Diethyl phthalate	ND		11	0.27	ug/L		07/20/23 09:41	07/22/23 01:21	1
2,4-Dimethylphenol	ND		11	3.9	ug/L		07/20/23 09:41	07/22/23 01:21	1
Dimethyl phthalate	ND		11	0.19	ug/L		07/20/23 09:41	07/22/23 01:21	1
Di-n-butyl phthalate	ND		11	3.0	ug/L		07/20/23 09:41	07/22/23 01:21	1
4,6-Dinitro-ortho-cresol	ND		11	1.8	ug/L		07/20/23 09:41	07/22/23 01:21	1
2,4-Dinitrophenol	ND		33	3.8	ug/L		07/20/23 09:41	07/22/23 01:21	1
2,4-Dinitrotoluene	ND		11	2.1	ug/L		07/20/23 09:41	07/22/23 01:21	1
2,6-Dinitrotoluene	ND		11	2.1	ug/L		07/20/23 09:41	07/22/23 01:21	1
Di-n-octyl phthalate	ND		11	0.19	ug/L		07/20/23 09:41	07/22/23 01:21	1
1,4-Dioxane	ND		11	1.1	ug/L		07/20/23 09:41	07/22/23 01:21	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	1.1	ug/L		07/20/23 09:41	07/22/23 01:21	1
Hexachlorobenzene	ND		11	0.19	ug/L		07/20/23 09:41	07/22/23 01:21	1
Hexachlorocyclopentadiene	ND		22	2.9	ug/L		07/20/23 09:41	07/22/23 01:21	1
Hexachloroethane	ND		11	4.7	ug/L		07/20/23 09:41	07/22/23 01:21	1
Indene	ND		11	1.1	ug/L		07/20/23 09:41	07/22/23 01:21	1
Isophorone	ND		11	0.16	ug/L		07/20/23 09:41	07/22/23 01:21	1
2-Methylphenol	ND		11	2.0	ug/L		07/20/23 09:41	07/22/23 01:21	1
3 & 4 Methylphenol	ND		22	0.43	ug/L		07/20/23 09:41	07/22/23 01:21	1
2-Nitroaniline	ND		11	2.5	ug/L		07/20/23 09:41	07/22/23 01:21	1
3-Nitroaniline	ND		11	2.0	ug/L		07/20/23 09:41	07/22/23 01:21	1
4-Nitroaniline	ND		11	1.7	ug/L		07/20/23 09:41	07/22/23 01:21	1
Nitrobenzene	ND		11	0.14	ug/L		07/20/23 09:41	07/22/23 01:21	1
2-Nitrophenol	ND		11	5.8	ug/L		07/20/23 09:41	07/22/23 01:21	1
4-Nitrophenol	ND		11	2.3	ug/L		07/20/23 09:41	07/22/23 01:21	1
N-Nitrosodimethylamine	ND		11	3.9	ug/L		07/20/23 09:41	07/22/23 01:21	1

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

Job ID: 400-240560-1

Client Sample ID: P57-ROX-071323
Date Collected: 07/13/23 13:00
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-11
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	3.7	ug/L		07/20/23 09:41	07/22/23 01:21	1
N-Nitrosodiphenylamine	ND		11	0.20	ug/L		07/20/23 09:41	07/22/23 01:21	1
Pentachlorophenol	ND		22	1.6	ug/L		07/20/23 09:41	07/22/23 01:21	1
Phenol	**7.9**	**J**	11	2.9	ug/L		07/20/23 09:41	07/22/23 01:21	1
Pyridine	ND		11	3.6	ug/L		07/20/23 09:41	07/22/23 01:21	1
Quinoline	ND		11	5.0	ug/L		07/20/23 09:41	07/22/23 01:21	1
2,4,5-Trichlorophenol	ND		11	4.1	ug/L		07/20/23 09:41	07/22/23 01:21	1
2,4,6-Trichlorophenol	ND		11	3.9	ug/L		07/20/23 09:41	07/22/23 01:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*46 - 124*	*07/20/23 09:41*	*07/22/23 01:21*	*1*
2-Fluorophenol	*14*		*13 - 113*	*07/20/23 09:41*	*07/22/23 01:21*	*1*
Nitrobenzene-d5	*59*		*36 - 126*	*07/20/23 09:41*	*07/22/23 01:21*	*1*
Phenol-d5	*43*		*17 - 127*	*07/20/23 09:41*	*07/22/23 01:21*	*1*
Terphenyl-d14	*83*		*44 - 149*	*07/20/23 09:41*	*07/22/23 01:21*	*1*
2,4,6-Tribromophenol	*79*		*26 - 150*	*07/20/23 09:41*	*07/22/23 01:21*	*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		0.029	0.016	ug/L		07/20/23 08:04	07/24/23 12:44	1
1,2-Dibromoethane	ND		0.019	0.014	ug/L		07/20/23 08:04	07/24/23 12:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*07/20/23 08:04*	*07/24/23 12:44*	*1*

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

Job ID: 400-240560-1

Client Sample ID: P57-ROX-071323- DUP
Date Collected: 07/13/23 13:00
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		50	20	ug/L			07/27/23 14:22	2
Acrolein	ND		40	6.6	ug/L			07/27/23 14:22	2
Acrylonitrile	ND		20	5.6	ug/L			07/27/23 14:22	2
Benzene	**400**		2.0	1.0	ug/L			07/27/23 14:22	2
Bromobenzene	ND		2.0	1.1	ug/L			07/27/23 14:22	2
Bromochloromethane	ND		2.0	0.42	ug/L			07/27/23 14:22	2
Bromodichloromethane	ND		2.0	1.0	ug/L			07/27/23 14:22	2
Bromoform	ND		10	0.50	ug/L			07/27/23 14:22	2
Bromomethane	ND		2.0	2.0	ug/L			07/27/23 14:22	2
2-Butanone (MEK)	ND		50	5.2	ug/L			07/27/23 14:22	2
Carbon disulfide	ND		2.0	1.0	ug/L			07/27/23 14:22	2
Carbon tetrachloride	ND		2.0	0.38	ug/L			07/27/23 14:22	2
Chlorobenzene	ND		2.0	0.30	ug/L			07/27/23 14:22	2
Chloroethane	ND		2.0	1.5	ug/L			07/27/23 14:22	2
2-Chloroethyl vinyl ether	ND		10	4.0	ug/L			07/27/23 14:22	2
Chloroform	ND		2.0	1.8	ug/L			07/27/23 14:22	2
1-Chlorohexane	ND		2.0	0.64	ug/L			07/27/23 14:22	2
Chloromethane	ND		2.0	1.8	ug/L			07/27/23 14:22	2
cis-1,2-Dichloroethene	ND		2.0	0.40	ug/L			07/27/23 14:22	2
cis-1,3-Dichloropropene	ND		10	1.0	ug/L			07/27/23 14:22	2
Dibromochloromethane	ND		2.0	0.48	ug/L			07/27/23 14:22	2
1,2-Dichlorobenzene	ND		2.0	1.0	ug/L			07/27/23 14:22	2
1,3-Dichlorobenzene	ND		2.0	1.1	ug/L			07/27/23 14:22	2
1,4-Dichlorobenzene	ND		2.0	1.3	ug/L			07/27/23 14:22	2
Dichlorodifluoromethane	ND		2.0	1.7	ug/L			07/27/23 14:22	2
1,1-Dichloroethane	ND		2.0	1.0	ug/L			07/27/23 14:22	2
1,2-Dichloroethane	ND		2.0	0.38	ug/L			07/27/23 14:22	2
1,1-Dichloroethene	ND		2.0	1.0	ug/L			07/27/23 14:22	2
1,2-Dichloropropane	ND		2.0	1.0	ug/L			07/27/23 14:22	2
1,3-Dichloropropane	ND		2.0	1.0	ug/L			07/27/23 14:22	2
2,2-Dichloropropane	ND		2.0	1.0	ug/L			07/27/23 14:22	2
1,1-Dichloropropene	ND		2.0	1.0	ug/L			07/27/23 14:22	2
Ethylbenzene	**4.4**		2.0	1.0	ug/L			07/27/23 14:22	2
Ethyl methacrylate	ND		2.0	1.2	ug/L			07/27/23 14:22	2
Hexachlorobutadiene	ND		10	1.8	ug/L			07/27/23 14:22	2
2-Hexanone	ND		50	2.8	ug/L			07/27/23 14:22	2
Isopropylbenzene	**38**		2.0	1.1	ug/L			07/27/23 14:22	2
Methylene bromide	ND		10	0.44	ug/L			07/27/23 14:22	2
Methylene Chloride	ND		10	6.0	ug/L			07/27/23 14:22	2
4-Methyl-2-pentanone (MIBK)	ND		50	3.6	ug/L			07/27/23 14:22	2
Methyl tert-butyl ether	ND		2.0	0.44	ug/L			07/27/23 14:22	2
m-Xylene & p-Xylene	**1.9**	**J**	10	1.3	ug/L			07/27/23 14:22	2
Naphthalene	**41**		10	6.0	ug/L			07/27/23 14:22	2
n-Butylbenzene	**5.6**		2.0	1.5	ug/L			07/27/23 14:22	2
N-Propylbenzene	**50**		2.0	1.4	ug/L			07/27/23 14:22	2
o-Chlorotoluene	ND		2.0	1.1	ug/L			07/27/23 14:22	2
o-Xylene	ND		10	1.2	ug/L			07/27/23 14:22	2
p-Chlorotoluene	ND		2.0	1.1	ug/L			07/27/23 14:22	2
p-Isopropyltoluene	ND		2.0	1.4	ug/L			07/27/23 14:22	2

Client Sample ID: P57-ROX-071323- DUP
Date Collected: 07/13/23 13:00
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-12
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	**9.0**		2.0	1.4	ug/L			07/27/23 14:22	2
Styrene	ND		2.0	2.0	ug/L			07/27/23 14:22	2
tert-Butylbenzene	**10**		2.0	1.3	ug/L			07/27/23 14:22	2
1,1,1,2-Tetrachloroethane	ND		2.0	0.32	ug/L			07/27/23 14:22	2
1,1,2,2-Tetrachloroethane	ND		2.0	1.0	ug/L			07/27/23 14:22	2
Tetrachloroethene	ND		2.0	1.8	ug/L			07/27/23 14:22	2
Toluene	**5.7**		2.0	1.8	ug/L			07/27/23 14:22	2
trans-1,2-Dichloroethene	ND		2.0	1.0	ug/L			07/27/23 14:22	2
trans-1,3-Dichloropropene	ND		10	0.40	ug/L			07/27/23 14:22	2
1,2,3-Trichlorobenzene	ND		2.0	1.8	ug/L			07/27/23 14:22	2
1,2,4-Trichlorobenzene	ND		2.0	1.6	ug/L			07/27/23 14:22	2
1,1,1-Trichloroethane	ND		2.0	0.36	ug/L			07/27/23 14:22	2
1,1,2-Trichloroethane	ND		10	0.42	ug/L			07/27/23 14:22	2
Trichloroethene	ND		2.0	0.30	ug/L			07/27/23 14:22	2
Trichlorofluoromethane	ND		2.0	1.0	ug/L			07/27/23 14:22	2
1,2,3-Trichloropropane	ND		10	1.7	ug/L			07/27/23 14:22	2
1,2,4-Trimethylbenzene	ND		2.0	1.6	ug/L			07/27/23 14:22	2
1,3,5-Trimethylbenzene	ND		2.0	1.1	ug/L			07/27/23 14:22	2
Vinyl acetate	ND		50	1.9	ug/L			07/27/23 14:22	2
Vinyl chloride	ND		2.0	1.0	ug/L			07/27/23 14:22	2
Xylenes, Total	ND		20	3.2	ug/L			07/27/23 14:22	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 130*		*07/27/23 14:22*	*2*
Dibromofluoromethane	*106*		*75 - 126*		*07/27/23 14:22*	*2*
Toluene-d8 (Surr)	*109*		*64 - 132*		*07/27/23 14:22*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.22**		0.20	0.098	ug/L		07/20/23 09:41	07/25/23 17:11	1
Acenaphthylene	ND		0.20	0.043	ug/L		07/20/23 09:41	07/25/23 17:11	1
Anthracene	ND		0.20	0.046	ug/L		07/20/23 09:41	07/25/23 17:11	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/20/23 09:41	07/25/23 17:11	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/20/23 09:41	07/25/23 17:11	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		07/20/23 09:41	07/25/23 17:11	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/20/23 09:41	07/25/23 17:11	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		07/20/23 09:41	07/25/23 17:11	1
Chrysene	ND		0.20	0.033	ug/L		07/20/23 09:41	07/25/23 17:11	1
Dibenz(a,h)an hracene	ND		0.20	0.047	ug/L		07/20/23 09:41	07/25/23 17:11	1
Fluoranthene	ND		0.20	0.034	ug/L		07/20/23 09:41	07/25/23 17:11	1
Fluorene	**0.41**		0.20	0.088	ug/L		07/20/23 09:41	07/25/23 17:11	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/20/23 09:41	07/25/23 17:11	1
Phenanthrene	**0.34**		0.20	0.089	ug/L		07/20/23 09:41	07/25/23 17:11	1
Pyrene	ND		0.20	0.038	ug/L		07/20/23 09:41	07/25/23 17:11	1
1-Methylnaphthalene	**22**		0.20	0.079	ug/L		07/20/23 09:41	07/25/23 17:11	1
2-Methylnaphthalene	**26**		0.20	0.065	ug/L		07/20/23 09:41	07/25/23 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*63*		*18 - 147*	*07/20/23 09:41*	*07/25/23 17:11*	*1*
2-Fluorobiphenyl	*53*		*15 - 128*	*07/20/23 09:41*	*07/25/23 17:11*	*1*

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

Job ID: 400-240560-1

Client Sample ID: P57-ROX-071323- DUP
Date Collected: 07/13/23 13:00
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-12
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	07/20/23 09:41	07/25/23 17:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.9	3.7	ug/L		07/20/23 09:41	07/22/23 01:43	1
Benzenethiol	ND	*-	9.9	1.7	ug/L		07/20/23 09:41	07/22/23 01:43	1
Benzoic acid	ND		30	7.2	ug/L		07/20/23 09:41	07/22/23 01:43	1
Benzyl alcohol	ND		9.9	2.0	ug/L		07/20/23 09:41	07/22/23 01:43	1
Bis(2-chloroethoxy)methane	ND		9.9	0.16	ug/L		07/20/23 09:41	07/22/23 01:43	1
Bis(2-chloroethyl)ether	ND		9.9	2.7	ug/L		07/20/23 09:41	07/22/23 01:43	1
bis (2-chloroisopropyl) ether	ND		9.9	0.16	ug/L		07/20/23 09:41	07/22/23 01:43	1
Bis(2-ethylhexyl) phthalate	ND		9.9	4.9	ug/L		07/20/23 09:41	07/22/23 01:43	1
4-Bromophenyl phenyl ether	ND		9.9	0.20	ug/L		07/20/23 09:41	07/22/23 01:43	1
Butyl benzyl phthalate	ND		9.9	0.19	ug/L		07/20/23 09:41	07/22/23 01:43	1
4-Chloroaniline	ND		9.9	3.4	ug/L		07/20/23 09:41	07/22/23 01:43	1
4-Chloro-3-methylphenol	ND		9.9	3.7	ug/L		07/20/23 09:41	07/22/23 01:43	1
2-Chloronaphthalene	ND		9.9	0.14	ug/L		07/20/23 09:41	07/22/23 01:43	1
2-Chlorophenol	ND		9.9	2.2	ug/L		07/20/23 09:41	07/22/23 01:43	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		07/20/23 09:41	07/22/23 01:43	1
Dibenz[a,h]acridine	ND		9.9	0.99	ug/L		07/20/23 09:41	07/22/23 01:43	1
Dibenzofuran	ND		9.9	0.17	ug/L		07/20/23 09:41	07/22/23 01:43	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		07/20/23 09:41	07/22/23 01:43	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		07/20/23 09:41	07/22/23 01:43	1
Diethyl phthalate	ND		9.9	0.24	ug/L		07/20/23 09:41	07/22/23 01:43	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		07/20/23 09:41	07/22/23 01:43	1
Dimethyl phthalate	ND		9.9	0.17	ug/L		07/20/23 09:41	07/22/23 01:43	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		07/20/23 09:41	07/22/23 01:43	1
4,6-Dinitro-ortho-cresol	ND		9.9	1.6	ug/L		07/20/23 09:41	07/22/23 01:43	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/20/23 09:41	07/22/23 01:43	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		07/20/23 09:41	07/22/23 01:43	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		07/20/23 09:41	07/22/23 01:43	1
Di-n-octyl phthalate	ND		9.9	0.17	ug/L		07/20/23 09:41	07/22/23 01:43	1
1,4-Dioxane	ND		9.9	0.99	ug/L		07/20/23 09:41	07/22/23 01:43	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		07/20/23 09:41	07/22/23 01:43	1
Hexachlorobenzene	ND		9.9	0.17	ug/L		07/20/23 09:41	07/22/23 01:43	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/20/23 09:41	07/22/23 01:43	1
Hexachloroethane	ND		9.9	4.1	ug/L		07/20/23 09:41	07/22/23 01:43	1
Indene	ND		9.9	0.99	ug/L		07/20/23 09:41	07/22/23 01:43	1
Isophorone	ND		9.9	0.14	ug/L		07/20/23 09:41	07/22/23 01:43	1
2-Methylphenol	ND		9.9	1.8	ug/L		07/20/23 09:41	07/22/23 01:43	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		07/20/23 09:41	07/22/23 01:43	1
2-Nitroaniline	ND		9.9	2.2	ug/L		07/20/23 09:41	07/22/23 01:43	1
3-Nitroaniline	ND		9.9	1.8	ug/L		07/20/23 09:41	07/22/23 01:43	1
4-Nitroaniline	ND		9.9	1.5	ug/L		07/20/23 09:41	07/22/23 01:43	1
Nitrobenzene	ND		9.9	0.13	ug/L		07/20/23 09:41	07/22/23 01:43	1
2-Nitrophenol	ND		9.9	5.1	ug/L		07/20/23 09:41	07/22/23 01:43	1
4-Nitrophenol	ND		9.9	2.1	ug/L		07/20/23 09:41	07/22/23 01:43	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		07/20/23 09:41	07/22/23 01:43	1

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

Job ID: 400-240560-1

Client Sample ID: P57-ROX-071323- DUP
Date Collected: 07/13/23 13:00
Date Received: 07/14/23 09:08

Lab Sample ID: 400-240560-12
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		9.9	3.3	ug/L		07/20/23 09:41	07/22/23 01:43	1
N-Nitrosodiphenylamine	ND		9.9	0.18	ug/L		07/20/23 09:41	07/22/23 01:43	1
Pentachlorophenol	ND		20	1.4	ug/L		07/20/23 09:41	07/22/23 01:43	1
Phenol	**7.2**	**J**	9.9	2.6	ug/L		07/20/23 09:41	07/22/23 01:43	1
Pyridine	ND		9.9	3.2	ug/L		07/20/23 09:41	07/22/23 01:43	1
Quinoline	ND		9.9	4.4	ug/L		07/20/23 09:41	07/22/23 01:43	1
2,4,5-Trichlorophenol	ND		9.9	3.6	ug/L		07/20/23 09:41	07/22/23 01:43	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		07/20/23 09:41	07/22/23 01:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*46 - 124*	*07/20/23 09:41*	*07/22/23 01:43*	*1*
2-Fluorophenol	*11*	*S1-*	*13 - 113*	*07/20/23 09:41*	*07/22/23 01:43*	*1*
Nitrobenzene-d5	*64*		*36 - 126*	*07/20/23 09:41*	*07/22/23 01:43*	*1*
Phenol-d5	*45*		*17 - 127*	*07/20/23 09:41*	*07/22/23 01:43*	*1*
Terphenyl-d14	*85*		*44 - 149*	*07/20/23 09:41*	*07/22/23 01:43*	*1*
2,4,6-Tribromophenol	*94*		*26 - 150*	*07/20/23 09:41*	*07/22/23 01:43*	*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	0.016	ug/L		07/20/23 08:04	07/24/23 13:06	1
1,2-Dibromoethane	ND		0.019	0.014	ug/L		07/20/23 08:04	07/24/23 13:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*51 - 149*	*07/20/23 08:04*	*07/24/23 13:06*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
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	Me hod Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Me hod Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Nega ive / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ra io (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: 400-240560-1

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)
400-240560-1	TB-ROX-071323-8260-A	96	117	99
400-240560-3	MW4-ROX-071323-EB	97	117	99
400-240560-4	MW4-ROX-071323	97	112	99
400-240560-5	MW25-ROX-071323	99	111	99
400-240560-6	MW7-ROX-071323	97	115	100
400-240560-7	MW7-ROX-071323-DUP	97	114	100
400-240560-8	TB-ROX-071323-8260-B	96	117	100
400-240560-10	MW22-ROX-071323	98	112	98
400-240560-11	P57-ROX-071323	106	109	110
400-240560-12	P57-ROX-071323- DUP	107	106	109
LCS 400-634438/1002	Lab Control Sample	101	112	100
LCS 400-634438/1003	Lab Control Sample	98	118	102
LCS 400-634747/1002	Lab Control Sample	101	101	102
MB 400-634438/31	Method Blank	97	118	99
MB 400-634747/29	Method Blank	105	101	109

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)
400-240560-3	MW4-ROX-071323-EB	67	22	57	49	85	58
400-240560-4	MW4-ROX-071323	70	18	62	44	81	75
400-240560-5	MW25-ROX-071323	71	25	60	55	67	87
400-240560-6	MW7-ROX-071323	73	20	62	56	85	94
400-240560-7	MW7-ROX-071323-DUP	70	11 S1-	62	40	77	88
400-240560-10	MW22-ROX-071323	76	33	65	57	84	85
400-240560-11	P57-ROX-071323	72	14	59	43	83	79
400-240560-12	P57-ROX-071323- DUP	75	11 S1-	64	45	85	94
LCS 400-633899/2-A	Lab Control Sample	81	40	74	67	95	105
LCS 400-633899/4-A	Lab Control Sample	78	47	64	67	102	80
LCSD 400-633899/3-A	Lab Control Sample Dup	83	21	73	61	99	111
LCSD 400-633899/5-A	Lab Control Sample Dup	82	52	67	70	98	80
MB 400-633899/1-A	Method Blank	70	14	59	44	86	65

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: 400-240560-1
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)
400-240560-3	MW4-ROX-071323-EB	73	68	51
400-240560-4	MW4-ROX-071323	58	61	50
400-240560-5	MW25-ROX-071323	51	59	48
400-240560-6	MW7-ROX-071323	61	57	39
400-240560-7	MW7-ROX-071323-DUP	60	63	40
400-240560-10	MW22-ROX-071323	62	62	73
400-240560-11	P57-ROX-071323	61	47	70
400-240560-12	P57-ROX-071323- DUP	63	53	80
LCS 400-633899/6-A	Lab Control Sample	134	134 S1+	107
LCSD 400-633899/7-A	Lab Control Sample Dup	140	141 S1+	112
MB 400-633899/1-A	Method Blank	68	67	50

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)
400-240560-2	TB-ROX-071323-8011-A	61
400-240560-3	MW4-ROX-071323-EB	76
400-240560-4	MW4-ROX-071323	71
400-240560-5	MW25-ROX-071323	70
400-240560-6	MW7-ROX-071323	70
400-240560-7	MW7-ROX-071323-DUP	64
400-240560-9	TB-ROX-071323-8011-B	69
400-240560-10	MW22-ROX-071323	99
400-240560-11	P57-ROX-071323	96
400-240560-12	P57-ROX-071323- DUP	92
LCS 400-633872/2-A	Lab Control Sample	54
LCSD 400-633872/3-A	Lab Control Sample Dup	65
MB 400-633872/1-A	Method Blank	68

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM Technical Services Inc.
Job ID: 400-240560-1
Project/Site: ROXANA QUARTERLY GW

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 S M	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

Client Sample ID: TB-ROX-071323-8260-A
Lab Sample ID: 400-240560-1

Date Collected: 07/13/23 12:00
Matrix: Water
Date Received: 07/14/23 09:08

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	634438	07/25/23 18:04	CH	EET PEN

Client Sample ID: TB-ROX-071323-8011-A
Lab Sample ID: 400-240560-2

Date Collected: 07/13/23 12:00
Matrix: Water
Date Received: 07/14/23 09:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.7 mL	35 mL	633872	07/20/23 08:04	PG	EET PEN
Total/NA	Analysis	8011		1			634252	07/24/23 09:35	PG	EET PEN

Client Sample ID: MW4-ROX-071323-EB
Lab Sample ID: 400-240560-3

Date Collected: 07/13/23 08:30
Matrix: Water
Date Received: 07/14/23 09:08

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	634438	07/25/23 18:27	CH	EET PEN
Total/NA	Prep	3520C			250.2 mL	1 mL	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 23:06	S1B	EET PEN
Total/NA	Prep	3520C			250.2 mL	1 mL	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 20:58	KJA	EET PEN
Total/NA	Prep	8011			36.3 mL	35 mL	633872	07/20/23 08:04	PG	EET PEN
Total/NA	Analysis	8011		1			634252	07/24/23 09:56	PG	EET PEN

Client Sample ID: MW4-ROX-071323
Lab Sample ID: 400-240560-4

Date Collected: 07/13/23 09:25
Matrix: Water
Date Received: 07/14/23 09:08

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	634438	07/25/23 18:50	CH	EET PEN
Total/NA	Prep	3520C			243.6 mL	1 mL	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 23:28	S1B	EET PEN
Total/NA	Prep	3520C			243.6 mL	1 mL	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 21:19	KJA	EET PEN
Total/NA	Prep	8011			36.7 mL	35 mL	633872	07/20/23 08:04	PG	EET PEN
Total/NA	Analysis	8011		1			634252	07/24/23 10:17	PG	EET PEN

Client Sample ID: MW25-ROX-071323
Lab Sample ID: 400-240560-5

Date Collected: 07/13/23 10:50
Matrix: Water
Date Received: 07/14/23 09:08

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	634438	07/25/23 19:13	CH	EET PEN
Total/NA	Prep	3520C			238.4 mL	1 mL	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 23:51	S1B	EET PEN

Client Sample ID: MW25-ROX-071323
Lab Sample ID: 400-240560-5

Date Collected: 07/13/23 10:50
Matrix: Water
Date Received: 07/14/23 09:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			238.4 mL	1 mL	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 21:41	KJA	EET PEN
Total/NA	Prep	8011			36.5 mL	35 mL	633872	07/20/23 08:04	PG	EET PEN
Total/NA	Analysis	8011		1			634252	07/24/23 10:38	PG	EET PEN

Client Sample ID: MW7-ROX-071323
Lab Sample ID: 400-240560-6

Date Collected: 07/13/23 12:05
Matrix: Water
Date Received: 07/14/23 09:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		5000	5 mL	5 mL	634438	07/25/23 21:07	CH	EET PEN
Total/NA	Prep	3520C			238 mL	1 mL	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/22/23 00:13	S1B	EET PEN
Total/NA	Prep	3520C			238 mL	1 mL	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 22:02	KJA	EET PEN
Total/NA	Prep	8011			35.5 mL	35 mL	633872	07/20/23 08:04	PG	EET PEN
Total/NA	Analysis	8011		1			634252	07/24/23 11:41	PG	EET PEN

Client Sample ID: MW7-ROX-071323-DUP
Lab Sample ID: 400-240560-7

Date Collected: 07/13/23 12:05
Matrix: Water
Date Received: 07/14/23 09:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		5000	5 mL	5 mL	634438	07/25/23 21:30	CH	EET PEN
Total/NA	Prep	3520C			253 mL	1 mL	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/22/23 00:36	S1B	EET PEN
Total/NA	Prep	3520C			253 mL	1 mL	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 22:23	KJA	EET PEN
Total/NA	Prep	8011			35.1 mL	35 mL	633872	07/20/23 08:04	PG	EET PEN
Total/NA	Analysis	8011		1			634252	07/24/23 11:20	PG	EET PEN

Client Sample ID: TB-ROX-071323-8260-B
Lab Sample ID: 400-240560-8

Date Collected: 07/13/23 12:00
Matrix: Water
Date Received: 07/14/23 09:08

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	634438	07/25/23 19:36	CH	EET PEN

Client Sample ID: TB-ROX-071323-8011-B
Lab Sample ID: 400-240560-9

Date Collected: 07/13/23 12:00
Matrix: Water
Date Received: 07/14/23 09:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.7 mL	35 mL	633872	07/20/23 08:04	PG	EET PEN
Total/NA	Analysis	8011		1			634252	07/24/23 10:59	PG	EET PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Job ID: 400-240560-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: MW22-ROX-071323
Lab Sample ID: 400-240560-10
Date Collected: 07/13/23 09:35
Matrix: Water
Date Received: 07/14/23 09:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	5 mL	5 mL	634438	07/25/23 20:44	CH	EET PEN
Total/NA	Prep	3520C			248.6 mL	1 mL	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/22/23 00:58	S1B	EET PEN
Total/NA	Prep	3520C			248.6 mL	1 mL	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634436	07/25/23 16:28	S1B	EET PEN
Total/NA	Prep	8011			36.3 mL	35 mL	633872	07/20/23 08:04	PG	EET PEN
Total/NA	Analysis	8011		1			634252	07/24/23 12:23	PG	EET PEN

Client Sample ID: P57-ROX-071323
Lab Sample ID: 400-240560-11
Date Collected: 07/13/23 13:00
Matrix: Water
Date Received: 07/14/23 09:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	5 mL	5 mL	634747	07/27/23 13:57	BPO	EET PEN
Total/NA	Prep	3520C			224.4 mL	1 mL	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/22/23 01:21	S1B	EET PEN
Total/NA	Prep	3520C			224.4 mL	1 mL	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634436	07/25/23 16:50	S1B	EET PEN
Total/NA	Prep	8011			36.6 mL	35 mL	633872	07/20/23 08:04	PG	EET PEN
Total/NA	Analysis	8011		1			634252	07/24/23 12:44	PG	EET PEN

Client Sample ID: P57-ROX-071323- DUP
Lab Sample ID: 400-240560-12
Date Collected: 07/13/23 13:00
Matrix: Water
Date Received: 07/14/23 09:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	5 mL	5 mL	634747	07/27/23 14:22	BPO	EET PEN
Total/NA	Prep	3520C			253.6 mL	1 mL	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/22/23 01:43	S1B	EET PEN
Total/NA	Prep	3520C			253.6 mL	1 mL	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634436	07/25/23 17:11	S1B	EET PEN
Total/NA	Prep	8011			36.4 mL	35 mL	633872	07/20/23 08:04	PG	EET PEN
Total/NA	Analysis	8011		1			634252	07/24/23 13:06	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-633872/1-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	633872	07/20/23 08:04	PG	EET PEN
Total/NA	Analysis	8011		1			634252	07/24/23 08:32	PG	EET PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-633899/1-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 21:12	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 19:54	KJA	EET PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-634438/31**
Date Collected: N/A — **Matrix: Water**
Date Received: 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	634438	07/25/23 11:59	CH	EET PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-634747/29**
Date Collected: N/A — **Matrix: Water**
Date Received: 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	634747	07/27/23 11:26	BPO	EET PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-633872/2-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	633872	07/20/23 08:04	PG	EET PEN
Total/NA	Analysis	8011		1			634252	07/24/23 08:53	PG	EET PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-633899/2-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 22:20	S1B	EET PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-633899/4-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 21:35	S1B	EET PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-633899/6-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 20:15	KJA	EET PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-634438/1002**
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	634438	07/25/23 10:29	CH	EET PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-634438/1003**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	634438	07/25/23 11:14	CH	EET PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-634747/1002**
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	634747	07/27/23 10:12	BPO	EET PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-633872/3-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	633872	07/20/23 08:04	PG	EET PEN
Total/NA	Analysis	8011		1			634252	07/24/23 09:14	PG	EET PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-633899/3-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 22:43	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-633899/5-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 21:58	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-633899/7-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	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 20:37	KJA	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 634438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240560-1	TB-ROX-071323-8260-A	Total/NA	Water	8260D	
400-240560-3	MW4-ROX-071323-EB	Total/NA	Water	8260D	
400-240560-4	MW4-ROX-071323	Total/NA	Water	8260D	
400-240560-5	MW25-ROX-071323	Total/NA	Water	8260D	
400-240560-6	MW7-ROX-071323	Total/NA	Water	8260D	
400-240560-7	MW7-ROX-071323-DUP	Total/NA	Water	8260D	
400-240560-8	TB-ROX-071323-8260-B	Total/NA	Water	8260D	
400-240560-10	MW22-ROX-071323	Total/NA	Water	8260D	
MB 400-634438/31	Method Blank	Total/NA	Water	8260D	
LCS 400-634438/1002	Lab Control Sample	Total/NA	Water	8260D	
LCS 400-634438/1003	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 634747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240560-11	P57-ROX-071323	Total/NA	Water	8260D	
400-240560-12	P57-ROX-071323- DUP	Total/NA	Water	8260D	
MB 400-634747/29	Method Blank	Total/NA	Water	8260D	
LCS 400-634747/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 633899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240560-3	MW4-ROX-071323-EB	Total/NA	Water	3520C	
400-240560-4	MW4-ROX-071323	Total/NA	Water	3520C	
400-240560-5	MW25-ROX-071323	Total/NA	Water	3520C	
400-240560-6	MW7-ROX-071323	Total/NA	Water	3520C	
400-240560-7	MW7-ROX-071323-DUP	Total/NA	Water	3520C	
400-240560-10	MW22-ROX-071323	Total/NA	Water	3520C	
400-240560-11	P57-ROX-071323	Total/NA	Water	3520C	
400-240560-12	P57-ROX-071323- DUP	Total/NA	Water	3520C	
MB 400-633899/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-633899/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-633899/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-633899/6-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-633899/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-633899/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-633899/7-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 634089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240560-3	MW4-ROX-071323-EB	Total/NA	Water	8270E SIM	633899
400-240560-4	MW4-ROX-071323	Total/NA	Water	8270E SIM	633899
400-240560-5	MW25-ROX-071323	Total/NA	Water	8270E SIM	633899
400-240560-6	MW7-ROX-071323	Total/NA	Water	8270E SIM	633899
400-240560-7	MW7-ROX-071323-DUP	Total/NA	Water	8270E SIM	633899
MB 400-633899/1-A	Method Blank	Total/NA	Water	8270E SIM	633899
LCS 400-633899/6-A	Lab Control Sample	Total/NA	Water	8270E SIM	633899
LCSD 400-633899/7-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	633899

GC/MS Semi VOA

Analysis Batch: 634183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240560-3	MW4-ROX-071323-EB	Total/NA	Water	8270E	633899
400-240560-4	MW4-ROX-071323	Total/NA	Water	8270E	633899
400-240560-5	MW25-ROX-071323	Total/NA	Water	8270E	633899
400-240560-6	MW7-ROX-071323	Total/NA	Water	8270E	633899
400-240560-7	MW7-ROX-071323-DUP	Total/NA	Water	8270E	633899
400-240560-10	MW22-ROX-071323	Total/NA	Water	8270E	633899
400-240560-11	P57-ROX-071323	Total/NA	Water	8270E	633899
400-240560-12	P57-ROX-071323- DUP	Total/NA	Water	8270E	633899
MB 400-633899/1-A	Method Blank	Total/NA	Water	8270E	633899
LCS 400-633899/2-A	Lab Control Sample	Total/NA	Water	8270E	633899
LCS 400-633899/4-A	Lab Control Sample	Total/NA	Water	8270E	633899
LCSD 400-633899/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	633899
LCSD 400-633899/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	633899

Analysis Batch: 634436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240560-10	MW22-ROX-071323	Total/NA	Water	8270E SIM	633899
400-240560-11	P57-ROX-071323	Total/NA	Water	8270E SIM	633899
400-240560-12	P57-ROX-071323- DUP	Total/NA	Water	8270E SIM	633899

GC Semi VOA

Prep Batch: 633872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240560-2	TB-ROX-071323-8011-A	Total/NA	Water	8011	
400-240560-3	MW4-ROX-071323-EB	Total/NA	Water	8011	
400-240560-4	MW4-ROX-071323	Total/NA	Water	8011	
400-240560-5	MW25-ROX-071323	Total/NA	Water	8011	
400-240560-6	MW7-ROX-071323	Total/NA	Water	8011	
400-240560-7	MW7-ROX-071323-DUP	Total/NA	Water	8011	
400-240560-9	TB-ROX-071323-8011-B	Total/NA	Water	8011	
400-240560-10	MW22-ROX-071323	Total/NA	Water	8011	
400-240560-11	P57-ROX-071323	Total/NA	Water	8011	
400-240560-12	P57-ROX-071323- DUP	Total/NA	Water	8011	
MB 400-633872/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-633872/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-633872/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 634252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240560-2	TB-ROX-071323-8011-A	Total/NA	Water	8011	633872
400-240560-3	MW4-ROX-071323-EB	Total/NA	Water	8011	633872
400-240560-4	MW4-ROX-071323	Total/NA	Water	8011	633872
400-240560-5	MW25-ROX-071323	Total/NA	Water	8011	633872
400-240560-6	MW7-ROX-071323	Total/NA	Water	8011	633872
400-240560-7	MW7-ROX-071323-DUP	Total/NA	Water	8011	633872
400-240560-9	TB-ROX-071323-8011-B	Total/NA	Water	8011	633872
400-240560-10	MW22-ROX-071323	Total/NA	Water	8011	633872
400-240560-11	P57-ROX-071323	Total/NA	Water	8011	633872
400-240560-12	P57-ROX-071323- DUP	Total/NA	Water	8011	633872
MB 400-633872/1-A	Method Blank	Total/NA	Water	8011	633872

GC Semi VOA (Continued)

Analysis Batch: 634252 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-633872/2-A	Lab Control Sample	Total/NA	Water	8011	633872
LCSD 400-633872/3-A	Lab Control Sample Dup	Total/NA	Water	8011	633872

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

Lab Sample ID: MB 400-634438/31
Matrix: Water
Analysis Batch: 634438

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/25/23 11:59	1
Acrolein	ND		20	3.3	ug/L			07/25/23 11:59	1
Acrylonitrile	ND		10	2.8	ug/L			07/25/23 11:59	1
Benzene	ND		1.0	0.50	ug/L			07/25/23 11:59	1
Bromobenzene	ND		1.0	0.54	ug/L			07/25/23 11:59	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/25/23 11:59	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/25/23 11:59	1
Bromoform	ND		5.0	0.25	ug/L			07/25/23 11:59	1
Bromomethane	ND		1.0	0.98	ug/L			07/25/23 11:59	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/25/23 11:59	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/25/23 11:59	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/25/23 11:59	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/25/23 11:59	1
Chloroethane	ND		1.0	0.76	ug/L			07/25/23 11:59	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/25/23 11:59	1
Chloroform	ND		1.0	0.90	ug/L			07/25/23 11:59	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/25/23 11:59	1
Chloromethane	ND		1.0	0.90	ug/L			07/25/23 11:59	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/25/23 11:59	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/25/23 11:59	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/25/23 11:59	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/25/23 11:59	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/25/23 11:59	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/25/23 11:59	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/25/23 11:59	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/25/23 11:59	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/25/23 11:59	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 11:59	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 11:59	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 11:59	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/25/23 11:59	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/25/23 11:59	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/25/23 11:59	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/25/23 11:59	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/25/23 11:59	1
2-Hexanone	ND		25	1.4	ug/L			07/25/23 11:59	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/25/23 11:59	1
Methylene bromide	ND		5.0	0.22	ug/L			07/25/23 11:59	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/25/23 11:59	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/25/23 11:59	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/25/23 11:59	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/25/23 11:59	1
Naphthalene	ND		5.0	3.0	ug/L			07/25/23 11:59	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/25/23 11:59	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/25/23 11:59	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/25/23 11:59	1
o-Xylene	ND		5.0	0.60	ug/L			07/25/23 11:59	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/25/23 11:59	1

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

Lab Sample ID: MB 400-634438/31
Matrix: Water
Analysis Batch: 634438

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/25/23 11:59	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/25/23 11:59	1
Styrene	ND		1.0	1.0	ug/L			07/25/23 11:59	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/25/23 11:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/25/23 11:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/25/23 11:59	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/25/23 11:59	1
Toluene	ND		1.0	0.90	ug/L			07/25/23 11:59	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/25/23 11:59	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/25/23 11:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/25/23 11:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/25/23 11:59	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/25/23 11:59	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/25/23 11:59	1
Trichloroethene	ND		1.0	0.15	ug/L			07/25/23 11:59	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/25/23 11:59	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/25/23 11:59	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/25/23 11:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/25/23 11:59	1
Vinyl acetate	ND		25	0.93	ug/L			07/25/23 11:59	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/25/23 11:59	1
Xylenes, Total	ND		10	1.6	ug/L			07/25/23 11:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*07/25/23 11:59*	*1*
Dibromofluoromethane	*118*		*75 - 126*		*07/25/23 11:59*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/25/23 11:59*	*1*

Lab Sample ID: LCS 400-634438/1002
Matrix: Water
Analysis Batch: 634438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acrolein	500	333		ug/L		67	38 - 160
Acrylonitrile	500	471		ug/L		94	64 - 142
Benzene	50.0	48.6		ug/L		97	70 - 130
Bromobenzene	50.0	52.3		ug/L		105	70 - 132
Bromochloromethane	50.0	54.6		ug/L		109	70 - 130
Bromodichloromethane	50.0	53.8		ug/L		108	67 - 133
Bromoform	50.0	56.3		ug/L		113	57 - 140
Bromomethane	50.0	47.8		ug/L		96	10 - 160
Carbon disulfide	50.0	44.1		ug/L		88	61 - 137
Carbon tetrachloride	50.0	54.1		ug/L		108	61 - 137
Chlorobenzene	50.0	51.6		ug/L		103	70 - 130
Chloroethane	50.0	55.6		ug/L		111	55 - 141
2-Chloroethyl vinyl ether	50.0	50.9		ug/L		102	10 - 160
Chloroform	50.0	53.1		ug/L		106	69 - 130
1-Chlorohexane	50.0	51.8		ug/L		104	69 - 130

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

Lab Sample ID: LCS 400-634438/1002
Matrix: Water
Analysis Batch: 634438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloromethane	50.0	34.8		ug/L		70	58 - 137
cis-1,2-Dichloroethene	50.0	49.1		ug/L		98	68 - 130
cis-1,3-Dichloropropene	50.0	51.1		ug/L		102	69 - 132
Dibromochloromethane	50.0	57.7		ug/L		115	67 - 135
1,2-Dichlorobenzene	50.0	55.3		ug/L		111	67 - 130
1,3-Dichlorobenzene	50.0	54.6		ug/L		109	70 - 130
1,4-Dichlorobenzene	50.0	54.2		ug/L		108	70 - 130
Dichlorodifluoromethane	50.0	43.2		ug/L		86	41 - 146
1,1-Dichloroethane	50.0	49.4		ug/L		99	70 - 130
1,2-Dichloroethane	50.0	58.5		ug/L		117	69 - 130
1,1-Dichloroethene	50.0	47.3		ug/L		95	63 - 134
1,2-Dichloropropane	50.0	50.6		ug/L		101	70 - 130
1,3-Dichloropropane	50.0	54.2		ug/L		108	70 - 130
2,2-Dichloropropane	50.0	41.4		ug/L		83	52 - 135
1,1-Dichloropropene	50.0	49.5		ug/L		99	70 - 130
Ethylbenzene	50.0	52.0		ug/L		104	70 - 130
Ethyl methacrylate	50.0	51.5		ug/L		103	68 - 130
Hexachlorobutadiene	50.0	54.3		ug/L		109	53 - 140
Isopropylbenzene	50.0	53.5		ug/L		107	70 - 130
Methylene bromide	50.0	56.0		ug/L		112	70 - 130
Methylene Chloride	50.0	49.4		ug/L		99	66 - 135
Methyl tert-butyl ether	50.0	50.1		ug/L		100	66 - 130
m-Xylene & p-Xylene	50.0	52.2		ug/L		104	70 - 130
Naphthalene	50.0	51.5		ug/L		103	47 - 149
n-Butylbenzene	50.0	62.2		ug/L		124	67 - 130
N-Propylbenzene	50.0	55.2		ug/L		110	70 - 130
o-Chlorotoluene	50.0	56.6		ug/L		113	70 - 130
o-Xylene	50.0	53.0		ug/L		106	70 - 130
p-Chlorotoluene	50.0	56.3		ug/L		113	70 - 130
p-Isopropyltoluene	50.0	56.7		ug/L		113	65 - 130
sec-Butylbenzene	50.0	55.4		ug/L		111	66 - 130
Styrene	50.0	51.9		ug/L		104	70 - 130
tert-Butylbenzene	50.0	56.3		ug/L		113	64 - 139
1,1,1,2-Tetrachloroethane	50.0	54.2		ug/L		108	67 - 131
1,1,2,2-Tetrachloroethane	50.0	53.8		ug/L		108	70 - 131
Tetrachloroethene	50.0	50.7		ug/L		101	65 - 130
Toluene	50.0	49.0		ug/L		98	70 - 130
trans-1,2-Dichloroethene	50.0	49.0		ug/L		98	70 - 130
trans-1,3-Dichloropropene	50.0	52.7		ug/L		105	63 - 130
1,2,3-Trichlorobenzene	50.0	51.8		ug/L		104	60 - 138
1,2,4-Trichlorobenzene	50.0	52.1		ug/L		104	60 - 140
1,1,1-Trichloroethane	50.0	50.9		ug/L		102	68 - 130
1,1,2-Trichloroethane	50.0	54.4		ug/L		109	70 - 130
Trichloroethene	50.0	50.0		ug/L		100	70 - 130
Trichlorofluoromethane	50.0	45.5		ug/L		91	65 - 138
1,2,3-Trichloropropane	50.0	55.0		ug/L		110	70 - 130
1,2,4-Trimethylbenzene	50.0	55.5		ug/L		111	70 - 130
1,3,5-Trimethylbenzene	50.0	54.8		ug/L		110	69 - 130
Vinyl acetate	100	113		ug/L		113	26 - 160

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

Lab Sample ID: LCS 400-634438/1002
Matrix: Water
Analysis Batch: 634438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Vinyl chloride			50.0	37.2		ug/L		74	59 - 136		
Xylenes, Total			100	105		ug/L		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*72 - 130*
Dibromofluoromethane	*112*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

Lab Sample ID: LCS 400-634438/1003
Matrix: Water
Analysis Batch: 634438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acetone			200	272		ug/L		136	43 - 160		
2-Butanone (MEK)			200	246		ug/L		123	61 - 145		
2-Hexanone			200	258		ug/L		129	65 - 137		
4-Methyl-2-pentanone (MIBK)			200	258		ug/L		129	69 - 138		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 130*
Dibromofluoromethane	*118*		*75 - 126*
Toluene-d8 (Surr)	*102*		*64 - 132*

Lab Sample ID: MB 400-634747/29
Matrix: Water
Analysis Batch: 634747

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/27/23 11:26	1
Acrolein	ND		20	3.3	ug/L			07/27/23 11:26	1
Acrylonitrile	ND		10	2.8	ug/L			07/27/23 11:26	1
Benzene	ND		1.0	0.50	ug/L			07/27/23 11:26	1
Bromobenzene	ND		1.0	0.54	ug/L			07/27/23 11:26	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/27/23 11:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/27/23 11:26	1
Bromoform	ND		5.0	0.25	ug/L			07/27/23 11:26	1
Bromomethane	ND		1.0	0.98	ug/L			07/27/23 11:26	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/27/23 11:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/27/23 11:26	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/27/23 11:26	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/27/23 11:26	1
Chloroethane	ND		1.0	0.76	ug/L			07/27/23 11:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/27/23 11:26	1
Chloroform	ND		1.0	0.90	ug/L			07/27/23 11:26	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/27/23 11:26	1
Chloromethane	ND		1.0	0.90	ug/L			07/27/23 11:26	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/27/23 11:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/27/23 11:26	1

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

Lab Sample ID: MB 400-634747/29
Matrix: Water
Analysis Batch: 634747

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		1.0	0.24	ug/L			07/27/23 11:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/27/23 11:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/27/23 11:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/27/23 11:26	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/27/23 11:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/27/23 11:26	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/27/23 11:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 11:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 11:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 11:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 11:26	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/27/23 11:26	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/27/23 11:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/27/23 11:26	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/27/23 11:26	1
2-Hexanone	ND		25	1.4	ug/L			07/27/23 11:26	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/27/23 11:26	1
Methylene bromide	ND		5.0	0.22	ug/L			07/27/23 11:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/27/23 11:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/27/23 11:26	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/27/23 11:26	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/27/23 11:26	1
Naphthalene	ND		5.0	3.0	ug/L			07/27/23 11:26	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/27/23 11:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/27/23 11:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/27/23 11:26	1
o-Xylene	ND		5.0	0.60	ug/L			07/27/23 11:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/27/23 11:26	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/27/23 11:26	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/27/23 11:26	1
Styrene	ND		1.0	1.0	ug/L			07/27/23 11:26	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/27/23 11:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/27/23 11:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/27/23 11:26	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/27/23 11:26	1
Toluene	ND		1.0	0.90	ug/L			07/27/23 11:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 11:26	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/27/23 11:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/27/23 11:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/27/23 11:26	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/27/23 11:26	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/27/23 11:26	1
Trichloroethene	0.262	J	1.0	0.15	ug/L			07/27/23 11:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/27/23 11:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/27/23 11:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/27/23 11:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/27/23 11:26	1
Vinyl acetate	ND		25	0.93	ug/L			07/27/23 11:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/27/23 11:26	1

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

Lab Sample ID: MB 400-634747/29
Matrix: Water
Analysis Batch: 634747

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		10	1.6	ug/L			07/27/23 11:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*07/27/23 11:26*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/27/23 11:26*	*1*
Toluene-d8 (Surr)	*109*		*64 - 132*		*07/27/23 11:26*	*1*

Lab Sample ID: LCS 400-634747/1002
Matrix: Water
Analysis Batch: 634747

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	263		ug/L		131	43 - 160
Acrolein	500	491		ug/L		98	38 - 160
Acrylonitrile	500	565		ug/L		113	64 - 142
Benzene	50.0	48.3		ug/L		97	70 - 130
Bromobenzene	50.0	42.6		ug/L		85	70 - 132
Bromochloromethane	50.0	39.7		ug/L		79	70 - 130
Bromodichloromethane	50.0	51.7		ug/L		103	67 - 133
Bromoform	50.0	41.3		ug/L		83	57 - 140
Bromomethane	50.0	79.9		ug/L		160	10 - 160
2-Butanone (MEK)	200	229		ug/L		114	61 - 145
Carbon disulfide	50.0	44.1		ug/L		88	61 - 137
Carbon tetrachloride	50.0	47.6		ug/L		95	61 - 137
Chlorobenzene	50.0	48.2		ug/L		96	70 - 130
Chloroethane	50.0	56.8		ug/L		114	55 - 141
2-Chloroethyl vinyl ether	50.0	66.1		ug/L		132	10 - 160
Chloroform	50.0	48.2		ug/L		96	69 - 130
1-Chlorohexane	50.0	55.8		ug/L		112	69 - 130
Chloromethane	50.0	57.3		ug/L		115	58 - 137
cis-1,2-Dichloroethene	50.0	49.1		ug/L		98	68 - 130
cis-1,3-Dichloropropene	50.0	48.8		ug/L		98	69 - 132
Dibromochloromethane	50.0	47.5		ug/L		95	67 - 135
1,2-Dichlorobenzene	50.0	46.7		ug/L		93	67 - 130
1,3-Dichlorobenzene	50.0	46.0		ug/L		92	70 - 130
1,4-Dichlorobenzene	50.0	45.9		ug/L		92	70 - 130
Dichlorodifluoromethane	50.0	56.6		ug/L		113	41 - 146
1,1-Dichloroethane	50.0	48.4		ug/L		97	70 - 130
1,2-Dichloroethane	50.0	53.2		ug/L		106	69 - 130
1,1-Dichloroethene	50.0	46.8		ug/L		94	63 - 134
1,2-Dichloropropane	50.0	54.2		ug/L		108	70 - 130
1,3-Dichloropropane	50.0	52.5		ug/L		105	70 - 130
2,2-Dichloropropane	50.0	44.2		ug/L		88	52 - 135
1,1-Dichloropropene	50.0	48.9		ug/L		98	70 - 130
Ethylbenzene	50.0	50.7		ug/L		101	70 - 130
Ethyl methacrylate	50.0	53.1		ug/L		106	68 - 130
Hexachlorobutadiene	50.0	47.3		ug/L		95	53 - 140
2-Hexanone	200	257		ug/L		129	65 - 137

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

Lab Sample ID: LCS 400-634747/1002
Matrix: Water
Analysis Batch: 634747

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Isopropylbenzene	50.0	51.3		ug/L		103	70 - 130
Methylene bromide	50.0	55.6		ug/L		111	70 - 130
Methylene Chloride	50.0	46.0		ug/L		92	66 - 135
4-Methyl-2-pentanone (MIBK)	200	266		ug/L		133	69 - 138
Methyl tert-butyl ether	50.0	47.0		ug/L		94	66 - 130
m-Xylene & p-Xylene	50.0	50.2		ug/L		100	70 - 130
Naphthalene	50.0	50.7		ug/L		101	47 - 149
n-Butylbenzene	50.0	54.9		ug/L		110	67 - 130
N-Propylbenzene	50.0	49.3		ug/L		99	70 - 130
o-Chlorotoluene	50.0	49.9		ug/L		100	70 - 130
o-Xylene	50.0	48.5		ug/L		97	70 - 130
p-Chlorotoluene	50.0	50.6		ug/L		101	70 - 130
p-Isopropyltoluene	50.0	49.4		ug/L		99	65 - 130
sec-Butylbenzene	50.0	51.0		ug/L		102	66 - 130
Styrene	50.0	46.6		ug/L		93	70 - 130
tert-Butylbenzene	50.0	50.7		ug/L		101	64 - 139
1,1,1,2-Tetrachloroethane	50.0	46.5		ug/L		93	67 - 131
1,1,2,2-Tetrachloroethane	50.0	44.0		ug/L		88	70 - 131
Tetrachloroethene	50.0	56.9		ug/L		114	65 - 130
Toluene	50.0	47.9		ug/L		96	70 - 130
trans-1,2-Dichloroethene	50.0	43.9		ug/L		88	70 - 130
trans-1,3-Dichloropropene	50.0	49.6		ug/L		99	63 - 130
1,2,3-Trichlorobenzene	50.0	43.4		ug/L		87	60 - 138
1,2,4-Trichlorobenzene	50.0	43.8		ug/L		88	60 - 140
1,1,1-Trichloroethane	50.0	47.6		ug/L		95	68 - 130
1,1,2-Trichloroethane	50.0	52.0		ug/L		104	70 - 130
Trichloroethene	50.0	50.2		ug/L		100	70 - 130
Trichlorofluoromethane	50.0	45.2		ug/L		90	65 - 138
1,2,3-Trichloropropane	50.0	53.9		ug/L		108	70 - 130
1,2,4-Trimethylbenzene	50.0	48.9		ug/L		98	70 - 130
1,3,5-Trimethylbenzene	50.0	49.2		ug/L		98	69 - 130
Vinyl acetate	100	101		ug/L		101	26 - 160
Vinyl chloride	50.0	51.9		ug/L		104	59 - 136
Xylenes, Total	100	98.7		ug/L		99	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*72 - 130*
Dibromofluoromethane	*101*		*75 - 126*
Toluene-d8 (Surr)	*102*		*64 - 132*

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

Lab Sample ID: MB 400-633899/1-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633899

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/20/23 09:40	07/21/23 21:12	1
Benzenethiol	ND		10	1.7	ug/L		07/20/23 09:40	07/21/23 21:12	1

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

Lab Sample ID: MB 400-633899/1-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633899

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzoic acid	ND		30	7.3	ug/L		07/20/23 09:40	07/21/23 21:12	1
Benzyl alcohol	ND		10	2.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/20/23 09:40	07/21/23 21:12	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/20/23 09:40	07/21/23 21:12	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/20/23 09:40	07/21/23 21:12	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/20/23 09:40	07/21/23 21:12	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Chloroaniline	ND		10	3.4	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/20/23 09:40	07/21/23 21:12	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/20/23 09:40	07/21/23 21:12	1
2-Chlorophenol	ND		10	2.2	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Dibenzofuran	ND		10	0.17	ug/L		07/20/23 09:40	07/21/23 21:12	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Diethyl phthalate	ND		10	0.24	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/20/23 09:40	07/21/23 21:12	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/20/23 09:40	07/21/23 21:12	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/20/23 09:40	07/21/23 21:12	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/20/23 09:40	07/21/23 21:12	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/20/23 09:40	07/21/23 21:12	1
1,4-Dioxane	ND		10	1.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/20/23 09:40	07/21/23 21:12	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/20/23 09:40	07/21/23 21:12	1
Hexachloroethane	ND		10	4.2	ug/L		07/20/23 09:40	07/21/23 21:12	1
Indene	ND		10	1.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Isophorone	ND		10	0.14	ug/L		07/20/23 09:40	07/21/23 21:12	1
2-Methylphenol	ND		10	1.8	ug/L		07/20/23 09:40	07/21/23 21:12	1
3 & 4 Me hylphenol	ND		20	0.39	ug/L		07/20/23 09:40	07/21/23 21:12	1
2-Nitroaniline	ND		10	2.2	ug/L		07/20/23 09:40	07/21/23 21:12	1
3-Nitroaniline	ND		10	1.8	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Nitroaniline	ND		10	1.5	ug/L		07/20/23 09:40	07/21/23 21:12	1
Nitrobenzene	ND		10	0.13	ug/L		07/20/23 09:40	07/21/23 21:12	1
2-Nitrophenol	ND		10	5.2	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Nitrophenol	ND		10	2.1	ug/L		07/20/23 09:40	07/21/23 21:12	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/20/23 09:40	07/21/23 21:12	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/20/23 09:40	07/21/23 21:12	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/20/23 09:40	07/21/23 21:12	1
Pentachlorophenol	ND		20	1.4	ug/L		07/20/23 09:40	07/21/23 21:12	1
Phenol	ND		10	2.6	ug/L		07/20/23 09:40	07/21/23 21:12	1
Pyridine	ND		10	3.2	ug/L		07/20/23 09:40	07/21/23 21:12	1
Quinoline	ND		10	4.5	ug/L		07/20/23 09:40	07/21/23 21:12	1

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

Lab Sample ID: MB 400-633899/1-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633899

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/20/23 09:40	07/21/23 21:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*46 - 124*	*07/20/23 09:40*	*07/21/23 21:12*	*1*
2-Fluorophenol	*14*		*13 - 113*	*07/20/23 09:40*	*07/21/23 21:12*	*1*
Nitrobenzene-d5	*59*		*36 - 126*	*07/20/23 09:40*	*07/21/23 21:12*	*1*
Phenol-d5	*44*		*17 - 127*	*07/20/23 09:40*	*07/21/23 21:12*	*1*
Terphenyl-d14	*86*		*44 - 149*	*07/20/23 09:40*	*07/21/23 21:12*	*1*
2,4,6-Tribromophenol	*65*		*26 - 150*	*07/20/23 09:40*	*07/21/23 21:12*	*1*

Lab Sample ID: LCS 400-633899/2-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	86.0		ug/L		72	21 - 120
Benzoic acid	522	231		ug/L		44	10 - 144
Benzyl alcohol	120	69.5		ug/L		58	28 - 120
Bis(2-chloroethoxy)methane	120	86.1		ug/L		72	47 - 120
Bis(2-chloroethyl)ether	120	83.5		ug/L		70	44 - 120
bis (2-chloroisopropyl) ether	120	86.5		ug/L		72	33 - 121
Bis(2-ethylhexyl) phthalate	120	91.3		ug/L		76	52 - 147
4-Bromophenyl phenyl ether	120	96.2		ug/L		80	54 - 122
Butyl benzyl phthalate	120	100		ug/L		84	54 - 133
4-Chloroaniline	120	72.3		ug/L		60	26 - 120
4-Chloro-3-methylphenol	120	88.6		ug/L		74	48 - 131
2-Chloronaphthalene	120	99.9		ug/L		83	52 - 121
2-Chlorophenol	120	68.9		ug/L		57	40 - 120
4-Chlorophenyl phenyl ether	120	104		ug/L		87	56 - 125
Dibenz[a,h]acridine	110	88.2		ug/L		81	31 - 150
Dibenzofuran	120	105		ug/L		88	56 - 122
3,3'-Dichlorobenzidine	160	144		ug/L		90	36 - 132
2,4-Dichlorophenol	120	86.8		ug/L		72	49 - 120
Diethyl phthalate	120	108		ug/L		90	50 - 137
2,4-Dimethylphenol	120	69.4		ug/L		58	48 - 120
Dimethyl phthalate	120	102		ug/L		85	57 - 124
Di-n-butyl phthalate	120	100		ug/L		84	58 - 126
4,6-Dinitro-ortho-cresol	240	171		ug/L		71	23 - 148
2,4-Dinitrophenol	240	173		ug/L		72	10 - 150
2,4-Dinitrotoluene	120	103		ug/L		86	54 - 142
2,6-Dinitrotoluene	120	101		ug/L		84	55 - 130
Di-n-octyl phthalate	120	91.5		ug/L		76	57 - 138
1,4-Dioxane	120	64.0		ug/L		53	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	83.1		ug/L		69	45 - 124
Hexachlorobenzene	120	113		ug/L		94	52 - 129
Hexachlorocyclopentadiene	120	54.0		ug/L		45	10 - 134
Hexachloroethane	120	79.8		ug/L		66	20 - 120

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

Lab Sample ID: LCS 400-633899/2-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Indene			120	91.2		ug/L		76	49 - 120		
Isophorone			120	85.4		ug/L		71	48 - 120		
2-Methylphenol			120	92.4		ug/L		77	46 - 124		
3 & 4 Me hylphenol			120	91.9		ug/L		77	45 - 120		
2-Nitroaniline			120	89.4		ug/L		74	51 - 145		
3-Nitroaniline			120	84.8		ug/L		71	37 - 127		
4-Nitroaniline			120	112		ug/L		93	36 - 137		
Nitrobenzene			120	79.5		ug/L		66	45 - 120		
2-Nitrophenol			120	82.0		ug/L		68	40 - 124		
4-Nitrophenol			240	152		ug/L		63	23 - 146		
N-Nitrosodimethylamine			120	69.6		ug/L		58	29 - 137		
N-Nitrosodi-n-propylamine			120	91.2		ug/L		76	45 - 120		
N-Nitrosodiphenylamine			119	91.4		ug/L		77	54 - 120		
Pentachlorophenol			240	195		ug/L		81	31 - 130		
Phenol			120	72.2		ug/L		60	11 - 120		
Pyridine			240	114		ug/L		47	16 - 120		
Quinoline			110	93.1		ug/L		85	49 - 130		
2,4,5-Trichlorophenol			120	95.9		ug/L		80	51 - 136		
2,4,6-Trichlorophenol			120	94.8		ug/L		79	50 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*81*		*46 - 124*
2-Fluorophenol	*40*		*13 - 113*
Nitrobenzene-d5	*74*		*36 - 126*
Phenol-d5	*67*		*17 - 127*
Terphenyl-d14	*95*		*44 - 149*
2,4,6-Tribromophenol	*105*		*26 - 150*

Lab Sample ID: LCS 400-633899/4-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	13.3		ug/L		11	10 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*46 - 124*
2-Fluorophenol	*47*		*13 - 113*
Nitrobenzene-d5	*64*		*36 - 126*
Phenol-d5	*67*		*17 - 127*
Terphenyl-d14	*102*		*44 - 149*
2,4,6-Tribromophenol	*80*		*26 - 150*

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

Lab Sample ID: LCSD 400-633899/3-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	98.9		ug/L		82	21 - 120	14	30
Benzoic acid			522	249		ug/L		48	10 - 144	7	30
Benzyl alcohol			120	75.2		ug/L		63	28 - 120	8	30
Bis(2-chloroethoxy)methane			120	92.0		ug/L		77	47 - 120	7	30
Bis(2-chloroethyl)ether			120	82.0		ug/L		68	44 - 120	2	30
bis (2-chloroisopropyl) ether			120	86.6		ug/L		72	33 - 121	0	30
Bis(2-ethylhexyl) phthalate			120	98.3		ug/L		82	52 - 147	7	30
4-Bromophenyl phenyl ether			120	106		ug/L		89	54 - 122	10	30
Butyl benzyl phthalate			120	109		ug/L		91	54 - 133	8	30
4-Chloroaniline			120	79.2		ug/L		66	26 - 120	9	30
4-Chloro-3-methylphenol			120	97.7		ug/L		81	48 - 131	10	30
2-Chloronaphthalene			120	107		ug/L		90	52 - 121	7	30
2-Chlorophenol			120	60.5		ug/L		50	40 - 120	13	30
4-Chlorophenyl phenyl ether			120	114		ug/L		95	56 - 125	9	30
Dibenz[a,h]acridine			110	102		ug/L		93	31 - 150	14	30
Dibenzofuran			120	115		ug/L		96	56 - 122	9	30
3,3'-Dichlorobenzidine			160	157		ug/L		98	36 - 132	9	30
2,4-Dichlorophenol			120	90.9		ug/L		76	49 - 120	5	30
Diethyl phthalate			120	118		ug/L		98	50 - 137	9	30
2,4-Dimethylphenol			120	77.1		ug/L		64	48 - 120	10	30
Dimethyl phthalate			120	113		ug/L		94	57 - 124	10	30
Di-n-butyl phthalate			120	110		ug/L		91	58 - 126	9	30
4,6-Dinitro-ortho-cresol			240	193		ug/L		81	23 - 148	13	30
2,4-Dinitrophenol			240	197		ug/L		82	10 - 150	13	30
2,4-Dinitrotoluene			120	115		ug/L		96	54 - 142	11	30
2,6-Dinitrotoluene			120	113		ug/L		94	55 - 130	11	30
Di-n-octyl phthalate			120	97.2		ug/L		81	57 - 138	6	30
1,4-Dioxane			120	64.3		ug/L		54	31 - 120	0	30
1,2-Diphenylhydrazine (as Azobenzene)			120	88.6		ug/L		74	45 - 124	6	30
Hexachlorobenzene			120	125		ug/L		104	52 - 129	10	30
Hexachlorocyclopentadiene			120	56.5		ug/L		47	10 - 134	5	30
Hexachloroethane			120	75.5		ug/L		63	20 - 120	6	30
Indene			120	93.4		ug/L		78	49 - 120	2	30
Isophorone			120	90.2		ug/L		75	48 - 120	6	30
2-Methylphenol			120	99.8		ug/L		83	46 - 124	8	30
3 & 4 Methylphenol			120	98.3		ug/L		82	45 - 120	7	30
2-Nitroaniline			120	96.3		ug/L		80	51 - 145	7	30
3-Nitroaniline			120	90.8		ug/L		76	37 - 127	7	30
4-Nitroaniline			120	121		ug/L		101	36 - 137	8	30
Nitrobenzene			120	83.2		ug/L		69	45 - 120	5	30
2-Nitrophenol			120	86.0		ug/L		72	40 - 124	5	30
4-Nitrophenol			240	155		ug/L		65	23 - 146	2	30
N-Nitrosodimethylamine			120	78.7		ug/L		66	29 - 137	12	30
N-Nitrosodi-n-propylamine			120	94.2		ug/L		79	45 - 120	3	30
N-Nitrosodiphenylamine			119	102		ug/L		85	54 - 120	11	30
Pentachlorophenol			240	213		ug/L		89	31 - 130	9	30
Phenol			120	69.4		ug/L		58	11 - 120	4	30
Pyridine			240	139		ug/L		58	16 - 120	20	30

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

Lab Sample ID: LCSD 400-633899/3-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Quinoline			110	101		ug/L		92	49 - 130	8	30
2,4,5-Trichlorophenol			120	108		ug/L		90	51 - 136	12	30
2,4,6-Trichlorophenol			120	107		ug/L		89	50 - 127	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*46 - 124*
2-Fluorophenol	*21*		*13 - 113*
Nitrobenzene-d5	*73*		*36 - 126*
Phenol-d5	*61*		*17 - 127*
Terphenyl-d14	*99*		*44 - 149*
2,4,6-Tribromophenol	*111*		*26 - 150*

Lab Sample ID: LCSD 400-633899/5-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	9.83	J *-	ug/L		8	10 - 120	30	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*82*		*46 - 124*
2-Fluorophenol	*52*		*13 - 113*
Nitrobenzene-d5	*67*		*36 - 126*
Phenol-d5	*70*		*17 - 127*
Terphenyl-d14	*98*		*44 - 149*
2,4,6-Tribromophenol	*80*		*26 - 150*

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

Lab Sample ID: MB 400-633899/1-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633899

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/20/23 09:40	07/21/23 19:54	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/20/23 09:40	07/21/23 19:54	1
Anthracene	ND		0.20	0.047	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/20/23 09:40	07/21/23 19:54	1
Chrysene	ND		0.20	0.033	ug/L		07/20/23 09:40	07/21/23 19:54	1
Dibenz(a,h)an hracene	ND		0.20	0.048	ug/L		07/20/23 09:40	07/21/23 19:54	1
Fluoranthene	ND		0.20	0.034	ug/L		07/20/23 09:40	07/21/23 19:54	1
Fluorene	ND		0.20	0.089	ug/L		07/20/23 09:40	07/21/23 19:54	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/20/23 09:40	07/21/23 19:54	1
Phenanthrene	ND		0.20	0.090	ug/L		07/20/23 09:40	07/21/23 19:54	1

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

Lab Sample ID: MB 400-633899/1-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633899

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		0.20	0.039	ug/L		07/20/23 09:40	07/21/23 19:54	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/20/23 09:40	07/21/23 19:54	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/20/23 09:40	07/21/23 19:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*68*		*18 - 147*	*07/20/23 09:40*	*07/21/23 19:54*	*1*
2-Fluorobiphenyl	*67*		*15 - 128*	*07/20/23 09:40*	*07/21/23 19:54*	*1*
Nitrobenzene-d5	*50*		*10 - 144*	*07/20/23 09:40*	*07/21/23 19:54*	*1*

Lab Sample ID: LCS 400-633899/6-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	2.00	1.18		ug/L		59	40 - 140
Acenaphthylene	2.00	1.24		ug/L		62	40 - 140
Anthracene	2.00	1.24		ug/L		62	40 - 140
Benzo[a]anthracene	2.00	1.41		ug/L		70	40 - 140
Benzo[a]pyrene	2.00	1.23		ug/L		61	40 - 140
Benzo[b]fluoranthene	2.00	1.21		ug/L		60	40 - 140
Benzo[g,h,i]perylene	2.00	1.36		ug/L		68	40 - 140
Benzo[k]fluoranthene	2.00	1.18		ug/L		59	40 - 140
Chrysene	2.00	1.32		ug/L		66	40 - 140
Dibenz(a,h)an hracene	2.00	1.45		ug/L		72	40 - 140
Fluoranthene	2.00	1.49		ug/L		74	40 - 140
Fluorene	2.00	1.30		ug/L		65	40 - 140
Indeno[1,2,3-cd]pyrene	2.00	1.42		ug/L		71	40 - 140
Phenanthrene	2.00	1.21		ug/L		60	40 - 140
Pyrene	2.00	1.02		ug/L		51	40 - 140
1-Methylnaphthalene	2.00	1.41		ug/L		71	40 - 140
2-Methylnaphthalene	2.00	1.42		ug/L		71	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*134*		*18 - 147*
2-Fluorobiphenyl	*134*	*S1+*	*15 - 128*
Nitrobenzene-d5	*107*		*10 - 144*

Lab Sample ID: LCSD 400-633899/7-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633899

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	2.00	1.25		ug/L		63	40 - 140	6	40
Acenaphthylene	2.00	1.30		ug/L		65	40 - 140	5	40
Anthracene	2.00	1.26		ug/L		63	40 - 140	2	40
Benzo[a]anthracene	2.00	1.46		ug/L		73	40 - 140	4	40
Benzo[a]pyrene	2.00	1.30		ug/L		65	40 - 140	6	40
Benzo[b]fluoranthene	2.00	1.26		ug/L		63	40 - 140	4	40

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

Lab Sample ID: LCSD 400-633899/7-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[g,h,i]perylene			2.00	1.39		ug/L		70	40 - 140	3	40
Benzo[k]fluoranthene			2.00	1.22		ug/L		61	40 - 140	4	40
Chrysene			2.00	1.38		ug/L		69	40 - 140	5	40
Dibenz(a,h)an hracene			2.00	1.50		ug/L		75	40 - 140	4	40
Fluoranthene			2.00	1.55		ug/L		77	40 - 140	4	40
Fluorene			2.00	1.39		ug/L		69	40 - 140	7	40
Indeno[1,2,3-cd]pyrene			2.00	1.44		ug/L		72	40 - 140	1	40
Phenanthrene			2.00	1.25		ug/L		63	40 - 140	4	40
Pyrene			2.00	1.09		ug/L		54	40 - 140	7	40
1-Methylnaphthalene			2.00	1.36		ug/L		68	40 - 140	4	40
2-Methylnaphthalene			2.00	1.37		ug/L		69	40 - 140	3	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*140*		*18 - 147*
2-Fluorobiphenyl	*141*	*S1+*	*15 - 128*
Nitrobenzene-d5	*112*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-633872/1-A
Matrix: Water
Analysis Batch: 634252

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633872

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/20/23 08:04	07/24/23 08:32	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/20/23 08:04	07/24/23 08:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*68*		*51 - 149*	*07/20/23 08:04*	*07/24/23 08:32*	*1*

Lab Sample ID: LCS 400-633872/2-A
Matrix: Water
Analysis Batch: 634252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633872

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane			0.101	0.123		ug/L		123	60 - 140
1,2-Dibromoethane			0.101	0.0712		ug/L		71	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*54*		*51 - 149*

Lab Sample ID: LCSD 400-633872/3-A
Matrix: Water
Analysis Batch: 634252

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633872

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.140		ug/L		139	60 - 140	12	30
1,2-Dibromoethane			0.101	0.0807		ug/L		80	60 - 140	12	30

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-633872/3-A
Matrix: Water
Analysis Batch: 634252

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633872

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	65		51 - 149

400-240560 COC

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: 7/13/2023
PO #	**GSAP Project ID**	PAGE: 1 of 2
60697537 – 3.3.2	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 60697537 – 3.3.2

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, loredana.filimon@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°: 2.6, 2.5 JR11

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-071323-8260-A	7/13/2023	0000	Water	2					2	X			
	TB-ROX-071323-8011-A	7/13/2023	0000	Water	2					2		X		
	MW4-ROX-071323-EB	7/13/2023	0830	Water	6			2		8	X	X	X	X
	MW4-ROX-071323	7/13/2023	0925	Water	6			2		8	X	X	X	X
	MW25-ROX-071323	7/13/2023	1050	Water	6			2		8	X	X	X	X
	MW7-ROX-071323	7/13/2023	1205	Water	6			2		8	X	X	X	X
	MW7-ROX-071323-DUP	7/13/2023	1205	Water	6			2		8	X	X	X	X

7/13/23

Relinquished by (Signature)	Received by (Signature)	Date	Time
MARY MASSA	FEDEX: 6339 6592 6450, 6339 6592 6472	7/13/2023	1600
Relinquished by (Signature)	Received by (Signature)	Date: 7142	Time 9:08
Relinquished by (Signature)	Received by (Signature)	Date	Time

Version: 12July23

CUSTODY SEALS: 2349717, 2349716, 2349713, 2349712

LAB (LOCATION)

☑ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other (_____)

Shell Oil Products US Chain Of Custody Record

AECOM

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL
☐ CHEMICALS ☐ CONSULTANT ☐ LUBES
☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES_____

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 7/13/2023
PO #	**GSAP Project ID**	PAGE: 2 of 2
60697537 – 3.3.2	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 60697537 – 3.3.2

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	J. Mayer, E. Chalfant	

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; loredana.filimon@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

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-071323-8260-B	7/13/2023	0000	Water	2					2	X			
	TB-ROX-071323-8011-B	7/13/2023	0000	Water	2					2		X		
	MW22-ROX-071323	7/13/2023	0935	Water	6			2		8	X	X	X	X
	P57-ROX-071323	7/13/2023	1300	Water	6			2		8	X	X	X	X
	P57-ROX-071323-DUP	7/13/2023	1300	Water	6			2		8	X	X	X	X

Joe Mayer 7-13-23

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Joe Mayer	FEDEX: See page 1	7/13/2023	1600
Relinquished by: (Signature)	Received by: (Signature)	Date: 7.14.23	Time: 9:08
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version 13Oct22

CUSTODY SEALS: See page 1

7/28/2023

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-240560-1

Login Number: 240560

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	2.5°C, 2.6°C IR11
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 leg ble 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: 400-240560-1
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	09-01-23
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Ilinois	NELAP	200041	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-23
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 – 3rd Quarter 2023 Data Review

Laboratory SDG: 400-240599-1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 8/22/2023

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

Sample Identification	Sample Identification
TB-ROX-071423-8260-A	TB-ROX-071423-8011-A
P114R-ROX-071423	MW13-ROX-071423
TB-ROX-071423-8260-B	TB-ROX-071423-8011-B
P93C-ROX-071423	T12-ROX-071423

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 LCS/LCSD recoveries for benzenethiol were outside evaluation criteria. Surrogate recoveries for SVOC 2-fluorophenol and PAH 2-Fluorobiphenyl in several investigative and quality control samples were outside criteria. VOCs in sample T12-ROX-071423 were diluted to bring target analytes into calibration range of the instrument. Several PAHs in sample MW13-ROX-071423 were diluted due to the nature of the sample matrix. The continuing calibration verification 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?

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 400-633899/4-A/5-A	SVOCs	Benzenethiol	11/**8**	30	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
P114R-ROX-071423	SVOCs	Benzenethiol	**UJ**
MW13-ROX-071423	SVOCs	Benzenethiol	**UJ**
P93C-ROX-071423	SVOCs	Benzenethiol	**UJ**
T12-ROX-071423	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
P114R-ROX-071423	SVOCs	2-Fluorophenol	**4**	13-113
LCS 400-633899/6-A	PAHs	2-Fluorobiphenyl	**134**	15-128
LCSD 400-633899/7-A	PAHs	2-Fluorobiphenyl	**141**	15-128

Qualifications due to surrogate recoveries were not required if only one of three base/neutral and/or acid SVOC/PAH surrogate recoveries were outside evaluation criteria. Laboratory control samples 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; analytes were detected in samples that were diluted with the exception of several PAHs in sample MW13-ROX-071423 due to the nature of the sample matrix. PAHs were non-detect at a dilution factor of 5X, with raised reporting limits of 0.99 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 for several analytes was outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
P114R-ROX-071423	SVOCs	1,4-Dioxane	**UJ**
P114R-ROX-071423	SVOCs	n-Nitrosodimethylamine	**UJ**
P114R-ROX-071423	SVOCs	Pyridine	**UJ**
P114R-ROX-071423	SVOCs	Phenol	**UJ**
P114R-ROX-071423	SVOCs	bis(2-Chloroethyl)ether	**UJ**
P114R-ROX-071423	SVOCs	Benzyl alcohol	**UJ**
P114R-ROX-071423	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	**UJ**
MW13-ROX-071423	SVOCs	1,4-Dioxane	**UJ**
MW13-ROX-071423	SVOCs	n-Nitrosodimethylamine	**UJ**
MW13-ROX-071423	SVOCs	Pyridine	**UJ**
MW13-ROX-071423	SVOCs	Phenol	**UJ**
MW13-ROX-071423	SVOCs	bis(2-Chloroethyl)ether	**UJ**
MW13-ROX-071423	SVOCs	Benzyl alcohol	**UJ**
MW13-ROX-071423	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	**UJ**
P93C-ROX-071423	SVOCs	1,4-Dioxane	**UJ**
P93C-ROX-071423	SVOCs	n-Nitrosodimethylamine	**UJ**
P93C-ROX-071423	SVOCs	Pyridine	**UJ**
P93C-ROX-071423	SVOCs	Phenol	**UJ**
P93C-ROX-071423	SVOCs	bis(2-Chloroethyl)ether	**UJ**
P93C-ROX-071423	SVOCs	Benzyl alcohol	**UJ**
P93C-ROX-071423	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	**UJ**
T12-ROX-071423	SVOCs	1,4-Dioxane	**UJ**
T12-ROX-071423	SVOCs	n-Nitrosodimethylamine	**UJ**
T12-ROX-071423	SVOCs	Pyridine	**UJ**
T12-ROX-071423	SVOCs	Phenol	**J**
T12-ROX-071423	SVOCs	bis(2-Chloroethyl)ether	**UJ**
T12-ROX-071423	SVOCs	Benzyl alcohol	**UJ**
T12-ROX-071423	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	**UJ**

Additionally, several PAHs in sample MW13-ROX-071423 were qualified as estimated non-detect due to sample dilution and historical detections.

Sample ID	Parameter	Analyte	Qualification
MW13-ROX-071423	PAHs	Acenaphthene	**UJ**
MW13-ROX-071423	PAHs	Acenaphthylene	**UJ**
MW13-ROX-071423	PAHs	Fluorene	**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 7/31/2023 8:17:11 AM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-240599-1

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
7/31/2023 8:17:11 AM

Authorized for release by
Leah Klingensmith, Senior Project Manager
Leah.Klingensmith@et.eurofinsus.com
(615)301-5038

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Certification Summary 56

Job ID: 400-240599-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-240599-1

Receipt
The samples were received on 7/15/2023 8:09 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 4.4°C

GC/MS VOA
Method 8260D: The initial calibration verification (ICV) analyzed in batch 400-625791 was outside method criteria for the following analyte(s): Hexachlorobutadiene. 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 sample was diluted to bring the concentration of target analytes within the calibration range: T12-ROX-071423 (400-240599-8). Elevated reporting limits (RLs) are provided.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-634769 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 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-071423-8260-A (400-240599-1), P114R-ROX-071423 (400-240599-3), MW13-ROX-071423 (400-240599-4), TB-ROX-071423-8260-B (400-240599-5), P93C-ROX-071423 (400-240599-7) and T12-ROX-071423 (400-240599-8). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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 400-631021 was outside method criteria for the following analyte(s): Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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-071423 (400-240599-3). These results have been reported and qualified.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-634343 recovered above the upper control limit for 4-Nitrophenol, 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 4-Chlorophenyl phenyl ether, Hexachlorobenzene, 2,4-Dinitrotoluene, 4,6-Dinitro-2-methylphenol and Hexachlorocyclopentadiene. 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 400-634343 recovered outside acceptance criteria, low biased, for N-Nitrosodimethylamine, Bis(2-chloroethyl)ether, 1,2-Diphenylhydrazine (as Azobenzene), 1,4-Dioxane, Pyridine and Benzyl alcohol. 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 laboratory control sample duplicate (LCSD) for preparation batch 400-633899 and analytical batch 400-634183 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_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: (LCS 400-633899/6-A) and (LCSD 400-633899/7-A). These results have been reported and qualified.

Job ID: 400-240599-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

Method 8270E_SIM: The following sample was diluted due to the nature of the sample matrix: MW13-ROX-071423 (400-240599-4). 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

Method 8011: The continuing calibration verification (CCV) associated with batch 400-634252 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8011: The continuing calibration verification (CCV) associated with batch 400-634434 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8011: The continuing calibration verification (CCV) associated with batch 400-634434 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8011: The continuing calibration verification (CCV) associated with batch 400-634434 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 QUARTERLY GW

Job ID: 400-240599-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-240599-1	TB-ROX-071423-8260-A	Water	07/14/23 12:00	07/15/23 08:09
400-240599-2	TB-ROX-071423-8011-A	Water	07/14/23 12:00	07/15/23 08:09
400-240599-3	P114R-ROX-071423	Water	07/14/23 12:30	07/15/23 08:09
400-240599-4	MW13-ROX-071423	Water	07/14/23 13:25	07/15/23 08:09
400-240599-5	TB-ROX-071423-8260-B	Water	07/14/23 12:00	07/15/23 08:09
400-240599-6	TB-ROX-071423-8011-B	Water	07/14/23 12:00	07/15/23 08:09
400-240599-7	P93C-ROX-071423	Water	07/14/23 11:40	07/15/23 08:09
400-240599-8	T12-ROX-071423	Water	07/14/23 13:25	07/15/23 08:09

Detection Summary

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

Job ID: 400-240599-1

Client Sample ID: TB-ROX-071423-8260-A — Lab Sample ID: 400-240599-1

No Detections.

Client Sample ID: TB-ROX-071423-8011-A — Lab Sample ID: 400-240599-2

No Detections.

Client Sample ID: P114R-ROX-071423 — Lab Sample ID: 400-240599-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	13	J	25	10	ug/L	1		8260D	Total/NA
Methyl tert-butyl ether	1.8		1.0	0.22	ug/L	1		8260D	Total/NA
Acenaphthene	0.48		0.20	0.098	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW13-ROX-071423 — Lab Sample ID: 400-240599-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.1		1.0	0.22	ug/L	1		8260D	Total/NA

Client Sample ID: TB-ROX-071423-8260-B — Lab Sample ID: 400-240599-5

No Detections.

Client Sample ID: TB-ROX-071423-8011-B — Lab Sample ID: 400-240599-6

No Detections.

Client Sample ID: P93C-ROX-071423 — Lab Sample ID: 400-240599-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	2.8		1.0	0.22	ug/L	1		8260D	Total/NA
Diethyl phthalate	0.29	J	10	0.25	ug/L	1		8270E	Total/NA

Client Sample ID: T12-ROX-071423 — Lab Sample ID: 400-240599-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1500		10	5.0	ug/L	10		8260D	Total/NA
Ethylbenzene	11		10	5.0	ug/L	10		8260D	Total/NA
Isopropy benzene	7.7	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	9.2	J	10	6.9	ug/L	10		8260D	Total/NA
Toluene	31		10	9.0	ug/L	10		8260D	Total/NA
Xylenes, Total	28	J	100	16	ug/L	10		8260D	Total/NA
Acenaphthene	0.24		0.20	0.099	ug/L	1		8270E SIM	Total/NA
Fluorene	0.23		0.20	0.089	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.42		0.20	0.090	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	15		0.20	0.080	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	23		0.20	0.066	ug/L	1		8270E SIM	Total/NA
Diethyl phthalate	1.1	J	10	0.24	ug/L	1		8270E	Total/NA
Phenol	50		10	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 QUARTERLY GW

Job ID: 400-240599-1

Client Sample ID: TB-ROX-071423-8260-A
Date Collected: 07/14/23 12:00
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-1
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			07/27/23 17:05	1
Acrolein	ND		20	3.3	ug/L			07/27/23 17:05	1
Acrylonitrile	ND		10	2.8	ug/L			07/27/23 17:05	1
Benzene	ND		1.0	0.50	ug/L			07/27/23 17:05	1
Bromobenzene	ND		1.0	0.54	ug/L			07/27/23 17:05	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/27/23 17:05	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/27/23 17:05	1
Bromoform	ND		5.0	0.25	ug/L			07/27/23 17:05	1
Bromomethane	ND		1.0	0.98	ug/L			07/27/23 17:05	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/27/23 17:05	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/27/23 17:05	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/27/23 17:05	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/27/23 17:05	1
Chloroethane	ND		1.0	0.76	ug/L			07/27/23 17:05	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/27/23 17:05	1
Chloroform	ND		1.0	0.90	ug/L			07/27/23 17:05	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/27/23 17:05	1
Chloromethane	ND		1.0	0.90	ug/L			07/27/23 17:05	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/27/23 17:05	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/27/23 17:05	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/27/23 17:05	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/27/23 17:05	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/27/23 17:05	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/27/23 17:05	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/27/23 17:05	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/27/23 17:05	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/27/23 17:05	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 17:05	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 17:05	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 17:05	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 17:05	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/27/23 17:05	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/27/23 17:05	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/27/23 17:05	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/27/23 17:05	1
2-Hexanone	ND		25	1.4	ug/L			07/27/23 17:05	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/27/23 17:05	1
Methylene bromide	ND		5.0	0.22	ug/L			07/27/23 17:05	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/27/23 17:05	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/27/23 17:05	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/27/23 17:05	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/27/23 17:05	1
Naphthalene	ND		5.0	3.0	ug/L			07/27/23 17:05	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/27/23 17:05	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/27/23 17:05	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/27/23 17:05	1
o-Xylene	ND		5.0	0.60	ug/L			07/27/23 17:05	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/27/23 17:05	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/27/23 17:05	1

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

Job ID: 400-240599-1

Client Sample ID: TB-ROX-071423-8260-A
Date Collected: 07/14/23 12:00
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-1
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			07/27/23 17:05	1
Styrene	ND		1.0	1.0	ug/L			07/27/23 17:05	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/27/23 17:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/27/23 17:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/27/23 17:05	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/27/23 17:05	1
Toluene	ND		1.0	0.90	ug/L			07/27/23 17:05	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 17:05	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/27/23 17:05	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/27/23 17:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/27/23 17:05	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/27/23 17:05	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/27/23 17:05	1
Trichloroethene	ND		1.0	0.15	ug/L			07/27/23 17:05	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/27/23 17:05	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/27/23 17:05	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/27/23 17:05	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/27/23 17:05	1
Vinyl acetate	ND		25	0.93	ug/L			07/27/23 17:05	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/27/23 17:05	1
Xylenes, Total	ND		10	1.6	ug/L			07/27/23 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*72 - 130*		*07/27/23 17:05*	*1*
Dibromofluoromethane	*113*		*75 - 126*		*07/27/23 17:05*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/27/23 17:05*	*1*

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

Job ID: 400-240599-1

Client Sample ID: TB-ROX-071423-8011-A
Date Collected: 07/14/23 12:00
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-2
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-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/24/23 13:46	07/25/23 22:54	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/24/23 13:46	07/25/23 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*51 - 149*	*07/24/23 13:46*	*07/25/23 22:54*	*1*

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

Job ID: 400-240599-1

Client Sample ID: P114R-ROX-071423
Date Collected: 07/14/23 12:30
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**13**	**J**	25	10	ug/L			07/27/23 17:28	1
Acrolein	ND		20	3.3	ug/L			07/27/23 17:28	1
Acrylonitrile	ND		10	2.8	ug/L			07/27/23 17:28	1
Benzene	ND		1.0	0.50	ug/L			07/27/23 17:28	1
Bromobenzene	ND		1.0	0.54	ug/L			07/27/23 17:28	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/27/23 17:28	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/27/23 17:28	1
Bromoform	ND		5.0	0.25	ug/L			07/27/23 17:28	1
Bromomethane	ND		1.0	0.98	ug/L			07/27/23 17:28	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/27/23 17:28	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/27/23 17:28	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/27/23 17:28	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/27/23 17:28	1
Chloroethane	ND		1.0	0.76	ug/L			07/27/23 17:28	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/27/23 17:28	1
Chloroform	ND		1.0	0.90	ug/L			07/27/23 17:28	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/27/23 17:28	1
Chloromethane	ND		1.0	0.90	ug/L			07/27/23 17:28	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/27/23 17:28	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/27/23 17:28	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/27/23 17:28	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/27/23 17:28	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/27/23 17:28	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/27/23 17:28	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/27/23 17:28	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/27/23 17:28	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/27/23 17:28	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 17:28	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 17:28	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 17:28	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 17:28	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/27/23 17:28	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/27/23 17:28	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/27/23 17:28	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/27/23 17:28	1
2-Hexanone	ND		25	1.4	ug/L			07/27/23 17:28	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/27/23 17:28	1
Methylene bromide	ND		5.0	0.22	ug/L			07/27/23 17:28	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/27/23 17:28	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/27/23 17:28	1
Methyl tert-butyl ether	**1.8**		1.0	0.22	ug/L			07/27/23 17:28	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/27/23 17:28	1
Naphthalene	ND		5.0	3.0	ug/L			07/27/23 17:28	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/27/23 17:28	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/27/23 17:28	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/27/23 17:28	1
o-Xylene	ND		5.0	0.60	ug/L			07/27/23 17:28	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/27/23 17:28	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/27/23 17:28	1

Client Sample ID: P114R-ROX-071423
Date Collected: 07/14/23 12:30
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-3
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			07/27/23 17:28	1
Styrene	ND		1.0	1.0	ug/L			07/27/23 17:28	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/27/23 17:28	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/27/23 17:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/27/23 17:28	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/27/23 17:28	1
Toluene	ND		1.0	0.90	ug/L			07/27/23 17:28	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 17:28	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/27/23 17:28	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/27/23 17:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/27/23 17:28	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/27/23 17:28	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/27/23 17:28	1
Trichloroethene	ND		1.0	0.15	ug/L			07/27/23 17:28	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/27/23 17:28	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/27/23 17:28	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/27/23 17:28	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/27/23 17:28	1
Vinyl acetate	ND		25	0.93	ug/L			07/27/23 17:28	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/27/23 17:28	1
Xylenes, Total	ND		10	1.6	ug/L			07/27/23 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*07/27/23 17:28*	*1*
Dibromofluoromethane	*111*		*75 - 126*		*07/27/23 17:28*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*07/27/23 17:28*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.48**		0.20	0.098	ug/L		07/21/23 09:00	07/26/23 12:33	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/21/23 09:00	07/26/23 12:33	1
Anthracene	ND		0.20	0.047	ug/L		07/21/23 09:00	07/26/23 12:33	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/21/23 09:00	07/26/23 12:33	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/21/23 09:00	07/26/23 12:33	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/21/23 09:00	07/26/23 12:33	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/21/23 09:00	07/26/23 12:33	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/21/23 09:00	07/26/23 12:33	1
Chrysene	ND		0.20	0.033	ug/L		07/21/23 09:00	07/26/23 12:33	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/21/23 09:00	07/26/23 12:33	1
Fluoranthene	ND		0.20	0.034	ug/L		07/21/23 09:00	07/26/23 12:33	1
Fluorene	ND		0.20	0.088	ug/L		07/21/23 09:00	07/26/23 12:33	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/21/23 09:00	07/26/23 12:33	1
Phenanthrene	ND		0.20	0.089	ug/L		07/21/23 09:00	07/26/23 12:33	1
Pyrene	ND		0.20	0.039	ug/L		07/21/23 09:00	07/26/23 12:33	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		07/21/23 09:00	07/26/23 12:33	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		07/21/23 09:00	07/26/23 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*78*		*18 - 147*	*07/21/23 09:00*	*07/26/23 12:33*	*1*
2-Fluorobiphenyl	*70*		*15 - 128*	*07/21/23 09:00*	*07/26/23 12:33*	*1*

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

Job ID: 400-240599-1

Client Sample ID: P114R-ROX-071423
Date Collected: 07/14/23 12:30
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-3
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	07/21/23 09:00	07/26/23 12:33	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		07/21/23 09:00	07/24/23 17:31	1
Benzenethiol	ND	*-	9.9	1.7	ug/L		07/21/23 09:00	07/24/23 17:31	1
Benzoic acid	ND		30	7.2	ug/L		07/21/23 09:00	07/24/23 17:31	1
Benzyl alcohol	ND		9.9	2.0	ug/L		07/21/23 09:00	07/24/23 17:31	1
Bis(2-chloroethoxy)methane	ND		9.9	0.16	ug/L		07/21/23 09:00	07/24/23 17:31	1
Bis(2-chloroethyl)ether	ND		9.9	2.7	ug/L		07/21/23 09:00	07/24/23 17:31	1
bis (2-chloroisopropyl) ether	ND		9.9	0.16	ug/L		07/21/23 09:00	07/24/23 17:31	1
Bis(2-ethylhexyl) phthalate	ND		9.9	5.0	ug/L		07/21/23 09:00	07/24/23 17:31	1
4-Bromophenyl phenyl ether	ND		9.9	0.20	ug/L		07/21/23 09:00	07/24/23 17:31	1
Butyl benzyl phthalate	ND		9.9	0.19	ug/L		07/21/23 09:00	07/24/23 17:31	1
4-Chloroaniline	ND		9.9	3.4	ug/L		07/21/23 09:00	07/24/23 17:31	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		07/21/23 09:00	07/24/23 17:31	1
2-Chloronaphthalene	ND		9.9	0.14	ug/L		07/21/23 09:00	07/24/23 17:31	1
2-Chlorophenol	ND		9.9	2.2	ug/L		07/21/23 09:00	07/24/23 17:31	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		07/21/23 09:00	07/24/23 17:31	1
Dibenz[a,h]acridine	ND		9.9	0.99	ug/L		07/21/23 09:00	07/24/23 17:31	1
Dibenzofuran	ND		9.9	0.17	ug/L		07/21/23 09:00	07/24/23 17:31	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		07/21/23 09:00	07/24/23 17:31	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		07/21/23 09:00	07/24/23 17:31	1
Diethyl phthalate	ND		9.9	0.24	ug/L		07/21/23 09:00	07/24/23 17:31	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		07/21/23 09:00	07/24/23 17:31	1
Dimethyl phthalate	ND		9.9	0.17	ug/L		07/21/23 09:00	07/24/23 17:31	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		07/21/23 09:00	07/24/23 17:31	1
4,6-Dinitro-ortho-cresol	ND		9.9	1.6	ug/L		07/21/23 09:00	07/24/23 17:31	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/21/23 09:00	07/24/23 17:31	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		07/21/23 09:00	07/24/23 17:31	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		07/21/23 09:00	07/24/23 17:31	1
Di-n-octyl phthalate	ND		9.9	0.17	ug/L		07/21/23 09:00	07/24/23 17:31	1
1,4-Dioxane	ND		9.9	0.99	ug/L		07/21/23 09:00	07/24/23 17:31	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		07/21/23 09:00	07/24/23 17:31	1
Hexachlorobenzene	ND		9.9	0.17	ug/L		07/21/23 09:00	07/24/23 17:31	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/21/23 09:00	07/24/23 17:31	1
Hexachloroethane	ND		9.9	4.2	ug/L		07/21/23 09:00	07/24/23 17:31	1
Indene	ND		9.9	0.99	ug/L		07/21/23 09:00	07/24/23 17:31	1
Isophorone	ND		9.9	0.14	ug/L		07/21/23 09:00	07/24/23 17:31	1
2-Methylphenol	ND		9.9	1.8	ug/L		07/21/23 09:00	07/24/23 17:31	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/21/23 09:00	07/24/23 17:31	1
2-Nitroaniline	ND		9.9	2.2	ug/L		07/21/23 09:00	07/24/23 17:31	1
3-Nitroaniline	ND		9.9	1.8	ug/L		07/21/23 09:00	07/24/23 17:31	1
4-Nitroaniline	ND		9.9	1.5	ug/L		07/21/23 09:00	07/24/23 17:31	1
Nitrobenzene	ND		9.9	0.13	ug/L		07/21/23 09:00	07/24/23 17:31	1
2-Nitrophenol	ND		9.9	5.2	ug/L		07/21/23 09:00	07/24/23 17:31	1
4-Nitrophenol	ND		9.9	2.1	ug/L		07/21/23 09:00	07/24/23 17:31	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		07/21/23 09:00	07/24/23 17:31	1

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

Job ID: 400-240599-1

Client Sample ID: P114R-ROX-071423
Date Collected: 07/14/23 12:30
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-3
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		07/21/23 09:00	07/24/23 17:31	1
N-Nitrosodiphenylamine	ND		9.9	0.18	ug/L		07/21/23 09:00	07/24/23 17:31	1
Pentachlorophenol	ND		20	1.4	ug/L		07/21/23 09:00	07/24/23 17:31	1
Phenol	ND		9.9	2.6	ug/L		07/21/23 09:00	07/24/23 17:31	1
Pyridine	ND		9.9	3.2	ug/L		07/21/23 09:00	07/24/23 17:31	1
Quinoline	ND		9.9	4.5	ug/L		07/21/23 09:00	07/24/23 17:31	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		07/21/23 09:00	07/24/23 17:31	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		07/21/23 09:00	07/24/23 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*46 - 124*	*07/21/23 09:00*	*07/24/23 17:31*	*1*
2-Fluorophenol	*4*	*S1-*	*13 - 113*	*07/21/23 09:00*	*07/24/23 17:31*	*1*
Nitrobenzene-d5	*64*		*36 - 126*	*07/21/23 09:00*	*07/24/23 17:31*	*1*
Phenol-d5	*27*		*17 - 127*	*07/21/23 09:00*	*07/24/23 17:31*	*1*
Terphenyl-d14	*98*		*44 - 149*	*07/21/23 09:00*	*07/24/23 17:31*	*1*
2,4,6-Tribromophenol	*104*		*26 - 150*	*07/21/23 09:00*	*07/24/23 17:31*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.029	0.017	ug/L		07/20/23 08:04	07/24/23 13:48	1
1,2-D bromoethane	ND		0.019	0.015	ug/L		07/20/23 08:04	07/24/23 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*07/20/23 08:04*	*07/24/23 13:48*	*1*

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

Job ID: 400-240599-1

Client Sample ID: MW13-ROX-071423
Date Collected: 07/14/23 13:25
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-4
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			07/27/23 17:51	1
Acrolein	ND		20	3.3	ug/L			07/27/23 17:51	1
Acrylonitrile	ND		10	2.8	ug/L			07/27/23 17:51	1
Benzene	ND		1.0	0.50	ug/L			07/27/23 17:51	1
Bromobenzene	ND		1.0	0.54	ug/L			07/27/23 17:51	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/27/23 17:51	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/27/23 17:51	1
Bromoform	ND		5.0	0.25	ug/L			07/27/23 17:51	1
Bromomethane	ND		1.0	0.98	ug/L			07/27/23 17:51	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/27/23 17:51	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/27/23 17:51	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/27/23 17:51	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/27/23 17:51	1
Chloroethane	ND		1.0	0.76	ug/L			07/27/23 17:51	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/27/23 17:51	1
Chloroform	ND		1.0	0.90	ug/L			07/27/23 17:51	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/27/23 17:51	1
Chloromethane	ND		1.0	0.90	ug/L			07/27/23 17:51	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/27/23 17:51	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/27/23 17:51	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/27/23 17:51	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/27/23 17:51	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/27/23 17:51	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/27/23 17:51	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/27/23 17:51	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/27/23 17:51	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/27/23 17:51	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 17:51	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 17:51	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 17:51	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 17:51	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/27/23 17:51	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/27/23 17:51	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/27/23 17:51	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/27/23 17:51	1
2-Hexanone	ND		25	1.4	ug/L			07/27/23 17:51	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/27/23 17:51	1
Methylene bromide	ND		5.0	0.22	ug/L			07/27/23 17:51	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/27/23 17:51	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/27/23 17:51	1
Methyl tert-butyl ether	**1.1**		1.0	0.22	ug/L			07/27/23 17:51	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/27/23 17:51	1
Naphthalene	ND		5.0	3.0	ug/L			07/27/23 17:51	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/27/23 17:51	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/27/23 17:51	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/27/23 17:51	1
o-Xylene	ND		5.0	0.60	ug/L			07/27/23 17:51	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/27/23 17:51	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/27/23 17:51	1

Client Sample ID: MW13-ROX-071423
Date Collected: 07/14/23 13:25
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-4
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			07/27/23 17:51	1
Styrene	ND		1.0	1.0	ug/L			07/27/23 17:51	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/27/23 17:51	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/27/23 17:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/27/23 17:51	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/27/23 17:51	1
Toluene	ND		1.0	0.90	ug/L			07/27/23 17:51	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 17:51	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/27/23 17:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/27/23 17:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/27/23 17:51	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/27/23 17:51	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/27/23 17:51	1
Trichloroethene	ND		1.0	0.15	ug/L			07/27/23 17:51	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/27/23 17:51	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/27/23 17:51	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/27/23 17:51	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/27/23 17:51	1
Vinyl acetate	ND		25	0.93	ug/L			07/27/23 17:51	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/27/23 17:51	1
Xylenes, Total	ND		10	1.6	ug/L			07/27/23 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*72 - 130*		*07/27/23 17:51*	*1*
Dibromofluoromethane	*110*		*75 - 126*		*07/27/23 17:51*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*07/27/23 17:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		0.20	0.046	ug/L		07/21/23 09:00	07/25/23 18:37	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/21/23 09:00	07/25/23 18:37	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/21/23 09:00	07/25/23 18:37	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/21/23 09:00	07/25/23 18:37	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/21/23 09:00	07/25/23 18:37	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		07/21/23 09:00	07/25/23 18:37	1
Chrysene	ND		0.20	0.033	ug/L		07/21/23 09:00	07/25/23 18:37	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		07/21/23 09:00	07/25/23 18:37	1
Fluoranthene	ND		0.20	0.034	ug/L		07/21/23 09:00	07/25/23 18:37	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/21/23 09:00	07/25/23 18:37	1
Phenanthrene	ND		0.20	0.089	ug/L		07/21/23 09:00	07/25/23 18:37	1
Pyrene	ND		0.20	0.039	ug/L		07/21/23 09:00	07/25/23 18:37	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		07/21/23 09:00	07/25/23 18:37	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		07/21/23 09:00	07/25/23 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*57*		*18 - 147*	*07/21/23 09:00*	*07/25/23 18:37*	*1*
Nitrobenzene-d5	*84*		*10 - 144*	*07/21/23 09:00*	*07/25/23 18:37*	*1*

Client Sample ID: MW13-ROX-071423
Date Collected: 07/14/23 13:25
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.99	0.49	ug/L		07/21/23 09:00	07/26/23 12:54	5
Acenaphthylene	ND		0.99	0.22	ug/L		07/21/23 09:00	07/26/23 12:54	5
Fluorene	ND		0.99	0.44	ug/L		07/21/23 09:00	07/26/23 12:54	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*15 - 128*	*07/21/23 09:00*	*07/26/23 12:54*	*5*

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		07/21/23 09:00	07/24/23 17:57	1
Benzenethiol	ND	*-	9.9	1.7	ug/L		07/21/23 09:00	07/24/23 17:57	1
Benzoic acid	ND		30	7.2	ug/L		07/21/23 09:00	07/24/23 17:57	1
Benzyl alcohol	ND		9.9	2.0	ug/L		07/21/23 09:00	07/24/23 17:57	1
Bis(2-chloroethoxy)methane	ND		9.9	0.16	ug/L		07/21/23 09:00	07/24/23 17:57	1
Bis(2-chloroethyl)ether	ND		9.9	2.7	ug/L		07/21/23 09:00	07/24/23 17:57	1
bis (2-chloroisopropyl) ether	ND		9.9	0.16	ug/L		07/21/23 09:00	07/24/23 17:57	1
Bis(2-ethylhexyl) phthalate	ND		9.9	4.9	ug/L		07/21/23 09:00	07/24/23 17:57	1
4-Bromophenyl phenyl ether	ND		9.9	0.20	ug/L		07/21/23 09:00	07/24/23 17:57	1
Butyl benzyl phthalate	ND		9.9	0.19	ug/L		07/21/23 09:00	07/24/23 17:57	1
4-Chloroaniline	ND		9.9	3.4	ug/L		07/21/23 09:00	07/24/23 17:57	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		07/21/23 09:00	07/24/23 17:57	1
2-Chloronaphthalene	ND		9.9	0.14	ug/L		07/21/23 09:00	07/24/23 17:57	1
2-Chlorophenol	ND		9.9	2.2	ug/L		07/21/23 09:00	07/24/23 17:57	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		07/21/23 09:00	07/24/23 17:57	1
Dibenz[a,h]acridine	ND		9.9	0.99	ug/L		07/21/23 09:00	07/24/23 17:57	1
Dibenzofuran	ND		9.9	0.17	ug/L		07/21/23 09:00	07/24/23 17:57	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		07/21/23 09:00	07/24/23 17:57	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		07/21/23 09:00	07/24/23 17:57	1
Diethyl phthalate	ND		9.9	0.24	ug/L		07/21/23 09:00	07/24/23 17:57	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		07/21/23 09:00	07/24/23 17:57	1
Dimethyl phthalate	ND		9.9	0.17	ug/L		07/21/23 09:00	07/24/23 17:57	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		07/21/23 09:00	07/24/23 17:57	1
4,6-Dinitro-ortho-cresol	ND		9.9	1.6	ug/L		07/21/23 09:00	07/24/23 17:57	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/21/23 09:00	07/24/23 17:57	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		07/21/23 09:00	07/24/23 17:57	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		07/21/23 09:00	07/24/23 17:57	1
Di-n-octyl phthalate	ND		9.9	0.17	ug/L		07/21/23 09:00	07/24/23 17:57	1
1,4-Dioxane	ND		9.9	0.99	ug/L		07/21/23 09:00	07/24/23 17:57	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		07/21/23 09:00	07/24/23 17:57	1
Hexachlorobenzene	ND		9.9	0.17	ug/L		07/21/23 09:00	07/24/23 17:57	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/21/23 09:00	07/24/23 17:57	1
Hexachloroethane	ND		9.9	4.1	ug/L		07/21/23 09:00	07/24/23 17:57	1
Indene	ND		9.9	0.99	ug/L		07/21/23 09:00	07/24/23 17:57	1
Isophorone	ND		9.9	0.14	ug/L		07/21/23 09:00	07/24/23 17:57	1
2-Methylphenol	ND		9.9	1.8	ug/L		07/21/23 09:00	07/24/23 17:57	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/21/23 09:00	07/24/23 17:57	1
2-Nitroaniline	ND		9.9	2.2	ug/L		07/21/23 09:00	07/24/23 17:57	1
3-Nitroaniline	ND		9.9	1.8	ug/L		07/21/23 09:00	07/24/23 17:57	1
4-Nitroaniline	ND		9.9	1.5	ug/L		07/21/23 09:00	07/24/23 17:57	1

Client Sample ID: MW13-ROX-071423
Date Collected: 07/14/23 13:25
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrobenzene	ND		9.9	0.13	ug/L		07/21/23 09:00	07/24/23 17:57	1
2-Nitrophenol	ND		9.9	5.1	ug/L		07/21/23 09:00	07/24/23 17:57	1
4-Nitrophenol	ND		9.9	2.1	ug/L		07/21/23 09:00	07/24/23 17:57	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		07/21/23 09:00	07/24/23 17:57	1
N-Nitrosodi-n-propylamine	ND		9.9	3.3	ug/L		07/21/23 09:00	07/24/23 17:57	1
N-Nitrosodiphenylamine	ND		9.9	0.18	ug/L		07/21/23 09:00	07/24/23 17:57	1
Pentachlorophenol	ND		20	1.4	ug/L		07/21/23 09:00	07/24/23 17:57	1
Phenol	ND		9.9	2.6	ug/L		07/21/23 09:00	07/24/23 17:57	1
Pyridine	ND		9.9	3.2	ug/L		07/21/23 09:00	07/24/23 17:57	1
Quinoline	ND		9.9	4.4	ug/L		07/21/23 09:00	07/24/23 17:57	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		07/21/23 09:00	07/24/23 17:57	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		07/21/23 09:00	07/24/23 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*46 - 124*	*07/21/23 09:00*	*07/24/23 17:57*	*1*
2-Fluorophenol	*21*		*13 - 113*	*07/21/23 09:00*	*07/24/23 17:57*	*1*
Nitrobenzene-d5	*66*		*36 - 126*	*07/21/23 09:00*	*07/24/23 17:57*	*1*
Phenol-d5	*45*		*17 - 127*	*07/21/23 09:00*	*07/24/23 17:57*	*1*
Terphenyl-d14	*71*		*44 - 149*	*07/21/23 09:00*	*07/24/23 17:57*	*1*
2,4,6-Tribromophenol	*108*		*26 - 150*	*07/21/23 09:00*	*07/24/23 17:57*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.029	0.016	ug/L		07/20/23 08:04	07/24/23 14:09	1
1,2-D bromoethane	ND		0.019	0.014	ug/L		07/20/23 08:04	07/24/23 14:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*51 - 149*	*07/20/23 08:04*	*07/24/23 14:09*	*1*

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

Job ID: 400-240599-1

Client Sample ID: TB-ROX-071423-8260-B
Date Collected: 07/14/23 12:00
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-5
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			07/27/23 18:14	1
Acrolein	ND		20	3.3	ug/L			07/27/23 18:14	1
Acrylonitrile	ND		10	2.8	ug/L			07/27/23 18:14	1
Benzene	ND		1.0	0.50	ug/L			07/27/23 18:14	1
Bromobenzene	ND		1.0	0.54	ug/L			07/27/23 18:14	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/27/23 18:14	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/27/23 18:14	1
Bromoform	ND		5.0	0.25	ug/L			07/27/23 18:14	1
Bromomethane	ND		1.0	0.98	ug/L			07/27/23 18:14	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/27/23 18:14	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/27/23 18:14	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/27/23 18:14	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/27/23 18:14	1
Chloroethane	ND		1.0	0.76	ug/L			07/27/23 18:14	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/27/23 18:14	1
Chloroform	ND		1.0	0.90	ug/L			07/27/23 18:14	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/27/23 18:14	1
Chloromethane	ND		1.0	0.90	ug/L			07/27/23 18:14	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/27/23 18:14	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/27/23 18:14	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/27/23 18:14	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/27/23 18:14	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/27/23 18:14	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/27/23 18:14	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/27/23 18:14	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/27/23 18:14	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/27/23 18:14	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 18:14	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 18:14	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 18:14	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 18:14	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/27/23 18:14	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/27/23 18:14	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/27/23 18:14	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/27/23 18:14	1
2-Hexanone	ND		25	1.4	ug/L			07/27/23 18:14	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/27/23 18:14	1
Methylene bromide	ND		5.0	0.22	ug/L			07/27/23 18:14	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/27/23 18:14	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/27/23 18:14	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/27/23 18:14	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/27/23 18:14	1
Naphthalene	ND		5.0	3.0	ug/L			07/27/23 18:14	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/27/23 18:14	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/27/23 18:14	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/27/23 18:14	1
o-Xylene	ND		5.0	0.60	ug/L			07/27/23 18:14	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/27/23 18:14	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/27/23 18:14	1

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

Job ID: 400-240599-1

Client Sample ID: TB-ROX-071423-8260-B
Date Collected: 07/14/23 12:00
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-5
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			07/27/23 18:14	1
Styrene	ND		1.0	1.0	ug/L			07/27/23 18:14	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/27/23 18:14	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/27/23 18:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/27/23 18:14	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/27/23 18:14	1
Toluene	ND		1.0	0.90	ug/L			07/27/23 18:14	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 18:14	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/27/23 18:14	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/27/23 18:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/27/23 18:14	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/27/23 18:14	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/27/23 18:14	1
Trichloroethene	ND		1.0	0.15	ug/L			07/27/23 18:14	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/27/23 18:14	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/27/23 18:14	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/27/23 18:14	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/27/23 18:14	1
Vinyl acetate	ND		25	0.93	ug/L			07/27/23 18:14	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/27/23 18:14	1
Xylenes, Total	ND		10	1.6	ug/L			07/27/23 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/27/23 18:14*	*1*
Dibromofluoromethane	*112*		*75 - 126*		*07/27/23 18:14*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/27/23 18:14*	*1*

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

Job ID: 400-240599-1

Client Sample ID: TB-ROX-071423-8011-B
Date Collected: 07/14/23 12:00
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-6
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-D bromo-3-Chloropropane	ND		0.029	0.016	ug/L		07/20/23 08:04	07/24/23 14:30	1
1,2-D bromoethane	ND		0.019	0.014	ug/L		07/20/23 08:04	07/24/23 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*51 - 149*	*07/20/23 08:04*	*07/24/23 14:30*	*1*

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

Job ID: 400-240599-1

Client Sample ID: P93C-ROX-071423
Date Collected: 07/14/23 11:40
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-7
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			07/27/23 18:37	1
Acrolein	ND		20	3.3	ug/L			07/27/23 18:37	1
Acrylonitrile	ND		10	2.8	ug/L			07/27/23 18:37	1
Benzene	ND		1.0	0.50	ug/L			07/27/23 18:37	1
Bromobenzene	ND		1.0	0.54	ug/L			07/27/23 18:37	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/27/23 18:37	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/27/23 18:37	1
Bromoform	ND		5.0	0.25	ug/L			07/27/23 18:37	1
Bromomethane	ND		1.0	0.98	ug/L			07/27/23 18:37	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/27/23 18:37	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/27/23 18:37	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/27/23 18:37	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/27/23 18:37	1
Chloroethane	ND		1.0	0.76	ug/L			07/27/23 18:37	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/27/23 18:37	1
Chloroform	ND		1.0	0.90	ug/L			07/27/23 18:37	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/27/23 18:37	1
Chloromethane	ND		1.0	0.90	ug/L			07/27/23 18:37	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/27/23 18:37	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/27/23 18:37	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/27/23 18:37	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/27/23 18:37	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/27/23 18:37	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/27/23 18:37	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/27/23 18:37	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/27/23 18:37	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/27/23 18:37	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 18:37	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 18:37	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 18:37	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 18:37	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/27/23 18:37	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/27/23 18:37	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/27/23 18:37	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/27/23 18:37	1
2-Hexanone	ND		25	1.4	ug/L			07/27/23 18:37	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/27/23 18:37	1
Methylene bromide	ND		5.0	0.22	ug/L			07/27/23 18:37	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/27/23 18:37	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/27/23 18:37	1
Methyl tert-butyl ether	**2.8**		1.0	0.22	ug/L			07/27/23 18:37	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/27/23 18:37	1
Naphthalene	ND		5.0	3.0	ug/L			07/27/23 18:37	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/27/23 18:37	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/27/23 18:37	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/27/23 18:37	1
o-Xylene	ND		5.0	0.60	ug/L			07/27/23 18:37	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/27/23 18:37	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/27/23 18:37	1

Client Sample ID: P93C-ROX-071423
Date Collected: 07/14/23 11:40
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-7
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			07/27/23 18:37	1
Styrene	ND		1.0	1.0	ug/L			07/27/23 18:37	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/27/23 18:37	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/27/23 18:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/27/23 18:37	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/27/23 18:37	1
Toluene	ND		1.0	0.90	ug/L			07/27/23 18:37	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 18:37	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/27/23 18:37	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/27/23 18:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/27/23 18:37	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/27/23 18:37	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/27/23 18:37	1
Trichloroethene	ND		1.0	0.15	ug/L			07/27/23 18:37	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/27/23 18:37	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/27/23 18:37	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/27/23 18:37	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/27/23 18:37	1
Vinyl acetate	ND		25	0.93	ug/L			07/27/23 18:37	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/27/23 18:37	1
Xylenes, Total	ND		10	1.6	ug/L			07/27/23 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*72 - 130*		*07/27/23 18:37*	*1*
Dibromofluoromethane	*114*		*75 - 126*		*07/27/23 18:37*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/27/23 18:37*	*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		07/21/23 09:00	07/25/23 18:58	1
Acenaphthylene	ND		0.21	0.045	ug/L		07/21/23 09:00	07/25/23 18:58	1
Anthracene	ND		0.21	0.048	ug/L		07/21/23 09:00	07/25/23 18:58	1
Benzo[a]anthracene	ND		0.21	0.035	ug/L		07/21/23 09:00	07/25/23 18:58	1
Benzo[a]pyrene	ND		0.21	0.066	ug/L		07/21/23 09:00	07/25/23 18:58	1
Benzo[b]fluoranthene	ND		0.21	0.038	ug/L		07/21/23 09:00	07/25/23 18:58	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		07/21/23 09:00	07/25/23 18:58	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		07/21/23 09:00	07/25/23 18:58	1
Chrysene	ND		0.21	0.034	ug/L		07/21/23 09:00	07/25/23 18:58	1
Dibenz(a,h)anthracene	ND		0.21	0.049	ug/L		07/21/23 09:00	07/25/23 18:58	1
Fluoranthene	ND		0.21	0.035	ug/L		07/21/23 09:00	07/25/23 18:58	1
Fluorene	ND		0.21	0.091	ug/L		07/21/23 09:00	07/25/23 18:58	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.035	ug/L		07/21/23 09:00	07/25/23 18:58	1
Phenanthrene	ND		0.21	0.092	ug/L		07/21/23 09:00	07/25/23 18:58	1
Pyrene	ND		0.21	0.040	ug/L		07/21/23 09:00	07/25/23 18:58	1
1-Methylnaphthalene	ND		0.21	0.082	ug/L		07/21/23 09:00	07/25/23 18:58	1
2-Methylnaphthalene	ND		0.21	0.068	ug/L		07/21/23 09:00	07/25/23 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*87*		*18 - 147*	*07/21/23 09:00*	*07/25/23 18:58*	*1*
2-Fluorobiphenyl	*80*		*15 - 128*	*07/21/23 09:00*	*07/25/23 18:58*	*1*

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

Job ID: 400-240599-1

Client Sample ID: P93C-ROX-071423
Date Collected: 07/14/23 11:40
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-7
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*87*		*10 - 144*	*07/21/23 09:00*	*07/25/23 18:58*	*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		07/21/23 09:00	07/24/23 18:24	1
Benzenethiol	ND	*-	10	1.7	ug/L		07/21/23 09:00	07/24/23 18:24	1
Benzoic acid	ND		31	7.5	ug/L		07/21/23 09:00	07/24/23 18:24	1
Benzyl alcohol	ND		10	2.1	ug/L		07/21/23 09:00	07/24/23 18:24	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/21/23 09:00	07/24/23 18:24	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		07/21/23 09:00	07/24/23 18:24	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/21/23 09:00	07/24/23 18:24	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/21/23 09:00	07/24/23 18:24	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/21/23 09:00	07/24/23 18:24	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		07/21/23 09:00	07/24/23 18:24	1
4-Chloroaniline	ND		10	3.5	ug/L		07/21/23 09:00	07/24/23 18:24	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/21/23 09:00	07/24/23 18:24	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/21/23 09:00	07/24/23 18:24	1
2-Chlorophenol	ND		10	2.3	ug/L		07/21/23 09:00	07/24/23 18:24	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/21/23 09:00	07/24/23 18:24	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 18:24	1
Dibenzofuran	ND		10	0.17	ug/L		07/21/23 09:00	07/24/23 18:24	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/21/23 09:00	07/24/23 18:24	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/21/23 09:00	07/24/23 18:24	1
Diethyl phthalate	**0.29**	**J**	10	0.25	ug/L		07/21/23 09:00	07/24/23 18:24	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/21/23 09:00	07/24/23 18:24	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/21/23 09:00	07/24/23 18:24	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/21/23 09:00	07/24/23 18:24	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/21/23 09:00	07/24/23 18:24	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/21/23 09:00	07/24/23 18:24	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/21/23 09:00	07/24/23 18:24	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/21/23 09:00	07/24/23 18:24	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/21/23 09:00	07/24/23 18:24	1
1,4-Dioxane	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 18:24	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 18:24	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/21/23 09:00	07/24/23 18:24	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/21/23 09:00	07/24/23 18:24	1
Hexachloroethane	ND		10	4.3	ug/L		07/21/23 09:00	07/24/23 18:24	1
Indene	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 18:24	1
Isophorone	ND		10	0.14	ug/L		07/21/23 09:00	07/24/23 18:24	1
2-Methylphenol	ND		10	1.8	ug/L		07/21/23 09:00	07/24/23 18:24	1
3 & 4 Methylphenol	ND		21	0.40	ug/L		07/21/23 09:00	07/24/23 18:24	1
2-Nitroaniline	ND		10	2.3	ug/L		07/21/23 09:00	07/24/23 18:24	1
3-Nitroaniline	ND		10	1.8	ug/L		07/21/23 09:00	07/24/23 18:24	1
4-Nitroaniline	ND		10	1.5	ug/L		07/21/23 09:00	07/24/23 18:24	1
Nitrobenzene	ND		10	0.13	ug/L		07/21/23 09:00	07/24/23 18:24	1
2-Nitrophenol	ND		10	5.3	ug/L		07/21/23 09:00	07/24/23 18:24	1
4-Nitrophenol	ND		10	2.2	ug/L		07/21/23 09:00	07/24/23 18:24	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/21/23 09:00	07/24/23 18:24	1

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

Job ID: 400-240599-1

Client Sample ID: P93C-ROX-071423
Date Collected: 07/14/23 11:40
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-7
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		07/21/23 09:00	07/24/23 18:24	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/21/23 09:00	07/24/23 18:24	1
Pentachlorophenol	ND		21	1.4	ug/L		07/21/23 09:00	07/24/23 18:24	1
Phenol	ND		10	2.7	ug/L		07/21/23 09:00	07/24/23 18:24	1
Pyridine	ND		10	3.3	ug/L		07/21/23 09:00	07/24/23 18:24	1
Quinoline	ND		10	4.6	ug/L		07/21/23 09:00	07/24/23 18:24	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/21/23 09:00	07/24/23 18:24	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/21/23 09:00	07/24/23 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*87*		*46 - 124*	*07/21/23 09:00*	*07/24/23 18:24*	*1*
2-Fluorophenol	*16*		*13 - 113*	*07/21/23 09:00*	*07/24/23 18:24*	*1*
Nitrobenzene-d5	*67*		*36 - 126*	*07/21/23 09:00*	*07/24/23 18:24*	*1*
Phenol-d5	*40*		*17 - 127*	*07/21/23 09:00*	*07/24/23 18:24*	*1*
Terphenyl-d14	*102*		*44 - 149*	*07/21/23 09:00*	*07/24/23 18:24*	*1*
2,4,6-Tribromophenol	*111*		*26 - 150*	*07/21/23 09:00*	*07/24/23 18:24*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.029	0.017	ug/L		07/20/23 08:04	07/24/23 14:51	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/20/23 08:04	07/24/23 14:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*70*		*51 - 149*	*07/20/23 08:04*	*07/24/23 14:51*	*1*

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

Job ID: 400-240599-1

Client Sample ID: T12-ROX-071423
Date Collected: 07/14/23 13:25
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-8
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			07/27/23 21:18	10
Acrolein	ND		200	33	ug/L			07/27/23 21:18	10
Acrylonitrile	ND		100	28	ug/L			07/27/23 21:18	10
Benzene	**1500**		10	5.0	ug/L			07/27/23 21:18	10
Bromobenzene	ND		10	5.4	ug/L			07/27/23 21:18	10
Bromochloromethane	ND		10	2.1	ug/L			07/27/23 21:18	10
Bromodichloromethane	ND		10	5.0	ug/L			07/27/23 21:18	10
Bromoform	ND		50	2.5	ug/L			07/27/23 21:18	10
Bromomethane	ND		10	9.8	ug/L			07/27/23 21:18	10
2-Butanone (MEK)	ND		250	26	ug/L			07/27/23 21:18	10
Carbon disulfide	ND		10	5.0	ug/L			07/27/23 21:18	10
Carbon tetrachloride	ND		10	1.9	ug/L			07/27/23 21:18	10
Chlorobenzene	ND		10	1.5	ug/L			07/27/23 21:18	10
Chloroethane	ND		10	7.6	ug/L			07/27/23 21:18	10
2-Chloroethyl vinyl ether	ND		50	20	ug/L			07/27/23 21:18	10
Chloroform	ND		10	9.0	ug/L			07/27/23 21:18	10
1-Chlorohexane	ND		10	3.2	ug/L			07/27/23 21:18	10
Chloromethane	ND		10	9.0	ug/L			07/27/23 21:18	10
cis-1,2-Dichloroethene	ND		10	2.0	ug/L			07/27/23 21:18	10
cis-1,3-Dichloropropene	ND		50	5.0	ug/L			07/27/23 21:18	10
Dibromochloromethane	ND		10	2.4	ug/L			07/27/23 21:18	10
1,2-Dichlorobenzene	ND		10	5.0	ug/L			07/27/23 21:18	10
1,3-Dichlorobenzene	ND		10	5.4	ug/L			07/27/23 21:18	10
1,4-Dichlorobenzene	ND		10	6.4	ug/L			07/27/23 21:18	10
Dichlorodifluoromethane	ND		10	8.5	ug/L			07/27/23 21:18	10
1,1-Dichloroethane	ND		10	5.0	ug/L			07/27/23 21:18	10
1,2-Dichloroethane	ND		10	1.9	ug/L			07/27/23 21:18	10
1,1-Dichloroethene	ND		10	5.0	ug/L			07/27/23 21:18	10
1,2-Dichloropropane	ND		10	5.0	ug/L			07/27/23 21:18	10
1,3-Dichloropropane	ND		10	5.0	ug/L			07/27/23 21:18	10
2,2-Dichloropropane	ND		10	5.0	ug/L			07/27/23 21:18	10
1,1-Dichloropropene	ND		10	5.0	ug/L			07/27/23 21:18	10
Ethylbenzene	**11**		10	5.0	ug/L			07/27/23 21:18	10
Ethyl methacrylate	ND		10	6.0	ug/L			07/27/23 21:18	10
Hexachlorobutadiene	ND		50	9.0	ug/L			07/27/23 21:18	10
2-Hexanone	ND		250	14	ug/L			07/27/23 21:18	10
Isopropylbenzene	**7.7**	**J**	10	5.3	ug/L			07/27/23 21:18	10
Methylene bromide	ND		50	2.2	ug/L			07/27/23 21:18	10
Methylene Chloride	ND		50	30	ug/L			07/27/23 21:18	10
4-Methyl-2-pentanone (MIBK)	ND		250	18	ug/L			07/27/23 21:18	10
Methyl tert-butyl ether	ND		10	2.2	ug/L			07/27/23 21:18	10
m-Xylene & p-Xylene	**28**	**J**	50	6.3	ug/L			07/27/23 21:18	10
Naphthalene	ND		50	30	ug/L			07/27/23 21:18	10
n-Butylbenzene	ND		10	7.6	ug/L			07/27/23 21:18	10
N-Propylbenzene	**9.2**	**J**	10	6.9	ug/L			07/27/23 21:18	10
o-Chlorotoluene	ND		10	5.7	ug/L			07/27/23 21:18	10
o-Xylene	ND		50	6.0	ug/L			07/27/23 21:18	10
p-Chlorotoluene	ND		10	5.6	ug/L			07/27/23 21:18	10
p-Isopropyltoluene	ND		10	7.1	ug/L			07/27/23 21:18	10

Client Sample ID: T12-ROX-071423
Date Collected: 07/14/23 13:25
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-8
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		10	7.0	ug/L			07/27/23 21:18	10
Styrene	ND		10	10	ug/L			07/27/23 21:18	10
tert-Butylbenzene	ND		10	6.3	ug/L			07/27/23 21:18	10
1,1,1,2-Tetrachloroethane	ND		10	1.6	ug/L			07/27/23 21:18	10
1,1,2,2-Tetrachloroethane	ND		10	5.0	ug/L			07/27/23 21:18	10
Tetrachloroethene	ND		10	9.0	ug/L			07/27/23 21:18	10
Toluene	**31**		10	9.0	ug/L			07/27/23 21:18	10
trans-1,2-Dichloroethene	ND		10	5.0	ug/L			07/27/23 21:18	10
trans-1,3-Dichloropropene	ND		50	2.0	ug/L			07/27/23 21:18	10
1,2,3-Trichlorobenzene	ND		10	9.0	ug/L			07/27/23 21:18	10
1,2,4-Trichlorobenzene	ND		10	8.2	ug/L			07/27/23 21:18	10
1,1,1-Trichloroethane	ND		10	1.8	ug/L			07/27/23 21:18	10
1,1,2-Trichloroethane	ND		50	2.1	ug/L			07/27/23 21:18	10
Trichloroethene	ND		10	1.5	ug/L			07/27/23 21:18	10
Trichlorofluoromethane	ND		10	5.2	ug/L			07/27/23 21:18	10
1,2,3-Trichloropropane	ND		50	8.4	ug/L			07/27/23 21:18	10
1,2,4-Trimethy benzene	ND		10	8.2	ug/L			07/27/23 21:18	10
1,3,5-Trimethy benzene	ND		10	5.6	ug/L			07/27/23 21:18	10
Vinyl acetate	ND		250	9.3	ug/L			07/27/23 21:18	10
Vinyl chloride	ND		10	5.0	ug/L			07/27/23 21:18	10
Xylenes, Total	**28**	**J**	100	16	ug/L			07/27/23 21:18	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/27/23 21:18*	*10*
Dibromofluoromethane	*111*		*75 - 126*		*07/27/23 21:18*	*10*
Toluene-d8 (Surr)	*100*		*64 - 132*		*07/27/23 21:18*	*10*

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	0.099	ug/L		07/21/23 09:00	07/25/23 19:19	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/21/23 09:00	07/25/23 19:19	1
Anthracene	ND		0.20	0.047	ug/L		07/21/23 09:00	07/25/23 19:19	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/21/23 09:00	07/25/23 19:19	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/21/23 09:00	07/25/23 19:19	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/21/23 09:00	07/25/23 19:19	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/21/23 09:00	07/25/23 19:19	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/21/23 09:00	07/25/23 19:19	1
Chrysene	ND		0.20	0.033	ug/L		07/21/23 09:00	07/25/23 19:19	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/21/23 09:00	07/25/23 19:19	1
Fluoranthene	ND		0.20	0.034	ug/L		07/21/23 09:00	07/25/23 19:19	1
Fluorene	**0.23**		0.20	0.089	ug/L		07/21/23 09:00	07/25/23 19:19	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/21/23 09:00	07/25/23 19:19	1
Phenanthrene	**0.42**		0.20	0.090	ug/L		07/21/23 09:00	07/25/23 19:19	1
Pyrene	ND		0.20	0.039	ug/L		07/21/23 09:00	07/25/23 19:19	1
1-Methylnaphthalene	**15**		0.20	0.080	ug/L		07/21/23 09:00	07/25/23 19:19	1
2-Methylnaphthalene	**23**		0.20	0.066	ug/L		07/21/23 09:00	07/25/23 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*84*		*18 - 147*	*07/21/23 09:00*	*07/25/23 19:19*	*1*
2-Fluorobiphenyl	*69*		*15 - 128*	*07/21/23 09:00*	*07/25/23 19:19*	*1*

Client Sample ID: T12-ROX-071423
Date Collected: 07/14/23 13:25
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-8
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	07/21/23 09:00	07/25/23 19:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/21/23 09:00	07/24/23 18:51	1
Benzenethiol	ND		10	1.7	ug/L		07/21/23 09:00	07/24/23 18:51	1
Benzoic acid	ND		30	7.3	ug/L		07/21/23 09:00	07/24/23 18:51	1
Benzyl alcohol	ND		10	2.0	ug/L		07/21/23 09:00	07/24/23 18:51	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/21/23 09:00	07/24/23 18:51	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/21/23 09:00	07/24/23 18:51	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/21/23 09:00	07/24/23 18:51	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/21/23 09:00	07/24/23 18:51	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/21/23 09:00	07/24/23 18:51	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/21/23 09:00	07/24/23 18:51	1
4-Chloroaniline	ND		10	3.4	ug/L		07/21/23 09:00	07/24/23 18:51	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/21/23 09:00	07/24/23 18:51	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/21/23 09:00	07/24/23 18:51	1
2-Chlorophenol	ND		10	2.2	ug/L		07/21/23 09:00	07/24/23 18:51	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/21/23 09:00	07/24/23 18:51	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 18:51	1
Dibenzofuran	ND		10	0.17	ug/L		07/21/23 09:00	07/24/23 18:51	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/21/23 09:00	07/24/23 18:51	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/21/23 09:00	07/24/23 18:51	1
Diethyl phthalate	**1.1**	**J**	10	0.24	ug/L		07/21/23 09:00	07/24/23 18:51	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/21/23 09:00	07/24/23 18:51	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/21/23 09:00	07/24/23 18:51	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/21/23 09:00	07/24/23 18:51	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/21/23 09:00	07/24/23 18:51	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/21/23 09:00	07/24/23 18:51	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/21/23 09:00	07/24/23 18:51	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/21/23 09:00	07/24/23 18:51	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/21/23 09:00	07/24/23 18:51	1
1,4-Dioxane	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 18:51	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 18:51	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/21/23 09:00	07/24/23 18:51	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/21/23 09:00	07/24/23 18:51	1
Hexachloroethane	ND		10	4.2	ug/L		07/21/23 09:00	07/24/23 18:51	1
Indene	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 18:51	1
Isophorone	ND		10	0.14	ug/L		07/21/23 09:00	07/24/23 18:51	1
2-Methylphenol	ND		10	1.8	ug/L		07/21/23 09:00	07/24/23 18:51	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/21/23 09:00	07/24/23 18:51	1
2-Nitroaniline	ND		10	2.2	ug/L		07/21/23 09:00	07/24/23 18:51	1
3-Nitroaniline	ND		10	1.8	ug/L		07/21/23 09:00	07/24/23 18:51	1
4-Nitroaniline	ND		10	1.5	ug/L		07/21/23 09:00	07/24/23 18:51	1
Nitrobenzene	ND		10	0.13	ug/L		07/21/23 09:00	07/24/23 18:51	1
2-Nitrophenol	ND		10	5.2	ug/L		07/21/23 09:00	07/24/23 18:51	1
4-Nitrophenol	ND		10	2.1	ug/L		07/21/23 09:00	07/24/23 18:51	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/21/23 09:00	07/24/23 18:51	1

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

Job ID: 400-240599-1

Client Sample ID: T12-ROX-071423
Date Collected: 07/14/23 13:25
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240599-8
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	3.3	ug/L		07/21/23 09:00	07/24/23 18:51	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/21/23 09:00	07/24/23 18:51	1
Pentachlorophenol	ND		20	1.4	ug/L		07/21/23 09:00	07/24/23 18:51	1
Phenol	**50**		10	2.6	ug/L		07/21/23 09:00	07/24/23 18:51	1
Pyridine	ND		10	3.2	ug/L		07/21/23 09:00	07/24/23 18:51	1
Quinoline	ND		10	4.5	ug/L		07/21/23 09:00	07/24/23 18:51	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/21/23 09:00	07/24/23 18:51	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/21/23 09:00	07/24/23 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*89*		*46 - 124*	*07/21/23 09:00*	*07/24/23 18:51*	*1*
2-Fluorophenol	*17*		*13 - 113*	*07/21/23 09:00*	*07/24/23 18:51*	*1*
Nitrobenzene-d5	*71*		*36 - 126*	*07/21/23 09:00*	*07/24/23 18:51*	*1*
Phenol-d5	*51*		*17 - 127*	*07/21/23 09:00*	*07/24/23 18:51*	*1*
Terphenyl-d14	*93*		*44 - 149*	*07/21/23 09:00*	*07/24/23 18:51*	*1*
2,4,6-Tribromophenol	*124*		*26 - 150*	*07/21/23 09:00*	*07/24/23 18:51*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/24/23 13:46	07/25/23 14:57	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/24/23 13:46	07/25/23 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*71*		*51 - 149*	*07/24/23 13:46*	*07/25/23 14:57*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Job ID: 400-240599-1
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
*-	LCS and/or LCSD is outside acceptance limits, low biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
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: 400-240599-1

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)
400-240599-1	TB-ROX-071423-8260-A	96	113	99
400-240599-3	P114R-ROX-071423	101	111	100
400-240599-4	MW13-ROX-071423	100	110	102
400-240599-5	TB-ROX-071423-8260-B	98	112	99
400-240599-7	P93C-ROX-071423	99	114	101
400-240599-8	T12-ROX-071423	98	111	100
LCS 400-634769/1002	Lab Control Sample	98	110	101
MB 400-634769/4	Method Blank	97	112	104

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)
400-240599-3	P114R-ROX-071423	84	4 S1-	64	27	98	104
400-240599-4	MW13-ROX-071423	83	21	66	45	71	108
400-240599-7	P93C-ROX-071423	87	16	67	40	102	111
400-240599-8	T12-ROX-071423	89	17	71	51	93	124
LCS 400-633899/2-A	Lab Control Sample	81	40	74	67	95	105
LCS 400-633899/4-A	Lab Control Sample	78	47	64	67	102	80
LCSD 400-633899/3-A	Lab Control Sample Dup	83	21	73	61	99	111
LCSD 400-633899/5-A	Lab Control Sample Dup	82	52	67	70	98	80
MB 400-633899/1-A	Method Blank	70	14	59	44	86	65

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)
400-240599-3	P114R-ROX-071423	78	70	76
400-240599-4	MW13-ROX-071423	57		84
400-240599-4 - DL	MW13-ROX-071423		76	
400-240599-7	P93C-ROX-071423	87	80	87
400-240599-8	T12-ROX-071423	84	69	81
LCS 400-633899/6-A	Lab Control Sample	134	134 S1+	107
LCSD 400-633899/7-A	Lab Control Sample Dup	140	141 S1+	112

Surrogate Summary

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

Job ID: 400-240599-1

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)
MB 400-633899/1-A	Method Blank	68	67	50

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)
400-240599-2	TB-ROX-071423-8011-A	89
400-240599-3	P114R-ROX-071423	101
400-240599-4	MW13-ROX-071423	93
400-240599-6	TB-ROX-071423-8011-B	88
400-240599-7	P93C-ROX-071423	70
400-240599-8	T12-ROX-071423	71
LCS 400-633872/2-A	Lab Control Sample	54
LCS 400-634344/2-A	Lab Control Sample	91
LCSD 400-633872/3-A	Lab Control Sample Dup	65
LCSD 400-634344/3-A	Lab Control Sample Dup	80
MB 400-633872/1-A	Method Blank	68
MB 400-634344/1-A	Method Blank	78

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-240599-1

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 QUARTERLY GW

Job ID: 400-240599-1

Client Sample ID: TB-ROX-071423-8260-A
Lab Sample ID: 400-240599-1
Date Collected: 07/14/23 12:00
Matrix: Water
Date Received: 07/15/23 08:09

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	634769	07/27/23 17:05	CH	EET PEN

Client Sample ID: TB-ROX-071423-8011-A
Lab Sample ID: 400-240599-2
Date Collected: 07/14/23 12:00
Matrix: Water
Date Received: 07/15/23 08:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.5 mL	35 mL	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 22:54	PG	EET PEN

Client Sample ID: P114R-ROX-071423
Lab Sample ID: 400-240599-3
Date Collected: 07/14/23 12:30
Matrix: Water
Date Received: 07/15/23 08:09

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	634769	07/27/23 17:28	CH	EET PEN
Total/NA	Prep	3520C			252 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634343	07/24/23 17:31	S1B	EET PEN
Total/NA	Prep	3520C			252 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634595	07/26/23 12:33	KJA	EET PEN
Total/NA	Prep	8011			36 mL	35 mL	633872	07/20/23 08:04	PG	EET PEN
Total/NA	Analysis	8011		1			634252	07/24/23 13:48	PG	EET PEN

Client Sample ID: MW13-ROX-071423
Lab Sample ID: 400-240599-4
Date Collected: 07/14/23 13:25
Matrix: Water
Date Received: 07/15/23 08:09

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	634769	07/27/23 17:51	CH	EET PEN
Total/NA	Prep	3520C			253.2 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634343	07/24/23 17:57	S1B	EET PEN
Total/NA	Prep	3520C			253.2 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634436	07/25/23 18:37	S1B	EET PEN
Total/NA	Prep	3520C	DL		253.2 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E SIM	DL	5	0.4 mL	0.4 mL	634595	07/26/23 12:54	KJA	EET PEN
Total/NA	Prep	8011			36.7 mL	35 mL	633872	07/20/23 08:04	PG	EET PEN
Total/NA	Analysis	8011		1			634252	07/24/23 14:09	PG	EET PEN

Client Sample ID: TB-ROX-071423-8260-B
Lab Sample ID: 400-240599-5
Date Collected: 07/14/23 12:00
Matrix: Water
Date Received: 07/15/23 08:09

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	634769	07/27/23 18:14	CH	EET PEN

Client Sample ID: TB-ROX-071423-8011-B

Lab Sample ID: 400-240599-6

Date Collected: 07/14/23 12:00

Matrix: Water

Date Received: 07/15/23 08:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			36.3 mL	35 mL	633872	07/20/23 08:04	PG	EET PEN
Total/NA	Analysis	8011		1			634252	07/24/23 14:30	PG	EET PEN

Client Sample ID: P93C-ROX-071423

Lab Sample ID: 400-240599-7

Date Collected: 07/14/23 11:40

Matrix: Water

Date Received: 07/15/23 08:09

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	634769	07/27/23 18:37	CH	EET PEN
Total/NA	Prep	3520C			243.4 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634343	07/24/23 18:24	S1B	EET PEN
Total/NA	Prep	3520C			243.4 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634436	07/25/23 18:58	S1B	EET PEN
Total/NA	Prep	8011			35.7 mL	35 mL	633872	07/20/23 08:04	PG	EET PEN
Total/NA	Analysis	8011		1			634252	07/24/23 14:51	PG	EET PEN

Client Sample ID: T12-ROX-071423

Lab Sample ID: 400-240599-8

Date Collected: 07/14/23 13:25

Matrix: Water

Date Received: 07/15/23 08:09

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	634769	07/27/23 21:18	CH	EET PEN
Total/NA	Prep	3520C			250.4 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634343	07/24/23 18:51	S1B	EET PEN
Total/NA	Prep	3520C			250.4 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634436	07/25/23 19:19	S1B	EET PEN
Total/NA	Prep	8011			34.9 mL	35 mL	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 14:57	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-633872/1-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	633872	07/20/23 08:04	PG	EET PEN
Total/NA	Analysis	8011		1			634252	07/24/23 08:32	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-633899/1-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 21:12	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 19:54	KJA	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-634344/1-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	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 12:49	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-634769/4

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	634769	07/27/23 12:27	CH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-633872/2-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	633872	07/20/23 08:04	PG	EET PEN
Total/NA	Analysis	8011		1			634252	07/24/23 08:53	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-633899/2-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 22:20	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-633899/4-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 21:35	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-633899/6-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 20:15	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634344/2-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	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 13:10	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634769/1002
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	634769	07/27/23 11:23	CH	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633872/3-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	633872	07/20/23 08:04	PG	EET PEN
Total/NA	Analysis	8011		1			634252	07/24/23 09:14	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633899/3-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 22:43	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633899/5-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 21:58	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633899/7-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	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 20:37	KJA	EET PEN

Client: AECOM Technical Services Inc.
Job ID: 400-240599-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-634344/3-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	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 13:31	PG	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 634769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240599-1	TB-ROX-071423-8260-A	Total/NA	Water	8260D	
400-240599-3	P114R-ROX-071423	Total/NA	Water	8260D	
400-240599-4	MW13-ROX-071423	Total/NA	Water	8260D	
400-240599-5	TB-ROX-071423-8260-B	Total/NA	Water	8260D	
400-240599-7	P93C-ROX-071423	Total/NA	Water	8260D	
400-240599-8	T12-ROX-071423	Total/NA	Water	8260D	
MB 400-634769/4	Method Blank	Total/NA	Water	8260D	
LCS 400-634769/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 633899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240599-3	P114R-ROX-071423	Total/NA	Water	3520C	
400-240599-4	MW13-ROX-071423	Total/NA	Water	3520C	
400-240599-4 - DL	MW13-ROX-071423	Total/NA	Water	3520C	
400-240599-7	P93C-ROX-071423	Total/NA	Water	3520C	
400-240599-8	T12-ROX-071423	Total/NA	Water	3520C	
MB 400-633899/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-633899/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-633899/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-633899/6-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-633899/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-633899/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-633899/7-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 634089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-633899/1-A	Method Blank	Total/NA	Water	8270E SIM	633899
LCS 400-633899/6-A	Lab Control Sample	Total/NA	Water	8270E SIM	633899
LCSD 400-633899/7-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	633899

Analysis Batch: 634183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-633899/1-A	Method Blank	Total/NA	Water	8270E	633899
LCS 400-633899/2-A	Lab Control Sample	Total/NA	Water	8270E	633899
LCS 400-633899/4-A	Lab Control Sample	Total/NA	Water	8270E	633899
LCSD 400-633899/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	633899
LCSD 400-633899/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	633899

Analysis Batch: 634343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240599-3	P114R-ROX-071423	Total/NA	Water	8270E	633899
400-240599-4	MW13-ROX-071423	Total/NA	Water	8270E	633899
400-240599-7	P93C-ROX-071423	Total/NA	Water	8270E	633899
400-240599-8	T12-ROX-071423	Total/NA	Water	8270E	633899

Analysis Batch: 634436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240599-4	MW13-ROX-071423	Total/NA	Water	8270E SIM	633899
400-240599-7	P93C-ROX-071423	Total/NA	Water	8270E SIM	633899

GC/MS Semi VOA (Continued)

Analysis Batch: 634436 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240599-8	T12-ROX-071423	Total/NA	Water	8270E SIM	633899

Analysis Batch: 634595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240599-3	P114R-ROX-071423	Total/NA	Water	8270E SIM	633899
400-240599-4 - DL	MW13-ROX-071423	Total/NA	Water	8270E SIM	633899

GC Semi VOA

Prep Batch: 633872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240599-3	P114R-ROX-071423	Total/NA	Water	8011	
400-240599-4	MW13-ROX-071423	Total/NA	Water	8011	
400-240599-6	TB-ROX-071423-8011-B	Total/NA	Water	8011	
400-240599-7	P93C-ROX-071423	Total/NA	Water	8011	
MB 400-633872/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-633872/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-633872/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 634252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240599-3	P114R-ROX-071423	Total/NA	Water	8011	633872
400-240599-4	MW13-ROX-071423	Total/NA	Water	8011	633872
400-240599-6	TB-ROX-071423-8011-B	Total/NA	Water	8011	633872
400-240599-7	P93C-ROX-071423	Total/NA	Water	8011	633872
MB 400-633872/1-A	Method Blank	Total/NA	Water	8011	633872
LCS 400-633872/2-A	Lab Control Sample	Total/NA	Water	8011	633872
LCSD 400-633872/3-A	Lab Control Sample Dup	Total/NA	Water	8011	633872

Prep Batch: 634344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240599-2	TB-ROX-071423-8011-A	Total/NA	Water	8011	
400-240599-8	T12-ROX-071423	Total/NA	Water	8011	
MB 400-634344/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-634344/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-634344/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 634434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240599-2	TB-ROX-071423-8011-A	Total/NA	Water	8011	634344
400-240599-8	T12-ROX-071423	Total/NA	Water	8011	634344
MB 400-634344/1-A	Method Blank	Total/NA	Water	8011	634344
LCS 400-634344/2-A	Lab Control Sample	Total/NA	Water	8011	634344
LCSD 400-634344/3-A	Lab Control Sample Dup	Total/NA	Water	8011	634344

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

Lab Sample ID: MB 400-634769/4
Matrix: Water
Analysis Batch: 634769

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/27/23 12:27	1
Acrolein	ND		20	3.3	ug/L			07/27/23 12:27	1
Acrylonitrile	ND		10	2.8	ug/L			07/27/23 12:27	1
Benzene	ND		1.0	0.50	ug/L			07/27/23 12:27	1
Bromobenzene	ND		1.0	0.54	ug/L			07/27/23 12:27	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/27/23 12:27	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/27/23 12:27	1
Bromoform	ND		5.0	0.25	ug/L			07/27/23 12:27	1
Bromomethane	ND		1.0	0.98	ug/L			07/27/23 12:27	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/27/23 12:27	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/27/23 12:27	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/27/23 12:27	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/27/23 12:27	1
Chloroethane	ND		1.0	0.76	ug/L			07/27/23 12:27	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/27/23 12:27	1
Chloroform	ND		1.0	0.90	ug/L			07/27/23 12:27	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/27/23 12:27	1
Chloromethane	ND		1.0	0.90	ug/L			07/27/23 12:27	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/27/23 12:27	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/27/23 12:27	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/27/23 12:27	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/27/23 12:27	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/27/23 12:27	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/27/23 12:27	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/27/23 12:27	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/27/23 12:27	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/27/23 12:27	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 12:27	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 12:27	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 12:27	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 12:27	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/27/23 12:27	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/27/23 12:27	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/27/23 12:27	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/27/23 12:27	1
2-Hexanone	ND		25	1.4	ug/L			07/27/23 12:27	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/27/23 12:27	1
Methylene bromide	ND		5.0	0.22	ug/L			07/27/23 12:27	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/27/23 12:27	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/27/23 12:27	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/27/23 12:27	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/27/23 12:27	1
Naphthalene	ND		5.0	3.0	ug/L			07/27/23 12:27	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/27/23 12:27	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/27/23 12:27	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/27/23 12:27	1
o-Xylene	ND		5.0	0.60	ug/L			07/27/23 12:27	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/27/23 12:27	1

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

Lab Sample ID: MB 400-634769/4
Matrix: Water
Analysis Batch: 634769

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/27/23 12:27	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/27/23 12:27	1
Styrene	ND		1.0	1.0	ug/L			07/27/23 12:27	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/27/23 12:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/27/23 12:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/27/23 12:27	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/27/23 12:27	1
Toluene	ND		1.0	0.90	ug/L			07/27/23 12:27	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 12:27	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/27/23 12:27	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/27/23 12:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/27/23 12:27	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/27/23 12:27	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/27/23 12:27	1
Trichloroethene	ND		1.0	0.15	ug/L			07/27/23 12:27	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/27/23 12:27	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/27/23 12:27	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/27/23 12:27	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/27/23 12:27	1
Vinyl acetate	ND		25	0.93	ug/L			07/27/23 12:27	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/27/23 12:27	1
Xylenes, Total	ND		10	1.6	ug/L			07/27/23 12:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*07/27/23 12:27*	*1*
Dibromofluoromethane	*112*		*75 - 126*		*07/27/23 12:27*	*1*
Toluene-d8 (Surr)	*104*		*64 - 132*		*07/27/23 12:27*	*1*

Lab Sample ID: LCS 400-634769/1002
Matrix: Water
Analysis Batch: 634769

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	194		ug/L		97	43 - 160
Acrolein	500	406		ug/L		81	38 - 160
Acrylonitrile	500	472		ug/L		94	64 - 142
Benzene	50.0	47.6		ug/L		95	70 - 130
Bromobenzene	50.0	49.1		ug/L		98	70 - 132
Bromochloromethane	50.0	49.5		ug/L		99	70 - 130
Bromodichloromethane	50.0	50.9		ug/L		102	67 - 133
Bromoform	50.0	49.2		ug/L		98	57 - 140
Bromomethane	50.0	53.7		ug/L		107	10 - 160
2-Butanone (MEK)	200	181		ug/L		91	61 - 145
Carbon disulfide	50.0	44.9		ug/L		90	61 - 137
Carbon tetrachloride	50.0	52.2		ug/L		104	61 - 137
Chlorobenzene	50.0	50.5		ug/L		101	70 - 130
Chloroethane	50.0	50.8		ug/L		102	55 - 141
2-Chloroethyl vinyl ether	50.0	54.6		ug/L		109	10 - 160

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

Lab Sample ID: LCS 400-634769/1002
Matrix: Water
Analysis Batch: 634769

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	50.6		ug/L		101	69 - 130
1-Chlorohexane	50.0	52.8		ug/L		106	69 - 130
Chloromethane	50.0	43.3		ug/L		87	58 - 137
cis-1,2-Dichloroethene	50.0	47.8		ug/L		96	68 - 130
cis-1,3-Dichloropropene	50.0	45.6		ug/L		91	69 - 132
Dibromochloromethane	50.0	54.0		ug/L		108	67 - 135
1,2-Dichlorobenzene	50.0	52.0		ug/L		104	67 - 130
1,3-Dichlorobenzene	50.0	51.2		ug/L		102	70 - 130
1,4-Dichlorobenzene	50.0	51.3		ug/L		103	70 - 130
Dichlorodifluoromethane	50.0	45.6		ug/L		91	41 - 146
1,1-Dichloroethane	50.0	48.3		ug/L		97	70 - 130
1,2-Dichloroethane	50.0	55.5		ug/L		111	69 - 130
1,1-Dichloroethene	50.0	48.2		ug/L		96	63 - 134
1,2-Dichloropropane	50.0	48.7		ug/L		97	70 - 130
1,3-Dichloropropane	50.0	51.6		ug/L		103	70 - 130
2,2-Dichloropropane	50.0	41.6		ug/L		83	52 - 135
1,1-Dichloropropene	50.0	47.8		ug/L		96	70 - 130
Ethylbenzene	50.0	51.4		ug/L		103	70 - 130
Ethyl methacrylate	50.0	51.2		ug/L		102	68 - 130
Hexachlorobutadiene	50.0	52.6		ug/L		105	53 - 140
2-Hexanone	200	201		ug/L		100	65 - 137
Isopropy benzene	50.0	53.3		ug/L		107	70 - 130
Methylene bromide	50.0	53.8		ug/L		108	70 - 130
Methylene Chloride	50.0	46.7		ug/L		93	66 - 135
4-Methyl-2-pentanone (MIBK)	200	209		ug/L		105	69 - 138
Methyl tert-butyl ether	50.0	48.2		ug/L		96	66 - 130
m-Xylene & p-Xylene	50.0	51.1		ug/L		102	70 - 130
Naphthalene	50.0	49.2		ug/L		98	47 - 149
n-Butylbenzene	50.0	57.2		ug/L		114	67 - 130
N-Propylbenzene	50.0	52.8		ug/L		106	70 - 130
o-Chlorotoluene	50.0	52.3		ug/L		105	70 - 130
o-Xylene	50.0	50.8		ug/L		102	70 - 130
p-Chlorotoluene	50.0	52.8		ug/L		106	70 - 130
p-Isopropyltoluene	50.0	52.5		ug/L		105	65 - 130
sec-Butylbenzene	50.0	53.2		ug/L		106	66 - 130
Styrene	50.0	50.4		ug/L		101	70 - 130
tert-Butylbenzene	50.0	53.4		ug/L		107	64 - 139
1,1,1,2-Tetrachloroethane	50.0	52.4		ug/L		105	67 - 131
1,1,2,2-Tetrachloroethane	50.0	50.6		ug/L		101	70 - 131
Tetrachloroethene	50.0	49.3		ug/L		99	65 - 130
Toluene	50.0	47.4		ug/L		95	70 - 130
trans-1,2-Dichloroethene	50.0	47.0		ug/L		94	70 - 130
trans-1,3-Dichloropropene	50.0	51.3		ug/L		103	63 - 130
1,2,3-Trichlorobenzene	50.0	48.7		ug/L		97	60 - 138
1,2,4-Trichlorobenzene	50.0	49.8		ug/L		100	60 - 140
1,1,1-Trichloroethane	50.0	49.6		ug/L		99	68 - 130
1,1,2-Trichloroethane	50.0	52.7		ug/L		105	70 - 130
Trichloroethene	50.0	47.9		ug/L		96	70 - 130
Trichlorofluoromethane	50.0	51.1		ug/L		102	65 - 138

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

Lab Sample ID: LCS 400-634769/1002
Matrix: Water
Analysis Batch: 634769

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	53.1		ug/L		106	70 - 130
1,2,4-Trimethy benzene	50.0	51.0		ug/L		102	70 - 130
1,3,5-Trimethy benzene	50.0	50.7		ug/L		101	69 - 130
Vinyl acetate	100	126		ug/L		126	26 - 160
Vinyl chloride	50.0	45.9		ug/L		92	59 - 136
Xylenes, Total	100	102		ug/L		102	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 130*
Dibromofluoromethane	*110*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

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

Lab Sample ID: MB 400-633899/1-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633899

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/20/23 09:40	07/21/23 21:12	1
Benzenethiol	ND		10	1.7	ug/L		07/20/23 09:40	07/21/23 21:12	1
Benzoic acid	ND		30	7.3	ug/L		07/20/23 09:40	07/21/23 21:12	1
Benzyl alcohol	ND		10	2.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/20/23 09:40	07/21/23 21:12	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/20/23 09:40	07/21/23 21:12	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/20/23 09:40	07/21/23 21:12	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/20/23 09:40	07/21/23 21:12	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Chloroaniline	ND		10	3.4	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/20/23 09:40	07/21/23 21:12	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/20/23 09:40	07/21/23 21:12	1
2-Chlorophenol	ND		10	2.2	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Dibenzofuran	ND		10	0.17	ug/L		07/20/23 09:40	07/21/23 21:12	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Diethyl phthalate	ND		10	0.24	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/20/23 09:40	07/21/23 21:12	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/20/23 09:40	07/21/23 21:12	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/20/23 09:40	07/21/23 21:12	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/20/23 09:40	07/21/23 21:12	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/20/23 09:40	07/21/23 21:12	1
1,4-Dioxane	ND		10	1.0	ug/L		07/20/23 09:40	07/21/23 21:12	1

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

Lab Sample ID: MB 400-633899/1-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633899

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/20/23 09:40	07/21/23 21:12	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/20/23 09:40	07/21/23 21:12	1
Hexachloroethane	ND		10	4.2	ug/L		07/20/23 09:40	07/21/23 21:12	1
Indene	ND		10	1.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Isophorone	ND		10	0.14	ug/L		07/20/23 09:40	07/21/23 21:12	1
2-Methylphenol	ND		10	1.8	ug/L		07/20/23 09:40	07/21/23 21:12	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/20/23 09:40	07/21/23 21:12	1
2-Nitroaniline	ND		10	2.2	ug/L		07/20/23 09:40	07/21/23 21:12	1
3-Nitroaniline	ND		10	1.8	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Nitroaniline	ND		10	1.5	ug/L		07/20/23 09:40	07/21/23 21:12	1
Nitrobenzene	ND		10	0.13	ug/L		07/20/23 09:40	07/21/23 21:12	1
2-Nitrophenol	ND		10	5.2	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Nitrophenol	ND		10	2.1	ug/L		07/20/23 09:40	07/21/23 21:12	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/20/23 09:40	07/21/23 21:12	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/20/23 09:40	07/21/23 21:12	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/20/23 09:40	07/21/23 21:12	1
Pentachlorophenol	ND		20	1.4	ug/L		07/20/23 09:40	07/21/23 21:12	1
Phenol	ND		10	2.6	ug/L		07/20/23 09:40	07/21/23 21:12	1
Pyridine	ND		10	3.2	ug/L		07/20/23 09:40	07/21/23 21:12	1
Quinoline	ND		10	4.5	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/20/23 09:40	07/21/23 21:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*46 - 124*	*07/20/23 09:40*	*07/21/23 21:12*	*1*
2-Fluorophenol	*14*		*13 - 113*	*07/20/23 09:40*	*07/21/23 21:12*	*1*
Nitrobenzene-d5	*59*		*36 - 126*	*07/20/23 09:40*	*07/21/23 21:12*	*1*
Phenol-d5	*44*		*17 - 127*	*07/20/23 09:40*	*07/21/23 21:12*	*1*
Terphenyl-d14	*86*		*44 - 149*	*07/20/23 09:40*	*07/21/23 21:12*	*1*
2,4,6-Tribromophenol	*65*		*26 - 150*	*07/20/23 09:40*	*07/21/23 21:12*	*1*

Lab Sample ID: LCS 400-633899/2-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	86.0		ug/L		72	21 - 120
Benzoic acid	522	231		ug/L		44	10 - 144
Benzyl alcohol	120	69.5		ug/L		58	28 - 120
Bis(2-chloroethoxy)methane	120	86.1		ug/L		72	47 - 120
Bis(2-chloroethyl)ether	120	83.5		ug/L		70	44 - 120
bis (2-chloroisopropyl) ether	120	86.5		ug/L		72	33 - 121
Bis(2-ethylhexyl) phthalate	120	91.3		ug/L		76	52 - 147
4-Bromophenyl phenyl ether	120	96.2		ug/L		80	54 - 122
Butyl benzyl phthalate	120	100		ug/L		84	54 - 133
4-Chloroaniline	120	72.3		ug/L		60	26 - 120
4-Chloro-3-methylphenol	120	88.6		ug/L		74	48 - 131

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

Job ID: 400-240599-1

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

Lab Sample ID: LCS 400-633899/2-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chloronaphthalene	120	99.9		ug/L		83	52 - 121
2-Chlorophenol	120	68.9		ug/L		57	40 - 120
4-Chlorophenyl phenyl ether	120	104		ug/L		87	56 - 125
Dibenz[a,h]acridine	110	88.2		ug/L		81	31 - 150
Dibenzofuran	120	105		ug/L		88	56 - 122
3,3'-Dichlorobenzidine	160	144		ug/L		90	36 - 132
2,4-Dichlorophenol	120	86.8		ug/L		72	49 - 120
Diethyl phthalate	120	108		ug/L		90	50 - 137
2,4-Dimethylphenol	120	69.4		ug/L		58	48 - 120
Dimethyl phthalate	120	102		ug/L		85	57 - 124
Di-n-butyl phthalate	120	100		ug/L		84	58 - 126
4,6-Dinitro-ortho-cresol	240	171		ug/L		71	23 - 148
2,4-Dinitrophenol	240	173		ug/L		72	10 - 150
2,4-Dinitrotoluene	120	103		ug/L		86	54 - 142
2,6-Dinitrotoluene	120	101		ug/L		84	55 - 130
Di-n-octyl phthalate	120	91.5		ug/L		76	57 - 138
1,4-Dioxane	120	64.0		ug/L		53	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	83.1		ug/L		69	45 - 124
Hexachlorobenzene	120	113		ug/L		94	52 - 129
Hexachlorocyclopentadiene	120	54.0		ug/L		45	10 - 134
Hexachloroethane	120	79.8		ug/L		66	20 - 120
Indene	120	91.2		ug/L		76	49 - 120
Isophorone	120	85.4		ug/L		71	48 - 120
2-Methylphenol	120	92.4		ug/L		77	46 - 124
3 & 4 Methylphenol	120	91.9		ug/L		77	45 - 120
2-Nitroaniline	120	89.4		ug/L		74	51 - 145
3-Nitroaniline	120	84.8		ug/L		71	37 - 127
4-Nitroaniline	120	112		ug/L		93	36 - 137
Nitrobenzene	120	79.5		ug/L		66	45 - 120
2-Nitrophenol	120	82.0		ug/L		68	40 - 124
4-Nitrophenol	240	152		ug/L		63	23 - 146
N-Nitrosodimethylamine	120	69.6		ug/L		58	29 - 137
N-Nitrosodi-n-propylamine	120	91.2		ug/L		76	45 - 120
N-Nitrosodiphenylamine	119	91.4		ug/L		77	54 - 120
Pentachlorophenol	240	195		ug/L		81	31 - 130
Phenol	120	72.2		ug/L		60	11 - 120
Pyridine	240	114		ug/L		47	16 - 120
Quinoline	110	93.1		ug/L		85	49 - 130
2,4,5-Trichlorophenol	120	95.9		ug/L		80	51 - 136
2,4,6-Trichlorophenol	120	94.8		ug/L		79	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*81*		*46 - 124*
2-Fluorophenol	*40*		*13 - 113*
Nitrobenzene-d5	*74*		*36 - 126*
Phenol-d5	*67*		*17 - 127*
Terphenyl-d14	*95*		*44 - 149*

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

Lab Sample ID: LCS 400-633899/2-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*105*		*26 - 150*

Lab Sample ID: LCS 400-633899/4-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	13.3		ug/L		11	10 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*46 - 124*
2-Fluorophenol	*47*		*13 - 113*
Nitrobenzene-d5	*64*		*36 - 126*
Phenol-d5	*67*		*17 - 127*
Terphenyl-d14	*102*		*44 - 149*
2,4,6-Tribromophenol	*80*		*26 - 150*

Lab Sample ID: LCSD 400-633899/3-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	98.9		ug/L		82	21 - 120	14	30
Benzoic acid			522	249		ug/L		48	10 - 144	7	30
Benzyl alcohol			120	75.2		ug/L		63	28 - 120	8	30
Bis(2-chloroethoxy)methane			120	92.0		ug/L		77	47 - 120	7	30
Bis(2-chloroethyl)ether			120	82.0		ug/L		68	44 - 120	2	30
bis (2-chloroisopropyl) ether			120	86.6		ug/L		72	33 - 121	0	30
Bis(2-ethylhexyl) phthalate			120	98.3		ug/L		82	52 - 147	7	30
4-Bromophenyl phenyl ether			120	106		ug/L		89	54 - 122	10	30
Butyl benzyl phthalate			120	109		ug/L		91	54 - 133	8	30
4-Chloroaniline			120	79.2		ug/L		66	26 - 120	9	30
4-Chloro-3-methylphenol			120	97.7		ug/L		81	48 - 131	10	30
2-Chloronaphthalene			120	107		ug/L		90	52 - 121	7	30
2-Chlorophenol			120	60.5		ug/L		50	40 - 120	13	30
4-Chlorophenyl phenyl ether			120	114		ug/L		95	56 - 125	9	30
Dibenz[a,h]acridine			110	102		ug/L		93	31 - 150	14	30
Dibenzofuran			120	115		ug/L		96	56 - 122	9	30
3,3'-Dichlorobenzidine			160	157		ug/L		98	36 - 132	9	30
2,4-Dichlorophenol			120	90.9		ug/L		76	49 - 120	5	30
Diethyl phthalate			120	118		ug/L		98	50 - 137	9	30
2,4-Dimethylphenol			120	77.1		ug/L		64	48 - 120	10	30
Dimethyl phthalate			120	113		ug/L		94	57 - 124	10	30
Di-n-butyl phthalate			120	110		ug/L		91	58 - 126	9	30
4,6-Dinitro-ortho-cresol			240	193		ug/L		81	23 - 148	13	30
2,4-Dinitrophenol			240	197		ug/L		82	10 - 150	13	30
2,4-Dinitrotoluene			120	115		ug/L		96	54 - 142	11	30
2,6-Dinitrotoluene			120	113		ug/L		94	55 - 130	11	30

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

Lab Sample ID: LCSD 400-633899/3-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Di-n-octyl phthalate			120	97.2		ug/L		81	57 - 138	6	30
1,4-Dioxane			120	64.3		ug/L		54	31 - 120	0	30
1,2-Diphenylhydrazine (as Azobenzene)			120	88.6		ug/L		74	45 - 124	6	30
Hexachlorobenzene			120	125		ug/L		104	52 - 129	10	30
Hexachlorocyclopentadiene			120	56.5		ug/L		47	10 - 134	5	30
Hexachloroethane			120	75.5		ug/L		63	20 - 120	6	30
Indene			120	93.4		ug/L		78	49 - 120	2	30
Isophorone			120	90.2		ug/L		75	48 - 120	6	30
2-Methylphenol			120	99.8		ug/L		83	46 - 124	8	30
3 & 4 Methylphenol			120	98.3		ug/L		82	45 - 120	7	30
2-Nitroaniline			120	96.3		ug/L		80	51 - 145	7	30
3-Nitroaniline			120	90.8		ug/L		76	37 - 127	7	30
4-Nitroaniline			120	121		ug/L		101	36 - 137	8	30
Nitrobenzene			120	83.2		ug/L		69	45 - 120	5	30
2-Nitrophenol			120	86.0		ug/L		72	40 - 124	5	30
4-Nitrophenol			240	155		ug/L		65	23 - 146	2	30
N-Nitrosodimethylamine			120	78.7		ug/L		66	29 - 137	12	30
N-Nitrosodi-n-propylamine			120	94.2		ug/L		79	45 - 120	3	30
N-Nitrosodiphenylamine			119	102		ug/L		85	54 - 120	11	30
Pentachlorophenol			240	213		ug/L		89	31 - 130	9	30
Phenol			120	69.4		ug/L		58	11 - 120	4	30
Pyridine			240	139		ug/L		58	16 - 120	20	30
Quinoline			110	101		ug/L		92	49 - 130	8	30
2,4,5-Trichlorophenol			120	108		ug/L		90	51 - 136	12	30
2,4,6-Trichlorophenol			120	107		ug/L		89	50 - 127	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*46 - 124*
2-Fluorophenol	*21*		*13 - 113*
Nitrobenzene-d5	*73*		*36 - 126*
Phenol-d5	*61*		*17 - 127*
Terphenyl-d14	*99*		*44 - 149*
2,4,6-Tribromophenol	*111*		*26 - 150*

Lab Sample ID: LCSD 400-633899/5-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	9.83	J *-	ug/L		8	10 - 120	30	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*82*		*46 - 124*
2-Fluorophenol	*52*		*13 - 113*
Nitrobenzene-d5	*67*		*36 - 126*
Phenol-d5	*70*		*17 - 127*
Terphenyl-d14	*98*		*44 - 149*

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

Lab Sample ID: LCSD 400-633899/5-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633899

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*80*		*26 - 150*

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

Lab Sample ID: MB 400-633899/1-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633899

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/20/23 09:40	07/21/23 19:54	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/20/23 09:40	07/21/23 19:54	1
Anthracene	ND		0.20	0.047	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/20/23 09:40	07/21/23 19:54	1
Chrysene	ND		0.20	0.033	ug/L		07/20/23 09:40	07/21/23 19:54	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/20/23 09:40	07/21/23 19:54	1
Fluoranthene	ND		0.20	0.034	ug/L		07/20/23 09:40	07/21/23 19:54	1
Fluorene	ND		0.20	0.089	ug/L		07/20/23 09:40	07/21/23 19:54	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/20/23 09:40	07/21/23 19:54	1
Phenanthrene	ND		0.20	0.090	ug/L		07/20/23 09:40	07/21/23 19:54	1
Pyrene	ND		0.20	0.039	ug/L		07/20/23 09:40	07/21/23 19:54	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/20/23 09:40	07/21/23 19:54	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/20/23 09:40	07/21/23 19:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*68*		*18 - 147*	*07/20/23 09:40*	*07/21/23 19:54*	*1*
2-Fluorobiphenyl	*67*		*15 - 128*	*07/20/23 09:40*	*07/21/23 19:54*	*1*
Nitrobenzene-d5	*50*		*10 - 144*	*07/20/23 09:40*	*07/21/23 19:54*	*1*

Lab Sample ID: LCS 400-633899/6-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	2.00	1.18		ug/L		59	40 - 140
Acenaphthylene	2.00	1.24		ug/L		62	40 - 140
Anthracene	2.00	1.24		ug/L		62	40 - 140
Benzo[a]anthracene	2.00	1.41		ug/L		70	40 - 140
Benzo[a]pyrene	2.00	1.23		ug/L		61	40 - 140
Benzo[b]fluoranthene	2.00	1.21		ug/L		60	40 - 140
Benzo[g,h,i]perylene	2.00	1.36		ug/L		68	40 - 140
Benzo[k]fluoranthene	2.00	1.18		ug/L		59	40 - 140
Chrysene	2.00	1.32		ug/L		66	40 - 140
Dibenz(a,h)anthracene	2.00	1.45		ug/L		72	40 - 140
Fluoranthene	2.00	1.49		ug/L		74	40 - 140

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

Lab Sample ID: LCS 400-633899/6-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Fluorene			2.00	1.30		ug/L		65	40 - 140		
Indeno[1,2,3-cd]pyrene			2.00	1.42		ug/L		71	40 - 140		
Phenanthrene			2.00	1.21		ug/L		60	40 - 140		
Pyrene			2.00	1.02		ug/L		51	40 - 140		
1-Methylnaphthalene			2.00	1.41		ug/L		71	40 - 140		
2-Methylnaphthalene			2.00	1.42		ug/L		71	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*134*		*18 - 147*
2-Fluorobiphenyl	*134*	*S1+*	*15 - 128*
Nitrobenzene-d5	*107*		*10 - 144*

Lab Sample ID: LCSD 400-633899/7-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			2.00	1.25		ug/L		63	40 - 140	6	40
Acenaphthylene			2.00	1.30		ug/L		65	40 - 140	5	40
Anthracene			2.00	1.26		ug/L		63	40 - 140	2	40
Benzo[a]anthracene			2.00	1.46		ug/L		73	40 - 140	4	40
Benzo[a]pyrene			2.00	1.30		ug/L		65	40 - 140	6	40
Benzo[b]fluoranthene			2.00	1.26		ug/L		63	40 - 140	4	40
Benzo[g,h,i]perylene			2.00	1.39		ug/L		70	40 - 140	3	40
Benzo[k]fluoranthene			2.00	1.22		ug/L		61	40 - 140	4	40
Chrysene			2.00	1.38		ug/L		69	40 - 140	5	40
Dibenz(a,h)anthracene			2.00	1.50		ug/L		75	40 - 140	4	40
Fluoranthene			2.00	1.55		ug/L		77	40 - 140	4	40
Fluorene			2.00	1.39		ug/L		69	40 - 140	7	40
Indeno[1,2,3-cd]pyrene			2.00	1.44		ug/L		72	40 - 140	1	40
Phenanthrene			2.00	1.25		ug/L		63	40 - 140	4	40
Pyrene			2.00	1.09		ug/L		54	40 - 140	7	40
1-Methylnaphthalene			2.00	1.36		ug/L		68	40 - 140	4	40
2-Methylnaphthalene			2.00	1.37		ug/L		69	40 - 140	3	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*140*		*18 - 147*
2-Fluorobiphenyl	*141*	*S1+*	*15 - 128*
Nitrobenzene-d5	*112*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-633872/1-A
Matrix: Water
Analysis Batch: 634252

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633872

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/20/23 08:04	07/24/23 08:32	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-633872/1-A
Matrix: Water
Analysis Batch: 634252

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633872

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/20/23 08:04	07/24/23 08:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*68*		*51 - 149*	*07/20/23 08:04*	*07/24/23 08:32*	*1*

Lab Sample ID: LCS 400-633872/2-A
Matrix: Water
Analysis Batch: 634252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633872

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-D bromo-3-Chloropropane			0.101	0.123		ug/L		123	60 - 140		
1,2-D bromoethane			0.101	0.0712		ug/L		71	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*54*		*51 - 149*

Lab Sample ID: LCSD 400-633872/3-A
Matrix: Water
Analysis Batch: 634252

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633872

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane			0.101	0.140		ug/L		139	60 - 140	12	30
1,2-D bromoethane			0.101	0.0807		ug/L		80	60 - 140	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*65*		*51 - 149*

Lab Sample ID: MB 400-634344/1-A
Matrix: Water
Analysis Batch: 634434

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634344

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/24/23 13:46	07/25/23 12:49	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/24/23 13:46	07/25/23 12:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*51 - 149*	*07/24/23 13:46*	*07/25/23 12:49*	*1*

Lab Sample ID: LCS 400-634344/2-A
Matrix: Water
Analysis Batch: 634434

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634344

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-D bromo-3-Chloropropane			0.101	0.135		ug/L		135	60 - 140		
1,2-D bromoethane			0.101	0.107		ug/L		106	60 - 140		

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCS 400-634344/2-A
Matrix: Water
Analysis Batch: 634434

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634344

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*51 - 149*

Lab Sample ID: LCSD 400-634344/3-A
Matrix: Water
Analysis Batch: 634434

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 634344

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane			0.101	0.138		ug/L		137	60 - 140	2	30
1,2-D bromoethane			0.101	0.0907		ug/L		90	60 - 140	13	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*80*		*51 - 149*

Shell Oil Products US Chain Of Custody Re(400-240599 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 Project ID
Melissa Remiger	25278
PO #	**GSAP Project ID**
60697537 – 3.3.2	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 7/14/2023
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 60697537 – 3.3.2
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, 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

* 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
60697537 – 3.3.2

FIELD NOTES:
4; 4°C TM

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-071423-8260-A	7/14/2023	0000	Water	2					2	X			
	TB-ROX-071423-8011-A	7/14/2023	0000	Water	2					2		X		
	P114R-ROX-071423	7/14/2023	1230	Water	6			2		8	X	X	X	X
	MW13-ROX-071423	7/14/2023	1325	Water	6			2		8	X	X	X	X

TEMPERATURE ON RECEIPT C°
Container PID Readings or Laboratory Notes:

Relinquished by (Signature)	Received by (Signature)	Date	Time
MARY MASSA	FEDEX: 6339 6592 6461	7/14/2023	1600
		7/15/23	809
		Date.	Time

Version: 12July23

CUSTODY SEALS: 2349711, 2349710

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: 7/14/2023
PO #	**GSAP Project ID**	PAGE: 2 of 2
60697537 – 3.3.2	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 60697537 – 3.3.2

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	J. Mayer, 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 :

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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
60697537 – 3.3.2

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-071423-8260-B	7/14/2023	0000	Water	2					2	X			
	TB-ROX-071423-8011-B	7/14/2023	0000	Water	2					2		X		
	P93C-ROX-071423	7/14/2023	1140	Water	6			2		8	X	X	X	X
	T12-ROX-071423	7/14/2023	1325	Water	6			2		8	X	X	X	X

Joe Mayer 7/14/23

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Joe Mayer	FEDEX: See page 1	7/14/2023	1600
Relinquished by: (Signature)	Received by: (Signature) ECTS	Date: 7/15/23	Time: 809
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version 13Oct22

CUSTODY SEALS: See page 1

7/31/2023

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc. Job Number: 400-240599-1

Login Number: 240599 **List Source: Eurofins Pensacola**
List Number: 1
Creator: Whitley, Adrian

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	4.4°C IR11
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: 400-240599-1
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	09-01-23
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-23
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 – 3rd Quarter 2023 Data Review

Laboratory SDG: 400-240600-1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 8/22/2023

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

Sample Identification	Sample Identification
TB-ROX-071423-8260-BP	TB-ROX-071423-8011-BP
MW23-ROX-071423	

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 LCS/LCSD recoveries for benzenethiol were outside evaluation criteria. Surrogate recoveries for SVOC 2-fluorophenol and PAH 2-fluorobiphenyl in sample MW23-ROX-071423 and several quality control samples were outside criteria. Several VOC MS/MSD recoveries were outside evaluation criteria in sample MW23-ROX-071423. The continuing calibration verification 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?

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 400-633899/4-A/5-A	SVOCs	Benzenethiol	11/**8**	30	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-071423	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW23-ROX-071423	SVOCs	2-Fluorophenol	**12**	13-113
LCS 400-633899/6-A	PAHs	2-Fluorobiphenyl	**134**	15-128
LCSD 400-633899/7-A	PAHs	2-Fluorobiphenyl	**141**	15-128

Qualifications due to surrogate recoveries were not required if only one of three base/neutral and/or acid SVOC surrogate recoveries were outside evaluation criteria. Laboratory control samples 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-071423 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-071423 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/30
MW23-ROX-071423 MS/MSD	VOCs	Ethyl methacrylate	**134**/123	8	64-130/30
MW23-ROX-071423 MS/MSD	VOCs	1,2,3-Trichloropropane	**136**/125	8	65-133/30
MW23-ROX-071423 MS/MSD	VOCs	Vinyl acetate	**154**/147	5	26-150/33

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
MW23-ROX-071423	VOCs	2-Chloroethyl vinyl ether	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for several analytes was outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW23-ROX-071423	SVOCs	1,4-Dioxane	**UJ**
MW23-ROX-071423	SVOCs	n-Nitrosodimethylamine	**UJ**
MW23-ROX-071423	SVOCs	Pyridine	**UJ**
MW23-ROX-071423	SVOCs	bis(2-Chloroethyl)ether	**UJ**
MW23-ROX-071423	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	**UJ**
MW23-ROX-071423	SVOCs	Benzyl alcohol	**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 7/31/2023 8:30:35 AM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-240600-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

myEOL

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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Job ID: 400-240600-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-240600-1

Comments
No additional comments.

Receipt
The samples were received on 7/15/2023 8:09 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 4.4º C.

GC/MS VOA
Method 8260D: The initial calibration verification (ICV) analyzed in batch 400-625791 was outside method criteria for the following analyte(s): Hexachlorobutadiene. 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 400-634769 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 matrix spike (MS) recoveries for analytical batch 400-634769 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-634769 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 400-634769 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-071423-8260-BP (400-240600-1) and MW23-ROX-071423 (400-240600-3). 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 400-631021 was outside method criteria for the following analyte(s): Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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: MW23-ROX-071423 (400-240600-3). These results have been reported and qualified.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-634343 recovered above the upper control limit for 4-Nitrophenol, 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 4-Chlorophenyl phenyl ether, Hexachlorobenzene, 2,4-Dinitrotoluene, 4,6-Dinitro-2-methylphenol and Hexachlorocyclopentadiene. 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 400-634343 recovered outside acceptance criteria, low biased, for N-Nitrosodimethylamine, Bis(2-chloroethyl)ether, 1,2-Diphenylhydrazine (as Azobenzene), 1,4-Dioxane, Pyridine and Benzyl alcohol. 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 laboratory control sample duplicate (LCSD) for preparation batch 400-633899 and analytical batch 400-634183 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte

Job ID: 400-240600-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

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 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: (LCS 400-633899/6-A) and (LCSD 400-633899/7-A). These results have been reported and qualified.

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

GC Semi VOA
Method 8011: The continuing calibration verification (CCV) associated with batch 400-634434 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

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

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

Sample Summary

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

Job ID: 400-240600-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-240600-1	TB-ROX-071423-8260-BP	Water	07/14/23 12:00	07/15/23 08:09
400-240600-2	TB-ROX-071423-8011-BP	Water	07/14/23 12:00	07/15/23 08:09
400-240600-3	MW23-ROX-071423	Water	07/14/23 10:05	07/15/23 08:09

Detection Summary

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

Job ID: 400-240600-1

Client Sample ID: TB-ROX-071423-8260-BP — Lab Sample ID: 400-240600-1

No Detections.

Client Sample ID: TB-ROX-071423-8011-BP — Lab Sample ID: 400-240600-2

No Detections.

Client Sample ID: MW23-ROX-071423 — Lab Sample ID: 400-240600-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.23	J	1.0	0.20	ug/L	1		8260D	Total/NA
Methyl tert-butyl ether	0.90	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 QUARTERLY GW

Job ID: 400-240600-1

Client Sample ID: TB-ROX-071423-8260-BP
Date Collected: 07/14/23 12:00
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240600-1
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			07/27/23 13:38	1
Acrolein	ND		20	3.3	ug/L			07/27/23 13:38	1
Acrylonitrile	ND		10	2.8	ug/L			07/27/23 13:38	1
Benzene	ND		1.0	0.50	ug/L			07/27/23 13:38	1
Bromobenzene	ND		1.0	0.54	ug/L			07/27/23 13:38	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/27/23 13:38	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/27/23 13:38	1
Bromoform	ND		5.0	0.25	ug/L			07/27/23 13:38	1
Bromomethane	ND		1.0	0.98	ug/L			07/27/23 13:38	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/27/23 13:38	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/27/23 13:38	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/27/23 13:38	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/27/23 13:38	1
Chloroethane	ND		1.0	0.76	ug/L			07/27/23 13:38	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/27/23 13:38	1
Chloroform	ND		1.0	0.90	ug/L			07/27/23 13:38	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/27/23 13:38	1
Chloromethane	ND		1.0	0.90	ug/L			07/27/23 13:38	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/27/23 13:38	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/27/23 13:38	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/27/23 13:38	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/27/23 13:38	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/27/23 13:38	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/27/23 13:38	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/27/23 13:38	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/27/23 13:38	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/27/23 13:38	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 13:38	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 13:38	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 13:38	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 13:38	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/27/23 13:38	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/27/23 13:38	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/27/23 13:38	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/27/23 13:38	1
2-Hexanone	ND		25	1.4	ug/L			07/27/23 13:38	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/27/23 13:38	1
Methylene bromide	ND		5.0	0.22	ug/L			07/27/23 13:38	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/27/23 13:38	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/27/23 13:38	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/27/23 13:38	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/27/23 13:38	1
Naphthalene	ND		5.0	3.0	ug/L			07/27/23 13:38	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/27/23 13:38	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/27/23 13:38	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/27/23 13:38	1
o-Xylene	ND		5.0	0.60	ug/L			07/27/23 13:38	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/27/23 13:38	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/27/23 13:38	1

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

Job ID: 400-240600-1

Client Sample ID: TB-ROX-071423-8260-BP
Date Collected: 07/14/23 12:00
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240600-1
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			07/27/23 13:38	1
Styrene	ND		1.0	1.0	ug/L			07/27/23 13:38	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/27/23 13:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/27/23 13:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/27/23 13:38	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/27/23 13:38	1
Toluene	ND		1.0	0.90	ug/L			07/27/23 13:38	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 13:38	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/27/23 13:38	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/27/23 13:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/27/23 13:38	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/27/23 13:38	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/27/23 13:38	1
Trichloroethene	ND		1.0	0.15	ug/L			07/27/23 13:38	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/27/23 13:38	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/27/23 13:38	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/27/23 13:38	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/27/23 13:38	1
Vinyl acetate	ND		25	0.93	ug/L			07/27/23 13:38	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/27/23 13:38	1
Xylenes, Total	ND		10	1.6	ug/L			07/27/23 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/27/23 13:38*	*1*
Dibromofluoromethane	*113*		*75 - 126*		*07/27/23 13:38*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/27/23 13:38*	*1*

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

Job ID: 400-240600-1

Client Sample ID: TB-ROX-071423-8011-BP
Date Collected: 07/14/23 12:00
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240600-2
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-D bromo-3-Chloropropane	ND		0.032	0.018	ug/L		07/24/23 13:46	07/25/23 15:19	1
1,2-D bromoethane	ND		0.022	0.016	ug/L		07/24/23 13:46	07/25/23 15:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*	*p*	*51 - 149*	*07/24/23 13:46*	*07/25/23 15:19*	*1*

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

Job ID: 400-240600-1

Client Sample ID: MW23-ROX-071423
Date Collected: 07/14/23 10:05
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240600-3
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			07/27/23 15:10	1
Acrolein	ND		20	3.3	ug/L			07/27/23 15:10	1
Acrylonitrile	ND		10	2.8	ug/L			07/27/23 15:10	1
Benzene	ND		1.0	0.50	ug/L			07/27/23 15:10	1
Bromobenzene	ND		1.0	0.54	ug/L			07/27/23 15:10	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/27/23 15:10	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/27/23 15:10	1
Bromoform	ND		5.0	0.25	ug/L			07/27/23 15:10	1
Bromomethane	ND		1.0	0.98	ug/L			07/27/23 15:10	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/27/23 15:10	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/27/23 15:10	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/27/23 15:10	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/27/23 15:10	1
Chloroethane	ND		1.0	0.76	ug/L			07/27/23 15:10	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			07/27/23 15:10	1
Chloroform	ND		1.0	0.90	ug/L			07/27/23 15:10	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/27/23 15:10	1
Chloromethane	ND		1.0	0.90	ug/L			07/27/23 15:10	1
cis-1,2-Dichloroethene	**0.23**	**J**	1.0	0.20	ug/L			07/27/23 15:10	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/27/23 15:10	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/27/23 15:10	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/27/23 15:10	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/27/23 15:10	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/27/23 15:10	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/27/23 15:10	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/27/23 15:10	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/27/23 15:10	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 15:10	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 15:10	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 15:10	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 15:10	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/27/23 15:10	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/27/23 15:10	1
Ethyl methacrylate	ND	F1	1.0	0.60	ug/L			07/27/23 15:10	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/27/23 15:10	1
2-Hexanone	ND		25	1.4	ug/L			07/27/23 15:10	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/27/23 15:10	1
Methylene bromide	ND		5.0	0.22	ug/L			07/27/23 15:10	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/27/23 15:10	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/27/23 15:10	1
Methyl tert-butyl ether	**0.90**	**J**	1.0	0.22	ug/L			07/27/23 15:10	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/27/23 15:10	1
Naphthalene	ND		5.0	3.0	ug/L			07/27/23 15:10	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/27/23 15:10	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/27/23 15:10	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/27/23 15:10	1
o-Xylene	ND		5.0	0.60	ug/L			07/27/23 15:10	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/27/23 15:10	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/27/23 15:10	1

Client Sample ID: MW23-ROX-071423
Date Collected: 07/14/23 10:05
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240600-3
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			07/27/23 15:10	1
Styrene	ND		1.0	1.0	ug/L			07/27/23 15:10	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/27/23 15:10	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/27/23 15:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/27/23 15:10	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/27/23 15:10	1
Toluene	ND		1.0	0.90	ug/L			07/27/23 15:10	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 15:10	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/27/23 15:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/27/23 15:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/27/23 15:10	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/27/23 15:10	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/27/23 15:10	1
Trichloroethene	ND		1.0	0.15	ug/L			07/27/23 15:10	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/27/23 15:10	1
1,2,3-Trichloropropane	ND	F1	5.0	0.84	ug/L			07/27/23 15:10	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/27/23 15:10	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/27/23 15:10	1
Vinyl acetate	ND	F1	25	0.93	ug/L			07/27/23 15:10	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/27/23 15:10	1
Xylenes, Total	ND		10	1.6	ug/L			07/27/23 15:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*72 - 130*		*07/27/23 15:10*	*1*
Dibromofluoromethane	*113*		*75 - 126*		*07/27/23 15:10*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*07/27/23 15:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.098	ug/L		07/21/23 09:00	07/25/23 21:27	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/21/23 09:00	07/25/23 21:27	1
Anthracene	ND		0.20	0.047	ug/L		07/21/23 09:00	07/25/23 21:27	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/21/23 09:00	07/25/23 21:27	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/21/23 09:00	07/25/23 21:27	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/21/23 09:00	07/25/23 21:27	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/21/23 09:00	07/25/23 21:27	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/21/23 09:00	07/25/23 21:27	1
Chrysene	ND		0.20	0.033	ug/L		07/21/23 09:00	07/25/23 21:27	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/21/23 09:00	07/25/23 21:27	1
Fluoranthene	ND		0.20	0.034	ug/L		07/21/23 09:00	07/25/23 21:27	1
Fluorene	ND		0.20	0.088	ug/L		07/21/23 09:00	07/25/23 21:27	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/21/23 09:00	07/25/23 21:27	1
Phenanthrene	ND		0.20	0.089	ug/L		07/21/23 09:00	07/25/23 21:27	1
Pyrene	ND		0.20	0.039	ug/L		07/21/23 09:00	07/25/23 21:27	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		07/21/23 09:00	07/25/23 21:27	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		07/21/23 09:00	07/25/23 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*68*		*18 - 147*	*07/21/23 09:00*	*07/25/23 21:27*	*1*
2-Fluorobiphenyl	*80*		*15 - 128*	*07/21/23 09:00*	*07/25/23 21:27*	*1*

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

Job ID: 400-240600-1

Client Sample ID: MW23-ROX-071423
Date Collected: 07/14/23 10:05
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240600-3
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	07/21/23 09:00	07/25/23 21:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.9	3.8	ug/L		07/21/23 09:00	07/24/23 21:29	1
Benzenethiol	ND	*-	9.9	1.7	ug/L		07/21/23 09:00	07/24/23 21:29	1
Benzoic acid	ND		30	7.2	ug/L		07/21/23 09:00	07/24/23 21:29	1
Benzyl alcohol	ND		9.9	2.0	ug/L		07/21/23 09:00	07/24/23 21:29	1
Bis(2-chloroethoxy)methane	ND		9.9	0.16	ug/L		07/21/23 09:00	07/24/23 21:29	1
Bis(2-chloroethyl)ether	ND		9.9	2.7	ug/L		07/21/23 09:00	07/24/23 21:29	1
bis (2-chloroisopropyl) ether	ND		9.9	0.16	ug/L		07/21/23 09:00	07/24/23 21:29	1
Bis(2-ethylhexyl) phthalate	ND		9.9	5.0	ug/L		07/21/23 09:00	07/24/23 21:29	1
4-Bromophenyl phenyl ether	ND		9.9	0.20	ug/L		07/21/23 09:00	07/24/23 21:29	1
Butyl benzyl phthalate	ND		9.9	0.19	ug/L		07/21/23 09:00	07/24/23 21:29	1
4-Chloroaniline	ND		9.9	3.4	ug/L		07/21/23 09:00	07/24/23 21:29	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		07/21/23 09:00	07/24/23 21:29	1
2-Chloronaphthalene	ND		9.9	0.14	ug/L		07/21/23 09:00	07/24/23 21:29	1
2-Chlorophenol	ND		9.9	2.2	ug/L		07/21/23 09:00	07/24/23 21:29	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		07/21/23 09:00	07/24/23 21:29	1
Dibenz[a,h]acridine	ND		9.9	0.99	ug/L		07/21/23 09:00	07/24/23 21:29	1
Dibenzofuran	ND		9.9	0.17	ug/L		07/21/23 09:00	07/24/23 21:29	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		07/21/23 09:00	07/24/23 21:29	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		07/21/23 09:00	07/24/23 21:29	1
Diethyl phthalate	ND		9.9	0.24	ug/L		07/21/23 09:00	07/24/23 21:29	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		07/21/23 09:00	07/24/23 21:29	1
Dimethyl phthalate	ND		9.9	0.17	ug/L		07/21/23 09:00	07/24/23 21:29	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		07/21/23 09:00	07/24/23 21:29	1
4,6-Dinitro-ortho-cresol	ND		9.9	1.6	ug/L		07/21/23 09:00	07/24/23 21:29	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/21/23 09:00	07/24/23 21:29	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		07/21/23 09:00	07/24/23 21:29	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		07/21/23 09:00	07/24/23 21:29	1
Di-n-octyl phthalate	ND		9.9	0.17	ug/L		07/21/23 09:00	07/24/23 21:29	1
1,4-Dioxane	ND		9.9	0.99	ug/L		07/21/23 09:00	07/24/23 21:29	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		07/21/23 09:00	07/24/23 21:29	1
Hexachlorobenzene	ND		9.9	0.17	ug/L		07/21/23 09:00	07/24/23 21:29	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/21/23 09:00	07/24/23 21:29	1
Hexachloroethane	ND		9.9	4.2	ug/L		07/21/23 09:00	07/24/23 21:29	1
Indene	ND		9.9	0.99	ug/L		07/21/23 09:00	07/24/23 21:29	1
Isophorone	ND		9.9	0.14	ug/L		07/21/23 09:00	07/24/23 21:29	1
2-Methylphenol	ND		9.9	1.8	ug/L		07/21/23 09:00	07/24/23 21:29	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/21/23 09:00	07/24/23 21:29	1
2-Nitroaniline	ND		9.9	2.2	ug/L		07/21/23 09:00	07/24/23 21:29	1
3-Nitroaniline	ND		9.9	1.8	ug/L		07/21/23 09:00	07/24/23 21:29	1
4-Nitroaniline	ND		9.9	1.5	ug/L		07/21/23 09:00	07/24/23 21:29	1
Nitrobenzene	ND		9.9	0.13	ug/L		07/21/23 09:00	07/24/23 21:29	1
2-Nitrophenol	ND		9.9	5.2	ug/L		07/21/23 09:00	07/24/23 21:29	1
4-Nitrophenol	ND		9.9	2.1	ug/L		07/21/23 09:00	07/24/23 21:29	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		07/21/23 09:00	07/24/23 21:29	1

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

Job ID: 400-240600-1

Client Sample ID: MW23-ROX-071423
Date Collected: 07/14/23 10:05
Date Received: 07/15/23 08:09

Lab Sample ID: 400-240600-3
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		07/21/23 09:00	07/24/23 21:29	1
N-Nitrosodiphenylamine	ND		9.9	0.18	ug/L		07/21/23 09:00	07/24/23 21:29	1
Pentachlorophenol	ND		20	1.4	ug/L		07/21/23 09:00	07/24/23 21:29	1
Phenol	ND		9.9	2.6	ug/L		07/21/23 09:00	07/24/23 21:29	1
Pyridine	ND		9.9	3.2	ug/L		07/21/23 09:00	07/24/23 21:29	1
Quinoline	ND		9.9	4.5	ug/L		07/21/23 09:00	07/24/23 21:29	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		07/21/23 09:00	07/24/23 21:29	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		07/21/23 09:00	07/24/23 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*46 - 124*	*07/21/23 09:00*	*07/24/23 21:29*	*1*
2-Fluorophenol	*12*	*S1-*	*13 - 113*	*07/21/23 09:00*	*07/24/23 21:29*	*1*
Nitrobenzene-d5	*61*		*36 - 126*	*07/21/23 09:00*	*07/24/23 21:29*	*1*
Phenol-d5	*35*		*17 - 127*	*07/21/23 09:00*	*07/24/23 21:29*	*1*
Terphenyl-d14	*78*		*44 - 149*	*07/21/23 09:00*	*07/24/23 21:29*	*1*
2,4,6-Tribromophenol	*92*		*26 - 150*	*07/21/23 09:00*	*07/24/23 21:29*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.031	0.017	ug/L		07/24/23 13:46	07/25/23 15:40	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/24/23 13:46	07/25/23 15:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*51 - 149*	*07/24/23 13:46*	*07/25/23 15:40*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Job ID: 400-240600-1
Project/Site: ROXANA QUARTERLY GW

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.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

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

Job ID: 400-240600-1

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)
400-240600-1	TB-ROX-071423-8260-BP	98	113	101
400-240600-3	MW23-ROX-071423	96	113	100
400-240600-3 MS	MW23-ROX-071423	101	110	99
400-240600-3 MSD	MW23-ROX-071423	102	111	100
LCS 400-634769/1002	Lab Control Sample	98	110	101
MB 400-634769/4	Method Blank	97	112	104

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)
400-240600-3	MW23-ROX-071423	79	12 S1-	61	35	78	92
LCS 400-633899/2-A	Lab Control Sample	81	40	74	67	95	105
LCS 400-633899/4-A	Lab Control Sample	78	47	64	67	102	80
LCSD 400-633899/3-A	Lab Control Sample Dup	83	21	73	61	99	111
LCSD 400-633899/5-A	Lab Control Sample Dup	82	52	67	70	98	80
MB 400-633899/1-A	Method Blank	70	14	59	44	86	65

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)
400-240600-3	MW23-ROX-071423	68	80	77
LCS 400-633899/6-A	Lab Control Sample	134	134 S1+	107
LCSD 400-633899/7-A	Lab Control Sample Dup	140	141 S1+	112
MB 400-633899/1-A	Method Blank	68	67	50

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: 400-240600-1

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)								
400-240600-2	TB-ROX-071423-8011-BP	94 p								
400-240600-3	MW23-ROX-071423	93								
LCS 400-634344/2-A	Lab Control Sample	91								
LCSD 400-634344/3-A	Lab Control Sample Dup	80								
MB 400-634344/1-A	Method Blank	78								

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-240600-1

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 QUARTERLY GW

Job ID: 400-240600-1

Client Sample ID: TB-ROX-071423-8260-BP
Lab Sample ID: 400-240600-1
Date Collected: 07/14/23 12:00
Matrix: Water
Date Received: 07/15/23 08:09

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	634769	07/27/23 13:38	CH	EET PEN

Client Sample ID: TB-ROX-071423-8011-BP
Lab Sample ID: 400-240600-2
Date Collected: 07/14/23 12:00
Matrix: Water
Date Received: 07/15/23 08:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			32.4 mL	35 mL	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 15:19	PG	EET PEN

Client Sample ID: MW23-ROX-071423
Lab Sample ID: 400-240600-3
Date Collected: 07/14/23 10:05
Matrix: Water
Date Received: 07/15/23 08:09

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	634769	07/27/23 15:10	CH	EET PEN
Total/NA	Prep	3520C			252 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634343	07/24/23 21:29	S1B	EET PEN
Total/NA	Prep	3520C			252 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634436	07/25/23 21:27	S1B	EET PEN
Total/NA	Prep	8011			34.4 mL	35 mL	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 15:40	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-633899/1-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 21:12	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 19:54	KJA	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-634344/1-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	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 12:49	PG	EET PEN

Lab Chronicle

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

Job ID: 400-240600-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-634769/4

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	634769	07/27/23 12:27	CH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-633899/2-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 22:20	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-633899/4-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 21:35	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-633899/6-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 20:15	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634344/2-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	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 13:10	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634769/1002

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	634769	07/27/23 11:23	CH	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633899/3-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 22:43	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633899/5-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 21:58	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633899/7-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	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 20:37	KJA	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-634344/3-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	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 13:31	PG	EET PEN

Client Sample ID: MW23-ROX-071423
Lab Sample ID: 400-240600-3 MS
Date Collected: 07/14/23 10:05
Matrix: Water
Date Received: 07/15/23 08:09

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	634769	07/27/23 15:56	CH	EET PEN

Client Sample ID: MW23-ROX-071423
Lab Sample ID: 400-240600-3 MSD
Date Collected: 07/14/23 10:05
Matrix: Water
Date Received: 07/15/23 08:09

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	634769	07/27/23 16:19	CH	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 634769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240600-1	TB-ROX-071423-8260-BP	Total/NA	Water	8260D	
400-240600-3	MW23-ROX-071423	Total/NA	Water	8260D	
MB 400-634769/4	Method Blank	Total/NA	Water	8260D	
LCS 400-634769/1002	Lab Control Sample	Total/NA	Water	8260D	
400-240600-3 MS	MW23-ROX-071423	Total/NA	Water	8260D	
400-240600-3 MSD	MW23-ROX-071423	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 633899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240600-3	MW23-ROX-071423	Total/NA	Water	3520C	
MB 400-633899/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-633899/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-633899/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-633899/6-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-633899/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-633899/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-633899/7-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 634089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-633899/1-A	Method Blank	Total/NA	Water	8270E SIM	633899
LCS 400-633899/6-A	Lab Control Sample	Total/NA	Water	8270E SIM	633899
LCSD 400-633899/7-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	633899

Analysis Batch: 634183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-633899/1-A	Method Blank	Total/NA	Water	8270E	633899
LCS 400-633899/2-A	Lab Control Sample	Total/NA	Water	8270E	633899
LCS 400-633899/4-A	Lab Control Sample	Total/NA	Water	8270E	633899
LCSD 400-633899/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	633899
LCSD 400-633899/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	633899

Analysis Batch: 634343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240600-3	MW23-ROX-071423	Total/NA	Water	8270E	633899

Analysis Batch: 634436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240600-3	MW23-ROX-071423	Total/NA	Water	8270E SIM	633899

GC Semi VOA

Prep Batch: 634344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240600-2	TB-ROX-071423-8011-BP	Total/NA	Water	8011	
400-240600-3	MW23-ROX-071423	Total/NA	Water	8011	
MB 400-634344/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-634344/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-634344/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

QC Association Summary

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

Job ID: 400-240600-1

GC Semi VOA

Analysis Batch: 634434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240600-2	TB-ROX-071423-8011-BP	Total/NA	Water	8011	634344
400-240600-3	MW23-ROX-071423	Total/NA	Water	8011	634344
MB 400-634344/1-A	Method Blank	Total/NA	Water	8011	634344
LCS 400-634344/2-A	Lab Control Sample	Total/NA	Water	8011	634344
LCSD 400-634344/3-A	Lab Control Sample Dup	Total/NA	Water	8011	634344

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

Lab Sample ID: MB 400-634769/4
Matrix: Water
Analysis Batch: 634769

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/27/23 12:27	1
Acrolein	ND		20	3.3	ug/L			07/27/23 12:27	1
Acrylonitrile	ND		10	2.8	ug/L			07/27/23 12:27	1
Benzene	ND		1.0	0.50	ug/L			07/27/23 12:27	1
Bromobenzene	ND		1.0	0.54	ug/L			07/27/23 12:27	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/27/23 12:27	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/27/23 12:27	1
Bromoform	ND		5.0	0.25	ug/L			07/27/23 12:27	1
Bromomethane	ND		1.0	0.98	ug/L			07/27/23 12:27	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/27/23 12:27	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/27/23 12:27	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/27/23 12:27	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/27/23 12:27	1
Chloroethane	ND		1.0	0.76	ug/L			07/27/23 12:27	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/27/23 12:27	1
Chloroform	ND		1.0	0.90	ug/L			07/27/23 12:27	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/27/23 12:27	1
Chloromethane	ND		1.0	0.90	ug/L			07/27/23 12:27	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/27/23 12:27	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/27/23 12:27	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/27/23 12:27	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/27/23 12:27	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/27/23 12:27	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/27/23 12:27	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/27/23 12:27	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/27/23 12:27	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/27/23 12:27	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 12:27	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 12:27	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 12:27	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 12:27	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/27/23 12:27	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/27/23 12:27	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/27/23 12:27	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/27/23 12:27	1
2-Hexanone	ND		25	1.4	ug/L			07/27/23 12:27	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/27/23 12:27	1
Methylene bromide	ND		5.0	0.22	ug/L			07/27/23 12:27	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/27/23 12:27	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/27/23 12:27	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/27/23 12:27	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/27/23 12:27	1
Naphthalene	ND		5.0	3.0	ug/L			07/27/23 12:27	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/27/23 12:27	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/27/23 12:27	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/27/23 12:27	1
o-Xylene	ND		5.0	0.60	ug/L			07/27/23 12:27	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/27/23 12:27	1

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

Lab Sample ID: MB 400-634769/4
Matrix: Water
Analysis Batch: 634769

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/27/23 12:27	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/27/23 12:27	1
Styrene	ND		1.0	1.0	ug/L			07/27/23 12:27	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/27/23 12:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/27/23 12:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/27/23 12:27	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/27/23 12:27	1
Toluene	ND		1.0	0.90	ug/L			07/27/23 12:27	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 12:27	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/27/23 12:27	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/27/23 12:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/27/23 12:27	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/27/23 12:27	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/27/23 12:27	1
Trichloroethene	ND		1.0	0.15	ug/L			07/27/23 12:27	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/27/23 12:27	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/27/23 12:27	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/27/23 12:27	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/27/23 12:27	1
Vinyl acetate	ND		25	0.93	ug/L			07/27/23 12:27	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/27/23 12:27	1
Xylenes, Total	ND		10	1.6	ug/L			07/27/23 12:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*07/27/23 12:27*	*1*
Dibromofluoromethane	*112*		*75 - 126*		*07/27/23 12:27*	*1*
Toluene-d8 (Surr)	*104*		*64 - 132*		*07/27/23 12:27*	*1*

Lab Sample ID: LCS 400-634769/1002
Matrix: Water
Analysis Batch: 634769

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	194		ug/L		97	43 - 160
Acrolein	500	406		ug/L		81	38 - 160
Acrylonitrile	500	472		ug/L		94	64 - 142
Benzene	50.0	47.6		ug/L		95	70 - 130
Bromobenzene	50.0	49.1		ug/L		98	70 - 132
Bromochloromethane	50.0	49.5		ug/L		99	70 - 130
Bromodichloromethane	50.0	50.9		ug/L		102	67 - 133
Bromoform	50.0	49.2		ug/L		98	57 - 140
Bromomethane	50.0	53.7		ug/L		107	10 - 160
2-Butanone (MEK)	200	181		ug/L		91	61 - 145
Carbon disulfide	50.0	44.9		ug/L		90	61 - 137
Carbon tetrachloride	50.0	52.2		ug/L		104	61 - 137
Chlorobenzene	50.0	50.5		ug/L		101	70 - 130
Chloroethane	50.0	50.8		ug/L		102	55 - 141
2-Chloroethyl vinyl ether	50.0	54.6		ug/L		109	10 - 160

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

Lab Sample ID: LCS 400-634769/1002
Matrix: Water
Analysis Batch: 634769

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	50.6		ug/L		101	69 - 130
1-Chlorohexane	50.0	52.8		ug/L		106	69 - 130
Chloromethane	50.0	43.3		ug/L		87	58 - 137
cis-1,2-Dichloroethene	50.0	47.8		ug/L		96	68 - 130
cis-1,3-Dichloropropene	50.0	45.6		ug/L		91	69 - 132
Dibromochloromethane	50.0	54.0		ug/L		108	67 - 135
1,2-Dichlorobenzene	50.0	52.0		ug/L		104	67 - 130
1,3-Dichlorobenzene	50.0	51.2		ug/L		102	70 - 130
1,4-Dichlorobenzene	50.0	51.3		ug/L		103	70 - 130
Dichlorodifluoromethane	50.0	45.6		ug/L		91	41 - 146
1,1-Dichloroethane	50.0	48.3		ug/L		97	70 - 130
1,2-Dichloroethane	50.0	55.5		ug/L		111	69 - 130
1,1-Dichloroethene	50.0	48.2		ug/L		96	63 - 134
1,2-Dichloropropane	50.0	48.7		ug/L		97	70 - 130
1,3-Dichloropropane	50.0	51.6		ug/L		103	70 - 130
2,2-Dichloropropane	50.0	41.6		ug/L		83	52 - 135
1,1-Dichloropropene	50.0	47.8		ug/L		96	70 - 130
Ethylbenzene	50.0	51.4		ug/L		103	70 - 130
Ethyl methacrylate	50.0	51.2		ug/L		102	68 - 130
Hexachlorobutadiene	50.0	52.6		ug/L		105	53 - 140
2-Hexanone	200	201		ug/L		100	65 - 137
Isopropy benzene	50.0	53.3		ug/L		107	70 - 130
Methylene bromide	50.0	53.8		ug/L		108	70 - 130
Methylene Chloride	50.0	46.7		ug/L		93	66 - 135
4-Methyl-2-pentanone (MIBK)	200	209		ug/L		105	69 - 138
Methyl tert-butyl ether	50.0	48.2		ug/L		96	66 - 130
m-Xylene & p-Xylene	50.0	51.1		ug/L		102	70 - 130
Naphthalene	50.0	49.2		ug/L		98	47 - 149
n-Butylbenzene	50.0	57.2		ug/L		114	67 - 130
N-Propylbenzene	50.0	52.8		ug/L		106	70 - 130
o-Chlorotoluene	50.0	52.3		ug/L		105	70 - 130
o-Xylene	50.0	50.8		ug/L		102	70 - 130
p-Chlorotoluene	50.0	52.8		ug/L		106	70 - 130
p-Isopropyltoluene	50.0	52.5		ug/L		105	65 - 130
sec-Butylbenzene	50.0	53.2		ug/L		106	66 - 130
Styrene	50.0	50.4		ug/L		101	70 - 130
tert-Butylbenzene	50.0	53.4		ug/L		107	64 - 139
1,1,1,2-Tetrachloroethane	50.0	52.4		ug/L		105	67 - 131
1,1,2,2-Tetrachloroethane	50.0	50.6		ug/L		101	70 - 131
Tetrachloroethene	50.0	49.3		ug/L		99	65 - 130
Toluene	50.0	47.4		ug/L		95	70 - 130
trans-1,2-Dichloroethene	50.0	47.0		ug/L		94	70 - 130
trans-1,3-Dichloropropene	50.0	51.3		ug/L		103	63 - 130
1,2,3-Trichlorobenzene	50.0	48.7		ug/L		97	60 - 138
1,2,4-Trichlorobenzene	50.0	49.8		ug/L		100	60 - 140
1,1,1-Trichloroethane	50.0	49.6		ug/L		99	68 - 130
1,1,2-Trichloroethane	50.0	52.7		ug/L		105	70 - 130
Trichloroethene	50.0	47.9		ug/L		96	70 - 130
Trichlorofluoromethane	50.0	51.1		ug/L		102	65 - 138

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

Lab Sample ID: LCS 400-634769/1002
Matrix: Water
Analysis Batch: 634769

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	53.1		ug/L		106	70 - 130
1,2,4-Trimethy benzene	50.0	51.0		ug/L		102	70 - 130
1,3,5-Trimethy benzene	50.0	50.7		ug/L		101	69 - 130
Vinyl acetate	100	126		ug/L		126	26 - 160
Vinyl chloride	50.0	45.9		ug/L		92	59 - 136
Xylenes, Total	100	102		ug/L		102	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 130*
Dibromofluoromethane	*110*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

Lab Sample ID: 400-240600-3 MS
Matrix: Water
Analysis Batch: 634769

Client Sample ID: MW23-ROX-071423
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND		200	229		ug/L		115	43 - 150
Acrolein	ND		500	508		ug/L		102	38 - 150
Acrylonitrile	ND		500	619		ug/L		124	62 - 149
Benzene	ND		50.0	55.2		ug/L		110	56 - 142
Bromobenzene	ND		50.0	52.6		ug/L		105	59 - 136
Bromochloromethane	ND		50.0	62.1		ug/L		124	64 - 140
Bromodichloromethane	ND		50.0	61.9		ug/L		124	59 - 143
Bromoform	ND		50.0	61.9		ug/L		124	50 - 140
Bromomethane	ND		50.0	58.1		ug/L		116	10 - 150
2-Butanone (MEK)	ND		200	239		ug/L		119	55 - 150
Carbon disulfide	ND		50.0	49.8		ug/L		100	48 - 150
Carbon tetrachloride	ND		50.0	57.2		ug/L		114	55 - 145
Chlorobenzene	ND		50.0	52.0		ug/L		104	64 - 130
Chloroethane	ND		50.0	38.9		ug/L		78	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	60.7		ug/L		121	60 - 141
1-Chlorohexane	ND		50.0	47.2		ug/L		94	56 - 136
Chloromethane	ND		50.0	49.0		ug/L		98	49 - 148
cis-1,2-Dichloroethene	0.23	J	50.0	57.8		ug/L		115	59 - 143
cis-1,3-Dichloropropene	ND		50.0	53.0		ug/L		106	57 - 140
Dibromochloromethane	ND		50.0	64.4		ug/L		129	56 - 143
1,2-Dichlorobenzene	ND		50.0	53.3		ug/L		107	52 - 137
1,3-Dichlorobenzene	ND		50.0	48.5		ug/L		97	54 - 135
1,4-Dichlorobenzene	ND		50.0	49.1		ug/L		98	53 - 135
Dichlorodifluoromethane	ND		50.0	49.9		ug/L		100	16 - 150
1,1-Dichloroethane	ND		50.0	57.9		ug/L		116	61 - 144
1,2-Dichloroethane	ND		50.0	70.3		ug/L		141	60 - 141
1,1-Dichloroethene	ND		50.0	55.0		ug/L		110	54 - 147
1,2-Dichloropropane	ND		50.0	59.6		ug/L		119	66 - 137
1,3-Dichloropropane	ND		50.0	63.4		ug/L		127	66 - 133
2,2-Dichloropropane	ND		50.0	46.1		ug/L		92	42 - 144

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

Lab Sample ID: 400-240600-3 MS
Matrix: Water
Analysis Batch: 634769

Client Sample ID: MW23-ROX-071423
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	52.1		ug/L		104	65 - 136
Ethylbenzene	ND		50.0	49.5		ug/L		99	58 - 131
Ethyl methacrylate	ND	F1	50.0	67.0	F1	ug/L		134	64 - 130
Hexachlorobutadiene	ND		50.0	35.7		ug/L		71	31 - 149
2-Hexanone	ND		200	273		ug/L		137	65 - 140
Isopropy benzene	ND		50.0	47.6		ug/L		95	56 - 133
Methylene bromide	ND		50.0	69.2		ug/L		138	63 - 138
Methylene Chloride	ND		50.0	57.9		ug/L		116	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	288		ug/L		144	63 - 146
Methyl tert-butyl ether	0.90	J	50.0	64.2		ug/L		127	59 - 137
m-Xylene & p-Xylene	ND		50.0	48.2		ug/L		96	57 - 130
Naphthalene	ND		50.0	58.9		ug/L		118	25 - 150
n-Butylbenzene	ND		50.0	40.4		ug/L		81	41 - 142
N-Propylbenzene	ND		50.0	45.3		ug/L		91	51 - 138
o-Chlorotoluene	ND		50.0	49.0		ug/L		98	53 - 134
o-Xylene	ND		50.0	50.8		ug/L		102	61 - 130
p-Chlorotoluene	ND		50.0	49.1		ug/L		98	54 - 133
p-Isopropyltoluene	ND		50.0	41.1		ug/L		82	48 - 139
sec-Butylbenzene	ND		50.0	42.8		ug/L		86	50 - 138
Styrene	ND		50.0	51.4		ug/L		103	58 - 131
tert-Butylbenzene	ND		50.0	46.6		ug/L		93	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	59.3		ug/L		119	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	67.7		ug/L		135	66 - 135
Tetrachloroethene	ND		50.0	42.7		ug/L		85	52 - 133
Toluene	ND		50.0	49.8		ug/L		100	65 - 130
trans-1,2-Dichloroethene	ND		50.0	53.9		ug/L		108	61 - 143
trans-1,3-Dichloropropene	ND		50.0	60.0		ug/L		120	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	51.6		ug/L		103	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	48.1		ug/L		96	39 - 148
1,1,1-Trichloroethane	ND		50.0	55.9		ug/L		112	57 - 142
1,1,2-Trichloroethane	ND		50.0	65.3		ug/L		131	66 - 131
Trichloroethene	ND		50.0	51.6		ug/L		103	64 - 136
Trichlorofluoromethane	ND		50.0	58.5		ug/L		117	54 - 150
1,2,3-Trichloropropane	ND	F1	50.0	67.8	F1	ug/L		136	65 - 133
1,2,4-Trimethy benzene	ND		50.0	46.1		ug/L		92	50 - 139
1,3,5-Trimethy benzene	ND		50.0	45.5		ug/L		91	52 - 135
Vinyl acetate	ND	F1	100	154	F1	ug/L		154	26 - 150
Vinyl chloride	ND		50.0	52.9		ug/L		106	46 - 150
Xylenes, Total	ND		100	99.0		ug/L		99	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*72 - 130*
Dibromofluoromethane	*110*		*75 - 126*
Toluene-d8 (Surr)	*99*		*64 - 132*

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

Lab Sample ID: 400-240600-3 MSD
Matrix: Water
Analysis Batch: 634769

Client Sample ID: MW23-ROX-071423
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	214		ug/L		107	43 - 150	7	30
Acrolein	ND		500	477		ug/L		95	38 - 150	6	31
Acrylonitrile	ND		500	572		ug/L		114	62 - 149	8	30
Benzene	ND		50.0	51.4		ug/L		103	56 - 142	7	30
Bromobenzene	ND		50.0	47.0		ug/L		94	59 - 136	11	30
Bromochloromethane	ND		50.0	58.3		ug/L		117	64 - 140	6	30
Bromodichloromethane	ND		50.0	57.0		ug/L		114	59 - 143	8	30
Bromoform	ND		50.0	56.8		ug/L		114	50 - 140	9	30
Bromomethane	ND		50.0	53.6		ug/L		107	10 - 150	8	50
2-Butanone (MEK)	ND		200	219		ug/L		110	55 - 150	8	30
Carbon disulfide	ND		50.0	47.7		ug/L		95	48 - 150	4	30
Carbon tetrachloride	ND		50.0	53.4		ug/L		107	55 - 145	7	30
Chlorobenzene	ND		50.0	46.7		ug/L		93	64 - 130	11	30
Chloroethane	ND		50.0	32.6		ug/L		65	50 - 150	17	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	56.7		ug/L		113	60 - 141	7	30
1-Chlorohexane	ND		50.0	41.7		ug/L		83	56 - 136	12	30
Chloromethane	ND		50.0	48.3		ug/L		97	49 - 148	1	31
cis-1,2-Dichloroethene	0.23	J	50.0	54.3		ug/L		108	59 - 143	6	30
cis-1,3-Dichloropropene	ND		50.0	50.0		ug/L		100	57 - 140	6	30
Dibromochloromethane	ND		50.0	59.5		ug/L		119	56 - 143	8	30
1,2-Dichlorobenzene	ND		50.0	46.6		ug/L		93	52 - 137	13	30
1,3-Dichlorobenzene	ND		50.0	42.6		ug/L		85	54 - 135	13	30
1,4-Dichlorobenzene	ND		50.0	43.1		ug/L		86	53 - 135	13	30
Dichlorodifluoromethane	ND		50.0	49.9		ug/L		100	16 - 150	0	31
1,1-Dichloroethane	ND		50.0	54.6		ug/L		109	61 - 144	6	30
1,2-Dichloroethane	ND		50.0	65.9		ug/L		132	60 - 141	6	30
1,1-Dichloroethene	ND		50.0	52.3		ug/L		105	54 - 147	5	30
1,2-Dichloropropane	ND		50.0	55.7		ug/L		111	66 - 137	7	30
1,3-Dichloropropane	ND		50.0	58.2		ug/L		116	66 - 133	9	30
2,2-Dichloropropane	ND		50.0	45.1		ug/L		90	42 - 144	2	31
1,1-Dichloropropene	ND		50.0	48.7		ug/L		97	65 - 136	7	30
Ethylbenzene	ND		50.0	43.8		ug/L		88	58 - 131	12	30
Ethyl methacrylate	ND	F1	50.0	61.7		ug/L		123	64 - 130	8	30
Hexachlorobutadiene	ND		50.0	31.2		ug/L		62	31 - 149	13	36
2-Hexanone	ND		200	250		ug/L		125	65 - 140	9	30
Isopropy benzene	ND		50.0	41.5		ug/L		83	56 - 133	14	30
Methylene bromide	ND		50.0	63.0		ug/L		126	63 - 138	9	30
Methylene Chloride	ND		50.0	55.4		ug/L		111	60 - 146	4	32
4-Methyl-2-pentanone (MIBK)	ND		200	266		ug/L		133	63 - 146	8	30
Methyl tert-butyl ether	0.90	J	50.0	62.2		ug/L		123	59 - 137	3	30
m-Xylene & p-Xylene	ND		50.0	42.7		ug/L		85	57 - 130	12	30
Naphthalene	ND		50.0	53.2		ug/L		106	25 - 150	10	30
n-Butylbenzene	ND		50.0	34.7		ug/L		69	41 - 142	15	31
N-Propylbenzene	ND		50.0	39.3		ug/L		79	51 - 138	14	30
o-Chlorotoluene	ND		50.0	42.9		ug/L		86	53 - 134	13	30
o-Xylene	ND		50.0	45.0		ug/L		90	61 - 130	12	30
p-Chlorotoluene	ND		50.0	42.8		ug/L		86	54 - 133	14	30

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

Lab Sample ID: 400-240600-3 MSD
Matrix: Water
Analysis Batch: 634769

Client Sample ID: MW23-ROX-071423
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	35.6		ug/L		71	48 - 139	14	30
sec-Butylbenzene	ND		50.0	37.4		ug/L		75	50 - 138	14	30
Styrene	ND		50.0	45.4		ug/L		91	58 - 131	12	30
tert-Butylbenzene	ND		50.0	40.9		ug/L		82	54 - 146	13	30
1,1,1,2-Tetrachloroethane	ND		50.0	53.6		ug/L		107	59 - 137	10	30
1,1,2,2-Tetrachloroethane	ND		50.0	62.7		ug/L		125	66 - 135	8	30
Tetrachloroethene	ND		50.0	38.5		ug/L		77	52 - 133	10	30
Toluene	ND		50.0	45.7		ug/L		91	65 - 130	9	30
trans-1,2-Dichloroethene	ND		50.0	50.9		ug/L		102	61 - 143	6	30
trans-1,3-Dichloropropene	ND		50.0	56.5		ug/L		113	53 - 133	6	30
1,2,3-Trichlorobenzene	ND		50.0	45.8		ug/L		92	43 - 145	12	30
1,2,4-Trichlorobenzene	ND		50.0	42.6		ug/L		85	39 - 148	12	30
1,1,1-Trichloroethane	ND		50.0	52.9		ug/L		106	57 - 142	5	30
1,1,2-Trichloroethane	ND		50.0	60.6		ug/L		121	66 - 131	7	30
Trichloroethene	ND		50.0	47.9		ug/L		96	64 - 136	8	30
Trichlorofluoromethane	ND		50.0	55.6		ug/L		111	54 - 150	5	30
1,2,3-Trichloropropane	ND	F1	50.0	62.4		ug/L		125	65 - 133	8	30
1,2,4-Trimethy benzene	ND		50.0	39.4		ug/L		79	50 - 139	16	30
1,3,5-Trimethy benzene	ND		50.0	39.8		ug/L		80	52 - 135	14	30
Vinyl acetate	ND	F1	100	147		ug/L		147	26 - 150	5	33
Vinyl chloride	ND		50.0	50.7		ug/L		101	46 - 150	4	30
Xylenes, Total	ND		100	87.7		ug/L		88	59 - 130	12	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*72 - 130*
Dibromofluoromethane	*111*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

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

Lab Sample ID: MB 400-633899/1-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633899

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/20/23 09:40	07/21/23 21:12	1
Benzenethiol	ND		10	1.7	ug/L		07/20/23 09:40	07/21/23 21:12	1
Benzoic acid	ND		30	7.3	ug/L		07/20/23 09:40	07/21/23 21:12	1
Benzyl alcohol	ND		10	2.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/20/23 09:40	07/21/23 21:12	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/20/23 09:40	07/21/23 21:12	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/20/23 09:40	07/21/23 21:12	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/20/23 09:40	07/21/23 21:12	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Chloroaniline	ND		10	3.4	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/20/23 09:40	07/21/23 21:12	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/20/23 09:40	07/21/23 21:12	1
2-Chlorophenol	ND		10	2.2	ug/L		07/20/23 09:40	07/21/23 21:12	1

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

Lab Sample ID: MB 400-633899/1-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633899

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Dibenzofuran	ND		10	0.17	ug/L		07/20/23 09:40	07/21/23 21:12	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Diethyl phthalate	ND		10	0.24	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/20/23 09:40	07/21/23 21:12	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/20/23 09:40	07/21/23 21:12	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/20/23 09:40	07/21/23 21:12	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/20/23 09:40	07/21/23 21:12	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/20/23 09:40	07/21/23 21:12	1
1,4-Dioxane	ND		10	1.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/20/23 09:40	07/21/23 21:12	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/20/23 09:40	07/21/23 21:12	1
Hexachloroethane	ND		10	4.2	ug/L		07/20/23 09:40	07/21/23 21:12	1
Indene	ND		10	1.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Isophorone	ND		10	0.14	ug/L		07/20/23 09:40	07/21/23 21:12	1
2-Methylphenol	ND		10	1.8	ug/L		07/20/23 09:40	07/21/23 21:12	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/20/23 09:40	07/21/23 21:12	1
2-Nitroaniline	ND		10	2.2	ug/L		07/20/23 09:40	07/21/23 21:12	1
3-Nitroaniline	ND		10	1.8	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Nitroaniline	ND		10	1.5	ug/L		07/20/23 09:40	07/21/23 21:12	1
Nitrobenzene	ND		10	0.13	ug/L		07/20/23 09:40	07/21/23 21:12	1
2-Nitrophenol	ND		10	5.2	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Nitrophenol	ND		10	2.1	ug/L		07/20/23 09:40	07/21/23 21:12	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/20/23 09:40	07/21/23 21:12	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/20/23 09:40	07/21/23 21:12	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/20/23 09:40	07/21/23 21:12	1
Pentachlorophenol	ND		20	1.4	ug/L		07/20/23 09:40	07/21/23 21:12	1
Phenol	ND		10	2.6	ug/L		07/20/23 09:40	07/21/23 21:12	1
Pyridine	ND		10	3.2	ug/L		07/20/23 09:40	07/21/23 21:12	1
Quinoline	ND		10	4.5	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/20/23 09:40	07/21/23 21:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*46 - 124*	*07/20/23 09:40*	*07/21/23 21:12*	*1*
2-Fluorophenol	*14*		*13 - 113*	*07/20/23 09:40*	*07/21/23 21:12*	*1*
Nitrobenzene-d5	*59*		*36 - 126*	*07/20/23 09:40*	*07/21/23 21:12*	*1*
Phenol-d5	*44*		*17 - 127*	*07/20/23 09:40*	*07/21/23 21:12*	*1*
Terphenyl-d14	*86*		*44 - 149*	*07/20/23 09:40*	*07/21/23 21:12*	*1*
2,4,6-Tribromophenol	*65*		*26 - 150*	*07/20/23 09:40*	*07/21/23 21:12*	*1*

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

Lab Sample ID: LCS 400-633899/2-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	86.0		ug/L		72	21 - 120
Benzoic acid	522	231		ug/L		44	10 - 144
Benzyl alcohol	120	69.5		ug/L		58	28 - 120
Bis(2-chloroethoxy)methane	120	86.1		ug/L		72	47 - 120
Bis(2-chloroethyl)ether	120	83.5		ug/L		70	44 - 120
bis (2-chloroisopropyl) ether	120	86.5		ug/L		72	33 - 121
Bis(2-ethylhexyl) phthalate	120	91.3		ug/L		76	52 - 147
4-Bromophenyl phenyl ether	120	96.2		ug/L		80	54 - 122
Butyl benzyl phthalate	120	100		ug/L		84	54 - 133
4-Chloroaniline	120	72.3		ug/L		60	26 - 120
4-Chloro-3-methylphenol	120	88.6		ug/L		74	48 - 131
2-Chloronaphthalene	120	99.9		ug/L		83	52 - 121
2-Chlorophenol	120	68.9		ug/L		57	40 - 120
4-Chlorophenyl phenyl ether	120	104		ug/L		87	56 - 125
Dibenz[a,h]acridine	110	88.2		ug/L		81	31 - 150
Dibenzofuran	120	105		ug/L		88	56 - 122
3,3'-Dichlorobenzidine	160	144		ug/L		90	36 - 132
2,4-Dichlorophenol	120	86.8		ug/L		72	49 - 120
Diethyl phthalate	120	108		ug/L		90	50 - 137
2,4-Dimethylphenol	120	69.4		ug/L		58	48 - 120
Dimethyl phthalate	120	102		ug/L		85	57 - 124
Di-n-butyl phthalate	120	100		ug/L		84	58 - 126
4,6-Dinitro-ortho-cresol	240	171		ug/L		71	23 - 148
2,4-Dinitrophenol	240	173		ug/L		72	10 - 150
2,4-Dinitrotoluene	120	103		ug/L		86	54 - 142
2,6-Dinitrotoluene	120	101		ug/L		84	55 - 130
Di-n-octyl phthalate	120	91.5		ug/L		76	57 - 138
1,4-Dioxane	120	64.0		ug/L		53	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	83.1		ug/L		69	45 - 124
Hexachlorobenzene	120	113		ug/L		94	52 - 129
Hexachlorocyclopentadiene	120	54.0		ug/L		45	10 - 134
Hexachloroethane	120	79.8		ug/L		66	20 - 120
Indene	120	91.2		ug/L		76	49 - 120
Isophorone	120	85.4		ug/L		71	48 - 120
2-Methylphenol	120	92.4		ug/L		77	46 - 124
3 & 4 Methylphenol	120	91.9		ug/L		77	45 - 120
2-Nitroaniline	120	89.4		ug/L		74	51 - 145
3-Nitroaniline	120	84.8		ug/L		71	37 - 127
4-Nitroaniline	120	112		ug/L		93	36 - 137
Nitrobenzene	120	79.5		ug/L		66	45 - 120
2-Nitrophenol	120	82.0		ug/L		68	40 - 124
4-Nitrophenol	240	152		ug/L		63	23 - 146
N-Nitrosodimethylamine	120	69.6		ug/L		58	29 - 137
N-Nitrosodi-n-propylamine	120	91.2		ug/L		76	45 - 120
N-Nitrosodiphenylamine	119	91.4		ug/L		77	54 - 120
Pentachlorophenol	240	195		ug/L		81	31 - 130
Phenol	120	72.2		ug/L		60	11 - 120
Pyridine	240	114		ug/L		47	16 - 120

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

Lab Sample ID: LCS 400-633899/2-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Quinoline			110	93.1		ug/L		85	49 - 130		
2,4,5-Trichlorophenol			120	95.9		ug/L		80	51 - 136		
2,4,6-Trichlorophenol			120	94.8		ug/L		79	50 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*81*		*46 - 124*
2-Fluorophenol	*40*		*13 - 113*
Nitrobenzene-d5	*74*		*36 - 126*
Phenol-d5	*67*		*17 - 127*
Terphenyl-d14	*95*		*44 - 149*
2,4,6-Tribromophenol	*105*		*26 - 150*

Lab Sample ID: LCS 400-633899/4-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	13.3		ug/L		11	10 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*46 - 124*
2-Fluorophenol	*47*		*13 - 113*
Nitrobenzene-d5	*64*		*36 - 126*
Phenol-d5	*67*		*17 - 127*
Terphenyl-d14	*102*		*44 - 149*
2,4,6-Tribromophenol	*80*		*26 - 150*

Lab Sample ID: LCSD 400-633899/3-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	98.9		ug/L		82	21 - 120	14	30
Benzoic acid			522	249		ug/L		48	10 - 144	7	30
Benzyl alcohol			120	75.2		ug/L		63	28 - 120	8	30
Bis(2-chloroethoxy)methane			120	92.0		ug/L		77	47 - 120	7	30
Bis(2-chloroethyl)ether			120	82.0		ug/L		68	44 - 120	2	30
bis (2-chloroisopropyl) ether			120	86.6		ug/L		72	33 - 121	0	30
Bis(2-ethylhexyl) phthalate			120	98.3		ug/L		82	52 - 147	7	30
4-Bromophenyl phenyl ether			120	106		ug/L		89	54 - 122	10	30
Butyl benzyl phthalate			120	109		ug/L		91	54 - 133	8	30
4-Chloroaniline			120	79.2		ug/L		66	26 - 120	9	30
4-Chloro-3-methylphenol			120	97.7		ug/L		81	48 - 131	10	30
2-Chloronaphthalene			120	107		ug/L		90	52 - 121	7	30
2-Chlorophenol			120	60.5		ug/L		50	40 - 120	13	30
4-Chlorophenyl phenyl ether			120	114		ug/L		95	56 - 125	9	30
Dibenz[a,h]acridine			110	102		ug/L		93	31 - 150	14	30
Dibenzofuran			120	115		ug/L		96	56 - 122	9	30

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

Lab Sample ID: LCSD 400-633899/3-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine			160	157		ug/L		98	36 - 132	9	30
2,4-Dichlorophenol			120	90.9		ug/L		76	49 - 120	5	30
Diethyl phthalate			120	118		ug/L		98	50 - 137	9	30
2,4-Dimethylphenol			120	77.1		ug/L		64	48 - 120	10	30
Dimethyl phthalate			120	113		ug/L		94	57 - 124	10	30
Di-n-butyl phthalate			120	110		ug/L		91	58 - 126	9	30
4,6-Dinitro-ortho-cresol			240	193		ug/L		81	23 - 148	13	30
2,4-Dinitrophenol			240	197		ug/L		82	10 - 150	13	30
2,4-Dinitrotoluene			120	115		ug/L		96	54 - 142	11	30
2,6-Dinitrotoluene			120	113		ug/L		94	55 - 130	11	30
Di-n-octyl phthalate			120	97.2		ug/L		81	57 - 138	6	30
1,4-Dioxane			120	64.3		ug/L		54	31 - 120	0	30
1,2-Diphenylhydrazine (as Azobenzene)			120	88.6		ug/L		74	45 - 124	6	30
Hexachlorobenzene			120	125		ug/L		104	52 - 129	10	30
Hexachlorocyclopentadiene			120	56.5		ug/L		47	10 - 134	5	30
Hexachloroethane			120	75.5		ug/L		63	20 - 120	6	30
Indene			120	93.4		ug/L		78	49 - 120	2	30
Isophorone			120	90.2		ug/L		75	48 - 120	6	30
2-Methylphenol			120	99.8		ug/L		83	46 - 124	8	30
3 & 4 Methylphenol			120	98.3		ug/L		82	45 - 120	7	30
2-Nitroaniline			120	96.3		ug/L		80	51 - 145	7	30
3-Nitroaniline			120	90.8		ug/L		76	37 - 127	7	30
4-Nitroaniline			120	121		ug/L		101	36 - 137	8	30
Nitrobenzene			120	83.2		ug/L		69	45 - 120	5	30
2-Nitrophenol			120	86.0		ug/L		72	40 - 124	5	30
4-Nitrophenol			240	155		ug/L		65	23 - 146	2	30
N-Nitrosodimethylamine			120	78.7		ug/L		66	29 - 137	12	30
N-Nitrosodi-n-propylamine			120	94.2		ug/L		79	45 - 120	3	30
N-Nitrosodiphenylamine			119	102		ug/L		85	54 - 120	11	30
Pentachlorophenol			240	213		ug/L		89	31 - 130	9	30
Phenol			120	69.4		ug/L		58	11 - 120	4	30
Pyridine			240	139		ug/L		58	16 - 120	20	30
Quinoline			110	101		ug/L		92	49 - 130	8	30
2,4,5-Trichlorophenol			120	108		ug/L		90	51 - 136	12	30
2,4,6-Trichlorophenol			120	107		ug/L		89	50 - 127	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*46 - 124*
2-Fluorophenol	*21*		*13 - 113*
Nitrobenzene-d5	*73*		*36 - 126*
Phenol-d5	*61*		*17 - 127*
Terphenyl-d14	*99*		*44 - 149*
2,4,6-Tribromophenol	*111*		*26 - 150*

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

Lab Sample ID: LCSD 400-633899/5-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	9.83	J *-	ug/L		8	10 - 120	30	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*82*		*46 - 124*
2-Fluorophenol	*52*		*13 - 113*
Nitrobenzene-d5	*67*		*36 - 126*
Phenol-d5	*70*		*17 - 127*
Terphenyl-d14	*98*		*44 - 149*
2,4,6-Tribromophenol	*80*		*26 - 150*

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

Lab Sample ID: MB 400-633899/1-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633899

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/20/23 09:40	07/21/23 19:54	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/20/23 09:40	07/21/23 19:54	1
Anthracene	ND		0.20	0.047	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/20/23 09:40	07/21/23 19:54	1
Chrysene	ND		0.20	0.033	ug/L		07/20/23 09:40	07/21/23 19:54	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/20/23 09:40	07/21/23 19:54	1
Fluoranthene	ND		0.20	0.034	ug/L		07/20/23 09:40	07/21/23 19:54	1
Fluorene	ND		0.20	0.089	ug/L		07/20/23 09:40	07/21/23 19:54	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/20/23 09:40	07/21/23 19:54	1
Phenanthrene	ND		0.20	0.090	ug/L		07/20/23 09:40	07/21/23 19:54	1
Pyrene	ND		0.20	0.039	ug/L		07/20/23 09:40	07/21/23 19:54	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/20/23 09:40	07/21/23 19:54	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/20/23 09:40	07/21/23 19:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*68*		*18 - 147*	*07/20/23 09:40*	*07/21/23 19:54*	*1*
2-Fluorobiphenyl	*67*		*15 - 128*	*07/20/23 09:40*	*07/21/23 19:54*	*1*
Nitrobenzene-d5	*50*		*10 - 144*	*07/20/23 09:40*	*07/21/23 19:54*	*1*

Lab Sample ID: LCS 400-633899/6-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acenaphthene			2.00	1.18		ug/L		59	40 - 140		
Acenaphthylene			2.00	1.24		ug/L		62	40 - 140		
Anthracene			2.00	1.24		ug/L		62	40 - 140		

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

Lab Sample ID: LCS 400-633899/6-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzo[a]anthracene			2.00	1.41		ug/L		70	40 - 140		
Benzo[a]pyrene			2.00	1.23		ug/L		61	40 - 140		
Benzo[b]fluoranthene			2.00	1.21		ug/L		60	40 - 140		
Benzo[g,h,i]perylene			2.00	1.36		ug/L		68	40 - 140		
Benzo[k]fluoranthene			2.00	1.18		ug/L		59	40 - 140		
Chrysene			2.00	1.32		ug/L		66	40 - 140		
Dibenz(a,h)anthracene			2.00	1.45		ug/L		72	40 - 140		
Fluoranthene			2.00	1.49		ug/L		74	40 - 140		
Fluorene			2.00	1.30		ug/L		65	40 - 140		
Indeno[1,2,3-cd]pyrene			2.00	1.42		ug/L		71	40 - 140		
Phenanthrene			2.00	1.21		ug/L		60	40 - 140		
Pyrene			2.00	1.02		ug/L		51	40 - 140		
1-Methylnaphthalene			2.00	1.41		ug/L		71	40 - 140		
2-Methylnaphthalene			2.00	1.42		ug/L		71	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*134*		*18 - 147*
2-Fluorobiphenyl	*134*	*S1+*	*15 - 128*
Nitrobenzene-d5	*107*		*10 - 144*

Lab Sample ID: LCSD 400-633899/7-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			2.00	1.25		ug/L		63	40 - 140	6	40
Acenaphthylene			2.00	1.30		ug/L		65	40 - 140	5	40
Anthracene			2.00	1.26		ug/L		63	40 - 140	2	40
Benzo[a]anthracene			2.00	1.46		ug/L		73	40 - 140	4	40
Benzo[a]pyrene			2.00	1.30		ug/L		65	40 - 140	6	40
Benzo[b]fluoranthene			2.00	1.26		ug/L		63	40 - 140	4	40
Benzo[g,h,i]perylene			2.00	1.39		ug/L		70	40 - 140	3	40
Benzo[k]fluoranthene			2.00	1.22		ug/L		61	40 - 140	4	40
Chrysene			2.00	1.38		ug/L		69	40 - 140	5	40
Dibenz(a,h)anthracene			2.00	1.50		ug/L		75	40 - 140	4	40
Fluoranthene			2.00	1.55		ug/L		77	40 - 140	4	40
Fluorene			2.00	1.39		ug/L		69	40 - 140	7	40
Indeno[1,2,3-cd]pyrene			2.00	1.44		ug/L		72	40 - 140	1	40
Phenanthrene			2.00	1.25		ug/L		63	40 - 140	4	40
Pyrene			2.00	1.09		ug/L		54	40 - 140	7	40
1-Methylnaphthalene			2.00	1.36		ug/L		68	40 - 140	4	40
2-Methylnaphthalene			2.00	1.37		ug/L		69	40 - 140	3	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*140*		*18 - 147*
2-Fluorobiphenyl	*141*	*S1+*	*15 - 128*
Nitrobenzene-d5	*112*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-634344/1-A
Matrix: Water
Analysis Batch: 634434

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634344

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/24/23 13:46	07/25/23 12:49	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/24/23 13:46	07/25/23 12:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*51 - 149*	*07/24/23 13:46*	*07/25/23 12:49*	*1*

Lab Sample ID: LCS 400-634344/2-A
Matrix: Water
Analysis Batch: 634434

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634344

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-D bromo-3-Chloropropane			0.101	0.135		ug/L		135	60 - 140		
1,2-D bromoethane			0.101	0.107		ug/L		106	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*51 - 149*

Lab Sample ID: LCSD 400-634344/3-A
Matrix: Water
Analysis Batch: 634434

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 634344

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane			0.101	0.138		ug/L		137	60 - 140	2	30
1,2-D bromoethane			0.101	0.0907		ug/L		90	60 - 140	13	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*80*		*51 - 149*

Shell Oil Products US Chain Of Custody R

400-240600 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 Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 7/14/2023
PO #	**GSAP Project ID**	PAGE: 1 of 1
60697537 – 3.3.2	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 60697537 – 3.3.2

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): Melissa Remiger - please see special instructions

PHONE NO: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID:

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; loredana fillmon@aecom.com

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

FIELD NOTES:

4.4°C JK 1

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-071423-8260-BP	7/14/2023	0000	Water	2					2	X			
	TB-ROX-071423-8011-BP	7/14/2023	0000	Water	2					2		X		
	MW23-ROX-071423	7/14/2023	1005	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
MARY MASSA	FEDEX: 6339 6592 6461	7/14/2023	1600
	EQ18	7/15/23	809

Version: 12July23

CUSTODY SEALS: 2349711, 2349710

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7/31/2023

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-240600-1

Login Number: 240600
List Number: 1
Creator: Whitley, Adrian

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	4.4°C IR11
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: 400-240600-1
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	09-01-23
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-23
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 – 3rd Quarter 2023 Data Review

Laboratory SDG: 400-240655-1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 8/22/2023

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

Sample Identification	Sample Identification
TB-ROX-071723-8260	TB-ROX-071723-8011
MW14-ROX-071723-EB	MW14-ROX-071723
MW5-ROX-071723	ROST3MW-ROX-071723
ROST3MW-ROX-071723-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, although not indicated in the laboratory case narrative, diethyl phthalate was detected in equipment blank MW14-ROX-071723-EB and trichloroethene was detected in a method blank. LCS/LCSD recoveries for benzenethiol were outside evaluation criteria. Several SVOC and PAH surrogate recoveries were outside criteria in several investigative and quality control samples. 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?

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
MW14-ROX-071723-EB	SVOCs	Diethyl phthalate	0.42 µg/L
MB 400-634747/29	VOCs	Trichloroethene	0.262 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.

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 400-633899/4-A/5-A	SVOCs	Benzenethiol	11/**8**	30	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
MW14-ROX-071723	SVOCs	Benzenethiol	**UJ**
MW5-ROX-071723	SVOCs	Benzenethiol	**UJ**
ROST3MW-ROX-071723	SVOCs	Benzenethiol	**UJ**
ROST3MW-ROX-071723-DUP	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW14-ROX-071723	SVOCs	2-Fluorobiphenyl	**10**	46-124
MW14-ROX-071723	SVOCs	2-Fluorophenol	**0**	13-113
MW14-ROX-071723	SVOCs	Nitrobenzene-d_5	**4**	36-126
MW14-ROX-071723	SVOCs	Phenol-d_5	**0**	17-127
MW14-ROX-071723	SVOCs	2,4,6-Tribromophenol	**14**	26-150
MW5-ROX-071723	SVOCs	2-Fluorophenol	**9**	13-113
ROST3MW-ROX-071723	SVOCs	2-Fluorophenol	**8**	13-113
MW14-ROX-071723	PAHs	2-Fluorobiphenyl	**11**	15-128
MW14-ROX-071723	PAHs	Nitrobenzene-d_5	**6**	10-144
LCS 400-633899/6-A	PAHs	2-Fluorobiphenyl	**134**	15-128
LCSD 400-633899/7-A	PAHs	2-Fluorobiphenyl	**141**	15-128

Analytical data that required qualification based on surrogate data are included in the table below. Qualifications due to surrogate recoveries were not required if only one of three base/neutral and/or acid surrogate recoveries were outside evaluation criteria. Laboratory control samples are quality control samples and do not require qualification. Benzenethiol was previously qualified in Section 5.0 of this data review due to LCS/LCSD recoveries outside evaluation criteria; no further qualification of benzenethiol was necessary.

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-071723	SVOCs	Benzoic acid	**R**

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-071723	SVOCs	Benzyl alcohol	R
MW14-ROX-071723	SVOCs	4-Chloro-3-methylphenol	R
MW14-ROX-071723	SVOCs	2-Chlorophenol	R
MW14-ROX-071723	SVOCs	2,4-Dichlorophenol	R
MW14-ROX-071723	SVOCs	2,4-Dimethylphenol	R
MW14-ROX-071723	SVOCs	4,6-Dinitro-ortho-cresol	R
MW14-ROX-071723	SVOCs	2,4-Dinitrophenol	R
MW14-ROX-071723	SVOCs	2-Methylphenol	R
MW14-ROX-071723	SVOCs	3 & 4 Methylphenol	R
MW14-ROX-071723	SVOCs	2-Nitrophenol	R
MW14-ROX-071723	SVOCs	4-Nitrophenol	R
MW14-ROX-071723	SVOCs	Pentachlorophenol	R
MW14-ROX-071723	SVOCs	Phenol	R
MW14-ROX-071723	SVOCs	2,4,5-Trichlorophenol	R
MW14-ROX-071723	SVOCs	2,4,6-Trichlorophenol	R
MW14-ROX-071723	SVOCs	Hexachlorobenzene	UJ
MW14-ROX-071723	SVOCs	4-Nitroaniline	UJ
MW14-ROX-071723	SVOCs	Nitrobenzene	UJ
MW14-ROX-071723	SVOCs	3-Nitroaniline	UJ
MW14-ROX-071723	SVOCs	Indene	UJ
MW14-ROX-071723	SVOCs	2-Chloronaphthalene	UJ
MW14-ROX-071723	SVOCs	Quinoline	UJ
MW14-ROX-071723	SVOCs	2-Nitroaniline	UJ
MW14-ROX-071723	SVOCs	Butyl benzyl phthalate	UJ
MW14-ROX-071723	SVOCs	N-Nitrosodiphenylamine	UJ
MW14-ROX-071723	SVOCs	3,3'-Dichlorobenzidine	UJ
MW14-ROX-071723	SVOCs	Di-n-butyl phthalate	UJ
MW14-ROX-071723	SVOCs	Isophorone	UJ
MW14-ROX-071723	SVOCs	Diethyl phthalate	UJ
MW14-ROX-071723	SVOCs	Hexachloroethane	UJ
MW14-ROX-071723	SVOCs	4-Chlorophenyl phenyl ether	UJ
MW14-ROX-071723	SVOCs	Hexachlorocyclopentadiene	UJ
MW14-ROX-071723	SVOCs	N-Nitrosodimethylamine	UJ
MW14-ROX-071723	SVOCs	N-Nitrosodi-n-propylamine	UJ
MW14-ROX-071723	SVOCs	2,6-Dinitrotoluene	UJ
MW14-ROX-071723	SVOCs	Aniline	UJ
MW14-ROX-071723	SVOCs	Dibenz[a,h]acridine	UJ
MW14-ROX-071723	SVOCs	Dimethyl phthalate	UJ
MW14-ROX-071723	SVOCs	Dibenzofuran	UJ
MW14-ROX-071723	SVOCs	2,4-Dinitrotoluene	UJ
MW14-ROX-071723	SVOCs	1,4-Dioxane	UJ
MW14-ROX-071723	SVOCs	Bis(2-chloroethoxy)methane	UJ
MW14-ROX-071723	SVOCs	Bis(2-ethylhexyl)phthalate	UJ
MW14-ROX-071723	SVOCs	Di-n-octyl phthalate	UJ
MW14-ROX-071723	SVOCs	Pyridine	UJ
MW14-ROX-071723	SVOCs	Bis(2-chloroethyl)ether	UJ

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-071723	SVOCs	4-Chloroaniline	**UJ**
MW14-ROX-071723	SVOCs	bis(2-Chloroisopropyl)ether	**UJ**
MW14-ROX-071723	SVOCs	4-Bromophenyl phenyl ether	**UJ**
MW14-ROX-071723	SVOCs	Azobenzene	**UJ**
MW14-ROX-071723	PAHs	All non-detects	**UJ**

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
ROST3MW-ROX-071723	ROST3MW-ROX-071723-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 for several analytes was outside evaluation criteria, biased low. Sample MW14-ROX-071723 was previously qualified in Section 6.0 of this data review due to surrogate recoveries outside evaluation criteria; no further qualification is required. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-071723	VOCs	Bromochloromethane	**UJ**
MW5-ROX-071723	VOCs	Bromochloromethane	**UJ**
MW5-ROX-071723	SVOCs	1,4-Dioxane	**UJ**
MW5-ROX-071723	SVOCs	n-Nitrosodimethylamine	**UJ**
MW5-ROX-071723	SVOCs	Pyridine	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW5-ROX-071723	SVOCs	bis(2-Chloroethyl)ether	**UJ**
MW5-ROX-071723	SVOCs	Benzyl alcohol	**UJ**
MW5-ROX-071723	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	**UJ**
ROST3MW-ROX-071723	VOCs	Bromochloromethane	**UJ**
ROST3MW-ROX-071723	SVOCs	1,4-Dioxane	**UJ**
ROST3MW-ROX-071723	SVOCs	n-Nitrosodimethylamine	**UJ**
ROST3MW-ROX-071723	SVOCs	Pyridine	**UJ**
ROST3MW-ROX-071723	SVOCs	bis(2-Chloroethyl)ether	**UJ**
ROST3MW-ROX-071723	SVOCs	Benzyl alcohol	**UJ**
ROST3MW-ROX-071723	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	**UJ**
ROST3MW-ROX-071723-DUP	VOCs	Bromochloromethane	**UJ**
ROST3MW-ROX-071723-DUP	SVOCs	1,4-Dioxane	**UJ**
ROST3MW-ROX-071723-DUP	SVOCs	n-Nitrosodimethylamine	**UJ**
ROST3MW-ROX-071723-DUP	SVOCs	Pyridine	**UJ**
ROST3MW-ROX-071723-DUP	SVOCs	bis(2-Chloroethyl)ether	**UJ**
ROST3MW-ROX-071723-DUP	SVOCs	Benzyl alcohol	**UJ**
ROST3MW-ROX-071723-DUP	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	**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 8/1/2023 6:00:53 PM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-240655-1

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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Authorized for release by
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Job ID: 400-240655-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-240655-1

Receipt
The samples were received on 7/18/2023 9:00 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 0.9°C

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-634952 recovered outside acceptance criteria, low biased, for 1,1-Dichloroethene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-634952 recovered above the upper control limit for Chloroethane. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

Method 8260D: The method blank for analytical batch 400-634747 contained Trichloroethene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-634747 recovered above the upper control limit for 2-Chloroethyl vinyl ether and Bromomethane. 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 400-634747 recovered outside acceptance criteria, low biased, for Bromochloromethane. 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: MW14-ROX-071723-EB (400-240655-3), MW14-ROX-071723 (400-240655-4), MW5-ROX-071723 (400-240655-5), ROST3MW-ROX-071723 (400-240655-6) and ROST3MW-ROX-071723-DUP (400-240655-7). 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 400-627009 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: TB-ROX-071723-8260 (400-240655-1). The requested target analyte list includes 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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

GC/MS Semi VOA
Method 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: MW5-ROX-071723 (400-240655-5) and ROST3MW-ROX-071723 (400-240655-6). These results have been reported and qualified.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-634343 recovered above the upper control limit for 4-Nitrophenol, 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 4-Chlorophenyl phenyl ether, Hexachlorobenzene, 2,4-Dinitrotoluene, 4,6-Dinitro-2-methylphenol and Hexachlorocyclopentadiene. The samples associated with this CCV were non-detects for the affected

Job ID: 400-240655-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

analytes; therefore, the data have been reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-634343 recovered outside acceptance criteria, low biased, for N-Nitrosodimethylamine, Bis(2-chloroethyl)ether, 1,2-Diphenylhydrazine (as Azobenzene), 1,4-Dioxane, Pyridine and Benzyl alcohol. 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 laboratory control sample duplicate (LCSD) for preparation batch 400-633899 and analytical batch 400-634183 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: Surrogate recovery for the following sample was outside of acceptance limits: MW14-ROX-071723 (400-240655-4). There was insufficient sample to perform a re-extraction; 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: (LCS 400-633899/6-A) and (LCSD 400-633899/7-A). These results have been reported and qualified.

Method 8270E_SIM: Surrogate recovery for the following sample was outside of acceptance limits: MW14-ROX-071723 (400-240655-4). There was insufficient sample to perform a re-extraction; 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 400-634434 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 QUARTERLY GW

Job ID: 400-240655-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-240655-1	TB-ROX-071723-8260	Water	07/17/23 12:00	07/18/23 09:00
400-240655-2	TB-ROX-071723-8011	Water	07/17/23 12:00	07/18/23 09:00
400-240655-3	MW14-ROX-071723-EB	Water	07/17/23 08:15	07/18/23 09:00
400-240655-4	MW14-ROX-071723	Water	07/17/23 09:50	07/18/23 09:00
400-240655-5	MW5-ROX-071723	Water	07/17/23 11:45	07/18/23 09:00
400-240655-6	ROST3MW-ROX-071723	Water	07/17/23 13:00	07/18/23 09:00
400-240655-7	ROST3MW-ROX-071723-DUP	Water	07/17/23 13:00	07/18/23 09:00

Detection Summary

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

Job ID: 400-240655-1

Client Sample ID: TB-ROX-071723-8260 — Lab Sample ID: 400-240655-1

No Detections.

Client Sample ID: TB-ROX-071723-8011 — Lab Sample ID: 400-240655-2

No Detections.

Client Sample ID: MW14-ROX-071723-EB — Lab Sample ID: 400-240655-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	0.42	J	10	0.24	ug/L	1		8270E	Total/NA

Client Sample ID: MW14-ROX-071723 — Lab Sample ID: 400-240655-4

No Detections.

Client Sample ID: MW5-ROX-071723 — Lab Sample ID: 400-240655-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	3.0		1.0	0.50	ug/L	1		8260D	Total/NA
Methyl tert-butyl ether	2.5		1.0	0.22	ug/L	1		8260D	Total/NA
tert-Butylbenzene	0.98	J	1.0	0.63	ug/L	1		8260D	Total/NA
1-Methylnaphthalene	0.17	J	0.21	0.082	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	0.26		0.21	0.068	ug/L	1		8270E SIM	Total/NA
Diethyl phthalate	0.27	J	10	0.25	ug/L	1		8270E	Total/NA

Client Sample ID: ROST3MW-ROX-071723 — Lab Sample ID: 400-240655-6

No Detections.

Client Sample ID: ROST3MW-ROX-071723-DUP — Lab Sample ID: 400-240655-7

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-240655-1

Client Sample ID: TB-ROX-071723-8260
Date Collected: 07/17/23 12:00
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-1
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			07/28/23 15:23	1
Acrolein	ND		20	3.3	ug/L			07/28/23 15:23	1
Acrylonitrile	ND		10	2.8	ug/L			07/28/23 15:23	1
Benzene	ND		1.0	0.50	ug/L			07/28/23 15:23	1
Bromobenzene	ND		1.0	0.54	ug/L			07/28/23 15:23	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/28/23 15:23	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/28/23 15:23	1
Bromoform	ND		5.0	0.25	ug/L			07/28/23 15:23	1
Bromomethane	ND		1.0	0.98	ug/L			07/28/23 15:23	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/28/23 15:23	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/28/23 15:23	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/28/23 15:23	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/28/23 15:23	1
Chloroethane	ND		1.0	0.76	ug/L			07/28/23 15:23	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/28/23 15:23	1
Chloroform	ND		1.0	0.90	ug/L			07/28/23 15:23	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/28/23 15:23	1
Chloromethane	ND		1.0	0.90	ug/L			07/28/23 15:23	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/28/23 15:23	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/28/23 15:23	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/28/23 15:23	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/28/23 15:23	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/28/23 15:23	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/28/23 15:23	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/28/23 15:23	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/28/23 15:23	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/28/23 15:23	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/28/23 15:23	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/28/23 15:23	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/28/23 15:23	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/28/23 15:23	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/28/23 15:23	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/28/23 15:23	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/28/23 15:23	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/28/23 15:23	1
2-Hexanone	ND		25	1.4	ug/L			07/28/23 15:23	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/28/23 15:23	1
Methylene bromide	ND		5.0	0.22	ug/L			07/28/23 15:23	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/28/23 15:23	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/28/23 15:23	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/28/23 15:23	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/28/23 15:23	1
Naphthalene	ND		5.0	3.0	ug/L			07/28/23 15:23	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/28/23 15:23	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/28/23 15:23	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/28/23 15:23	1
o-Xylene	ND		5.0	0.60	ug/L			07/28/23 15:23	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/28/23 15:23	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/28/23 15:23	1

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

Job ID: 400-240655-1

Client Sample ID: TB-ROX-071723-8260
Date Collected: 07/17/23 12:00
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-1
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			07/28/23 15:23	1
Styrene	ND		1.0	1.0	ug/L			07/28/23 15:23	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/28/23 15:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/28/23 15:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/28/23 15:23	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/28/23 15:23	1
Toluene	ND		1.0	0.90	ug/L			07/28/23 15:23	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/28/23 15:23	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/28/23 15:23	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/28/23 15:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/28/23 15:23	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/28/23 15:23	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/28/23 15:23	1
Trichloroethene	ND		1.0	0.15	ug/L			07/28/23 15:23	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/28/23 15:23	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/28/23 15:23	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/28/23 15:23	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/28/23 15:23	1
Vinyl acetate	ND		25	0.93	ug/L			07/28/23 15:23	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/28/23 15:23	1
Xylenes, Total	ND		10	1.6	ug/L			07/28/23 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*07/28/23 15:23*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*07/28/23 15:23*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/28/23 15:23*	*1*

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

Job ID: 400-240655-1

Client Sample ID: TB-ROX-071723-8011
Date Collected: 07/17/23 12:00
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-2
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-D bromo-3-Chloropropane	ND		0.031	0.017	ug/L		07/24/23 13:46	07/25/23 16:02	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/24/23 13:46	07/25/23 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*51 - 149*	*07/24/23 13:46*	*07/25/23 16:02*	*1*

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

Job ID: 400-240655-1

Client Sample ID: MW14-ROX-071723-EB
Date Collected: 07/17/23 08:15
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-3
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			07/27/23 17:44	1
Acrolein	ND		20	3.3	ug/L			07/27/23 17:44	1
Acrylonitrile	ND		10	2.8	ug/L			07/27/23 17:44	1
Benzene	ND		1.0	0.50	ug/L			07/27/23 17:44	1
Bromobenzene	ND		1.0	0.54	ug/L			07/27/23 17:44	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/27/23 17:44	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/27/23 17:44	1
Bromoform	ND		5.0	0.25	ug/L			07/27/23 17:44	1
Bromomethane	ND		1.0	0.98	ug/L			07/27/23 17:44	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/27/23 17:44	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/27/23 17:44	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/27/23 17:44	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/27/23 17:44	1
Chloroethane	ND		1.0	0.76	ug/L			07/27/23 17:44	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/27/23 17:44	1
Chloroform	ND		1.0	0.90	ug/L			07/27/23 17:44	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/27/23 17:44	1
Chloromethane	ND		1.0	0.90	ug/L			07/27/23 17:44	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/27/23 17:44	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/27/23 17:44	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/27/23 17:44	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/27/23 17:44	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/27/23 17:44	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/27/23 17:44	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/27/23 17:44	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/27/23 17:44	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/27/23 17:44	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 17:44	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 17:44	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 17:44	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 17:44	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/27/23 17:44	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/27/23 17:44	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/27/23 17:44	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/27/23 17:44	1
2-Hexanone	ND		25	1.4	ug/L			07/27/23 17:44	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/27/23 17:44	1
Methylene bromide	ND		5.0	0.22	ug/L			07/27/23 17:44	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/27/23 17:44	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/27/23 17:44	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/27/23 17:44	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/27/23 17:44	1
Naphthalene	ND		5.0	3.0	ug/L			07/27/23 17:44	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/27/23 17:44	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/27/23 17:44	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/27/23 17:44	1
o-Xylene	ND		5.0	0.60	ug/L			07/27/23 17:44	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/27/23 17:44	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/27/23 17:44	1

Client Sample ID: MW14-ROX-071723-EB
Date Collected: 07/17/23 08:15
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-3
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			07/27/23 17:44	1
Styrene	ND		1.0	1.0	ug/L			07/27/23 17:44	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/27/23 17:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/27/23 17:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/27/23 17:44	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/27/23 17:44	1
Toluene	ND		1.0	0.90	ug/L			07/27/23 17:44	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 17:44	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/27/23 17:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/27/23 17:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/27/23 17:44	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/27/23 17:44	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/27/23 17:44	1
Trichloroethene	ND		1.0	0.15	ug/L			07/27/23 17:44	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/27/23 17:44	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/27/23 17:44	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/27/23 17:44	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/27/23 17:44	1
Vinyl acetate	ND		25	0.93	ug/L			07/27/23 17:44	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/27/23 17:44	1
Xylenes, Total	ND		10	1.6	ug/L			07/27/23 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*07/27/23 17:44*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*07/27/23 17:44*	*1*
Toluene-d8 (Surr)	*108*		*64 - 132*		*07/27/23 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		0.20	0.10	ug/L		07/21/23 09:00	07/25/23 19:41	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/21/23 09:00	07/25/23 19:41	1
Anthracene	ND		0.20	0.048	ug/L		07/21/23 09:00	07/25/23 19:41	1
Benzo[a]anthracene	ND		0.20	0.035	ug/L		07/21/23 09:00	07/25/23 19:41	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		07/21/23 09:00	07/25/23 19:41	1
Benzo[b]fluoranthene	ND		0.20	0.038	ug/L		07/21/23 09:00	07/25/23 19:41	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/21/23 09:00	07/25/23 19:41	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		07/21/23 09:00	07/25/23 19:41	1
Chrysene	ND		0.20	0.034	ug/L		07/21/23 09:00	07/25/23 19:41	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		07/21/23 09:00	07/25/23 19:41	1
Fluoranthene	ND		0.20	0.035	ug/L		07/21/23 09:00	07/25/23 19:41	1
Fluorene	ND		0.20	0.091	ug/L		07/21/23 09:00	07/25/23 19:41	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.035	ug/L		07/21/23 09:00	07/25/23 19:41	1
Phenanthrene	ND		0.20	0.092	ug/L		07/21/23 09:00	07/25/23 19:41	1
Pyrene	ND		0.20	0.040	ug/L		07/21/23 09:00	07/25/23 19:41	1
1-Methylnaphthalene	ND		0.20	0.081	ug/L		07/21/23 09:00	07/25/23 19:41	1
2-Methylnaphthalene	ND		0.20	0.067	ug/L		07/21/23 09:00	07/25/23 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*91*		*18 - 147*	*07/21/23 09:00*	*07/25/23 19:41*	*1*
2-Fluorobiphenyl	*80*		*15 - 128*	*07/21/23 09:00*	*07/25/23 19:41*	*1*

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

Job ID: 400-240655-1

Client Sample ID: MW14-ROX-071723-EB

Date Collected: 07/17/23 08:15
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-3

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*	*07/21/23 09:00*	*07/25/23 19:41*	*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		07/21/23 09:00	07/24/23 19:17	1
Benzenethiol	ND	*-	10	1.7	ug/L		07/21/23 09:00	07/24/23 19:17	1
Benzoic acid	ND		31	7.4	ug/L		07/21/23 09:00	07/24/23 19:17	1
Benzyl alcohol	ND		10	2.0	ug/L		07/21/23 09:00	07/24/23 19:17	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/21/23 09:00	07/24/23 19:17	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/21/23 09:00	07/24/23 19:17	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/21/23 09:00	07/24/23 19:17	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/21/23 09:00	07/24/23 19:17	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/21/23 09:00	07/24/23 19:17	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/21/23 09:00	07/24/23 19:17	1
4-Chloroaniline	ND		10	3.5	ug/L		07/21/23 09:00	07/24/23 19:17	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/21/23 09:00	07/24/23 19:17	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/21/23 09:00	07/24/23 19:17	1
2-Chlorophenol	ND		10	2.2	ug/L		07/21/23 09:00	07/24/23 19:17	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/21/23 09:00	07/24/23 19:17	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 19:17	1
Dibenzofuran	ND		10	0.17	ug/L		07/21/23 09:00	07/24/23 19:17	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/21/23 09:00	07/24/23 19:17	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/21/23 09:00	07/24/23 19:17	1
Diethyl phthalate	**0.42**	**J**	10	0.24	ug/L		07/21/23 09:00	07/24/23 19:17	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/21/23 09:00	07/24/23 19:17	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/21/23 09:00	07/24/23 19:17	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/21/23 09:00	07/24/23 19:17	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/21/23 09:00	07/24/23 19:17	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/21/23 09:00	07/24/23 19:17	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/21/23 09:00	07/24/23 19:17	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/21/23 09:00	07/24/23 19:17	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/21/23 09:00	07/24/23 19:17	1
1,4-Dioxane	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 19:17	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 19:17	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/21/23 09:00	07/24/23 19:17	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/21/23 09:00	07/24/23 19:17	1
Hexachloroethane	ND		10	4.3	ug/L		07/21/23 09:00	07/24/23 19:17	1
Indene	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 19:17	1
Isophorone	ND		10	0.14	ug/L		07/21/23 09:00	07/24/23 19:17	1
2-Methylphenol	ND		10	1.8	ug/L		07/21/23 09:00	07/24/23 19:17	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		07/21/23 09:00	07/24/23 19:17	1
2-Nitroaniline	ND		10	2.2	ug/L		07/21/23 09:00	07/24/23 19:17	1
3-Nitroaniline	ND		10	1.8	ug/L		07/21/23 09:00	07/24/23 19:17	1
4-Nitroaniline	ND		10	1.5	ug/L		07/21/23 09:00	07/24/23 19:17	1
Nitrobenzene	ND		10	0.13	ug/L		07/21/23 09:00	07/24/23 19:17	1
2-Nitrophenol	ND		10	5.3	ug/L		07/21/23 09:00	07/24/23 19:17	1
4-Nitrophenol	ND		10	2.1	ug/L		07/21/23 09:00	07/24/23 19:17	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/21/23 09:00	07/24/23 19:17	1

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

Job ID: 400-240655-1

Client Sample ID: MW14-ROX-071723-EB

Date Collected: 07/17/23 08:15
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-3

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	3.4	ug/L		07/21/23 09:00	07/24/23 19:17	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/21/23 09:00	07/24/23 19:17	1
Pentachlorophenol	ND		20	1.4	ug/L		07/21/23 09:00	07/24/23 19:17	1
Phenol	ND		10	2.6	ug/L		07/21/23 09:00	07/24/23 19:17	1
Pyridine	ND		10	3.3	ug/L		07/21/23 09:00	07/24/23 19:17	1
Quinoline	ND		10	4.6	ug/L		07/21/23 09:00	07/24/23 19:17	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/21/23 09:00	07/24/23 19:17	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/21/23 09:00	07/24/23 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*46 - 124*	*07/21/23 09:00*	*07/24/23 19:17*	*1*
2-Fluorophenol	*13*		*13 - 113*	*07/21/23 09:00*	*07/24/23 19:17*	*1*
Nitrobenzene-d5	*61*		*36 - 126*	*07/21/23 09:00*	*07/24/23 19:17*	*1*
Phenol-d5	*41*		*17 - 127*	*07/21/23 09:00*	*07/24/23 19:17*	*1*
Terphenyl-d14	*100*		*44 - 149*	*07/21/23 09:00*	*07/24/23 19:17*	*1*
2,4,6-Tribromophenol	*100*		*26 - 150*	*07/21/23 09:00*	*07/24/23 19:17*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/24/23 13:46	07/25/23 16:24	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/24/23 13:46	07/25/23 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*07/24/23 13:46*	*07/25/23 16:24*	*1*

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

Job ID: 400-240655-1

Client Sample ID: MW14-ROX-071723
Date Collected: 07/17/23 09:50
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-4
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			07/27/23 18:09	1
Acrolein	ND		20	3.3	ug/L			07/27/23 18:09	1
Acrylonitrile	ND		10	2.8	ug/L			07/27/23 18:09	1
Benzene	ND		1.0	0.50	ug/L			07/27/23 18:09	1
Bromobenzene	ND		1.0	0.54	ug/L			07/27/23 18:09	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/27/23 18:09	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/27/23 18:09	1
Bromoform	ND		5.0	0.25	ug/L			07/27/23 18:09	1
Bromomethane	ND		1.0	0.98	ug/L			07/27/23 18:09	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/27/23 18:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/27/23 18:09	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/27/23 18:09	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/27/23 18:09	1
Chloroethane	ND		1.0	0.76	ug/L			07/27/23 18:09	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/27/23 18:09	1
Chloroform	ND		1.0	0.90	ug/L			07/27/23 18:09	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/27/23 18:09	1
Chloromethane	ND		1.0	0.90	ug/L			07/27/23 18:09	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/27/23 18:09	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/27/23 18:09	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/27/23 18:09	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/27/23 18:09	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/27/23 18:09	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/27/23 18:09	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/27/23 18:09	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/27/23 18:09	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/27/23 18:09	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 18:09	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 18:09	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 18:09	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 18:09	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/27/23 18:09	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/27/23 18:09	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/27/23 18:09	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/27/23 18:09	1
2-Hexanone	ND		25	1.4	ug/L			07/27/23 18:09	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/27/23 18:09	1
Methylene bromide	ND		5.0	0.22	ug/L			07/27/23 18:09	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/27/23 18:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/27/23 18:09	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/27/23 18:09	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/27/23 18:09	1
Naphthalene	ND		5.0	3.0	ug/L			07/27/23 18:09	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/27/23 18:09	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/27/23 18:09	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/27/23 18:09	1
o-Xylene	ND		5.0	0.60	ug/L			07/27/23 18:09	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/27/23 18:09	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/27/23 18:09	1

Client Sample ID: MW14-ROX-071723
Date Collected: 07/17/23 09:50
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-4
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			07/27/23 18:09	1
Styrene	ND		1.0	1.0	ug/L			07/27/23 18:09	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/27/23 18:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/27/23 18:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/27/23 18:09	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/27/23 18:09	1
Toluene	ND		1.0	0.90	ug/L			07/27/23 18:09	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 18:09	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/27/23 18:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/27/23 18:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/27/23 18:09	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/27/23 18:09	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/27/23 18:09	1
Trichloroethene	ND		1.0	0.15	ug/L			07/27/23 18:09	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/27/23 18:09	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/27/23 18:09	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/27/23 18:09	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/27/23 18:09	1
Vinyl acetate	ND		25	0.93	ug/L			07/27/23 18:09	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/27/23 18:09	1
Xylenes, Total	ND		10	1.6	ug/L			07/27/23 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*07/27/23 18:09*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/27/23 18:09*	*1*
Toluene-d8 (Surr)	*108*		*64 - 132*		*07/27/23 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		0.22	0.11	ug/L		07/21/23 09:00	07/25/23 20:02	1
Acenaphthylene	ND		0.22	0.048	ug/L		07/21/23 09:00	07/25/23 20:02	1
Anthracene	ND		0.22	0.051	ug/L		07/21/23 09:00	07/25/23 20:02	1
Benzo[a]anthracene	ND		0.22	0.037	ug/L		07/21/23 09:00	07/25/23 20:02	1
Benzo[a]pyrene	ND		0.22	0.070	ug/L		07/21/23 09:00	07/25/23 20:02	1
Benzo[b]fluoranthene	ND		0.22	0.040	ug/L		07/21/23 09:00	07/25/23 20:02	1
Benzo[g,h,i]perylene	ND		0.22	0.029	ug/L		07/21/23 09:00	07/25/23 20:02	1
Benzo[k]fluoranthene	ND		0.22	0.068	ug/L		07/21/23 09:00	07/25/23 20:02	1
Chrysene	ND		0.22	0.036	ug/L		07/21/23 09:00	07/25/23 20:02	1
Dibenz(a,h)anthracene	ND		0.22	0.052	ug/L		07/21/23 09:00	07/25/23 20:02	1
Fluoranthene	ND		0.22	0.037	ug/L		07/21/23 09:00	07/25/23 20:02	1
Fluorene	ND		0.22	0.097	ug/L		07/21/23 09:00	07/25/23 20:02	1
Indeno[1,2,3-cd]pyrene	ND		0.22	0.037	ug/L		07/21/23 09:00	07/25/23 20:02	1
Phenanthrene	ND		0.22	0.098	ug/L		07/21/23 09:00	07/25/23 20:02	1
Pyrene	ND		0.22	0.043	ug/L		07/21/23 09:00	07/25/23 20:02	1
1-Methylnaphthalene	ND		0.22	0.087	ug/L		07/21/23 09:00	07/25/23 20:02	1
2-Methylnaphthalene	ND		0.22	0.072	ug/L		07/21/23 09:00	07/25/23 20:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*75*		*18 - 147*	*07/21/23 09:00*	*07/25/23 20:02*	*1*
2-Fluorobiphenyl	*11*	*S1-*	*15 - 128*	*07/21/23 09:00*	*07/25/23 20:02*	*1*

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

Job ID: 400-240655-1

Client Sample ID: MW14-ROX-071723
Date Collected: 07/17/23 09:50
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*6*	*S1-*	*10 - 144*	*07/21/23 09:00*	*07/25/23 20:02*	*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		07/21/23 09:00	07/24/23 19:44	1
Benzenethiol	ND	*-	11	1.9	ug/L		07/21/23 09:00	07/24/23 19:44	1
Benzoic acid	ND		33	8.0	ug/L		07/21/23 09:00	07/24/23 19:44	1
Benzyl alcohol	ND		11	2.2	ug/L		07/21/23 09:00	07/24/23 19:44	1
Bis(2-chloroethoxy)methane	ND		11	0.17	ug/L		07/21/23 09:00	07/24/23 19:44	1
Bis(2-chloroethyl)ether	ND		11	2.9	ug/L		07/21/23 09:00	07/24/23 19:44	1
bis (2-chloroisopropyl) ether	ND		11	0.17	ug/L		07/21/23 09:00	07/24/23 19:44	1
Bis(2-ethylhexyl) phthalate	ND		11	5.4	ug/L		07/21/23 09:00	07/24/23 19:44	1
4-Bromophenyl phenyl ether	ND		11	0.22	ug/L		07/21/23 09:00	07/24/23 19:44	1
Butyl benzyl phthalate	ND		11	0.21	ug/L		07/21/23 09:00	07/24/23 19:44	1
4-Chloroaniline	ND		11	3.7	ug/L		07/21/23 09:00	07/24/23 19:44	1
4-Chloro-3-methylphenol	ND		11	4.1	ug/L		07/21/23 09:00	07/24/23 19:44	1
2-Chloronaphthalene	ND		11	0.15	ug/L		07/21/23 09:00	07/24/23 19:44	1
2-Chlorophenol	ND		11	2.4	ug/L		07/21/23 09:00	07/24/23 19:44	1
4-Chlorophenyl phenyl ether	ND		11	2.2	ug/L		07/21/23 09:00	07/24/23 19:44	1
Dibenz[a,h]acridine	ND		11	1.1	ug/L		07/21/23 09:00	07/24/23 19:44	1
Dibenzofuran	ND		11	0.19	ug/L		07/21/23 09:00	07/24/23 19:44	1
3,3'-Dichlorobenzidine	ND		11	2.8	ug/L		07/21/23 09:00	07/24/23 19:44	1
2,4-Dichlorophenol	ND		11	3.3	ug/L		07/21/23 09:00	07/24/23 19:44	1
Diethyl phthalate	ND		11	0.26	ug/L		07/21/23 09:00	07/24/23 19:44	1
2,4-Dimethylphenol	ND		11	3.8	ug/L		07/21/23 09:00	07/24/23 19:44	1
Dimethyl phthalate	ND		11	0.19	ug/L		07/21/23 09:00	07/24/23 19:44	1
Di-n-butyl phthalate	ND		11	2.9	ug/L		07/21/23 09:00	07/24/23 19:44	1
4,6-Dinitro-ortho-cresol	ND		11	1.7	ug/L		07/21/23 09:00	07/24/23 19:44	1
2,4-Dinitrophenol	ND		33	3.7	ug/L		07/21/23 09:00	07/24/23 19:44	1
2,4-Dinitrotoluene	ND		11	2.1	ug/L		07/21/23 09:00	07/24/23 19:44	1
2,6-Dinitrotoluene	ND		11	2.1	ug/L		07/21/23 09:00	07/24/23 19:44	1
Di-n-octyl phthalate	ND		11	0.19	ug/L		07/21/23 09:00	07/24/23 19:44	1
1,4-Dioxane	ND		11	1.1	ug/L		07/21/23 09:00	07/24/23 19:44	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	1.1	ug/L		07/21/23 09:00	07/24/23 19:44	1
Hexachlorobenzene	ND		11	0.19	ug/L		07/21/23 09:00	07/24/23 19:44	1
Hexachlorocyclopentadiene	ND		22	2.8	ug/L		07/21/23 09:00	07/24/23 19:44	1
Hexachloroethane	ND		11	4.6	ug/L		07/21/23 09:00	07/24/23 19:44	1
Indene	ND		11	1.1	ug/L		07/21/23 09:00	07/24/23 19:44	1
Isophorone	ND		11	0.15	ug/L		07/21/23 09:00	07/24/23 19:44	1
2-Methylphenol	ND		11	2.0	ug/L		07/21/23 09:00	07/24/23 19:44	1
3 & 4 Methylphenol	ND		22	0.43	ug/L		07/21/23 09:00	07/24/23 19:44	1
2-Nitroaniline	ND		11	2.4	ug/L		07/21/23 09:00	07/24/23 19:44	1
3-Nitroaniline	ND		11	2.0	ug/L		07/21/23 09:00	07/24/23 19:44	1
4-Nitroaniline	ND		11	1.6	ug/L		07/21/23 09:00	07/24/23 19:44	1
Nitrobenzene	ND		11	0.14	ug/L		07/21/23 09:00	07/24/23 19:44	1
2-Nitrophenol	ND		11	5.7	ug/L		07/21/23 09:00	07/24/23 19:44	1
4-Nitrophenol	ND		11	2.3	ug/L		07/21/23 09:00	07/24/23 19:44	1
N-Nitrosodimethylamine	ND		11	3.8	ug/L		07/21/23 09:00	07/24/23 19:44	1

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

Job ID: 400-240655-1

Client Sample ID: MW14-ROX-071723
Date Collected: 07/17/23 09:50
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-4
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	3.6	ug/L		07/21/23 09:00	07/24/23 19:44	1
N-Nitrosodiphenylamine	ND		11	0.20	ug/L		07/21/23 09:00	07/24/23 19:44	1
Pentachlorophenol	ND		22	1.5	ug/L		07/21/23 09:00	07/24/23 19:44	1
Phenol	ND		11	2.8	ug/L		07/21/23 09:00	07/24/23 19:44	1
Pyridine	ND		11	3.5	ug/L		07/21/23 09:00	07/24/23 19:44	1
Quinoline	ND		11	4.9	ug/L		07/21/23 09:00	07/24/23 19:44	1
2,4,5-Trichlorophenol	ND		11	4.0	ug/L		07/21/23 09:00	07/24/23 19:44	1
2,4,6-Trichlorophenol	ND		11	3.8	ug/L		07/21/23 09:00	07/24/23 19:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*10*	*S1-*	*46 - 124*	*07/21/23 09:00*	*07/24/23 19:44*	*1*
2-Fluorophenol	*0*	*S1-*	*13 - 113*	*07/21/23 09:00*	*07/24/23 19:44*	*1*
Nitrobenzene-d5	*4*	*S1-*	*36 - 126*	*07/21/23 09:00*	*07/24/23 19:44*	*1*
Phenol-d5	*0*	*S1-*	*17 - 127*	*07/21/23 09:00*	*07/24/23 19:44*	*1*
Terphenyl-d14	*87*		*44 - 149*	*07/21/23 09:00*	*07/24/23 19:44*	*1*
2,4,6-Tribromophenol	*14*	*S1-*	*26 - 150*	*07/21/23 09:00*	*07/24/23 19:44*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.031	0.018	ug/L		07/24/23 13:46	07/25/23 16:45	1
1,2-D bromoethane	ND		0.021	0.015	ug/L		07/24/23 13:46	07/25/23 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*51 - 149*	*07/24/23 13:46*	*07/25/23 16:45*	*1*

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

Job ID: 400-240655-1

Client Sample ID: MW5-ROX-071723
Date Collected: 07/17/23 11:45
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-5
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			07/27/23 18:34	1
Acrolein	ND		20	3.3	ug/L			07/27/23 18:34	1
Acrylonitrile	ND		10	2.8	ug/L			07/27/23 18:34	1
Benzene	**3.0**		1.0	0.50	ug/L			07/27/23 18:34	1
Bromobenzene	ND		1.0	0.54	ug/L			07/27/23 18:34	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/27/23 18:34	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/27/23 18:34	1
Bromoform	ND		5.0	0.25	ug/L			07/27/23 18:34	1
Bromomethane	ND		1.0	0.98	ug/L			07/27/23 18:34	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/27/23 18:34	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/27/23 18:34	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/27/23 18:34	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/27/23 18:34	1
Chloroethane	ND		1.0	0.76	ug/L			07/27/23 18:34	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/27/23 18:34	1
Chloroform	ND		1.0	0.90	ug/L			07/27/23 18:34	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/27/23 18:34	1
Chloromethane	ND		1.0	0.90	ug/L			07/27/23 18:34	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/27/23 18:34	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/27/23 18:34	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/27/23 18:34	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/27/23 18:34	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/27/23 18:34	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/27/23 18:34	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/27/23 18:34	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/27/23 18:34	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/27/23 18:34	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 18:34	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 18:34	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 18:34	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 18:34	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/27/23 18:34	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/27/23 18:34	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/27/23 18:34	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/27/23 18:34	1
2-Hexanone	ND		25	1.4	ug/L			07/27/23 18:34	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/27/23 18:34	1
Methylene bromide	ND		5.0	0.22	ug/L			07/27/23 18:34	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/27/23 18:34	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/27/23 18:34	1
Methyl tert-butyl ether	**2.5**		1.0	0.22	ug/L			07/27/23 18:34	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/27/23 18:34	1
Naphthalene	ND		5.0	3.0	ug/L			07/27/23 18:34	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/27/23 18:34	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/27/23 18:34	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/27/23 18:34	1
o-Xylene	ND		5.0	0.60	ug/L			07/27/23 18:34	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/27/23 18:34	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/27/23 18:34	1

Client Sample ID: MW5-ROX-071723
Date Collected: 07/17/23 11:45
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-5
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			07/27/23 18:34	1
Styrene	ND		1.0	1.0	ug/L			07/27/23 18:34	1
tert-Butylbenzene	**0.98**	**J**	1.0	0.63	ug/L			07/27/23 18:34	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/27/23 18:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/27/23 18:34	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/27/23 18:34	1
Toluene	ND		1.0	0.90	ug/L			07/27/23 18:34	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 18:34	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/27/23 18:34	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/27/23 18:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/27/23 18:34	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/27/23 18:34	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/27/23 18:34	1
Trichloroethene	ND		1.0	0.15	ug/L			07/27/23 18:34	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/27/23 18:34	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/27/23 18:34	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/27/23 18:34	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/27/23 18:34	1
Vinyl acetate	ND		25	0.93	ug/L			07/27/23 18:34	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/27/23 18:34	1
Xylenes, Total	ND		10	1.6	ug/L			07/27/23 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*07/27/23 18:34*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*07/27/23 18:34*	*1*
Toluene-d8 (Surr)	*108*		*64 - 132*		*07/27/23 18:34*	*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		07/21/23 09:00	07/25/23 20:23	1
Acenaphthylene	ND		0.21	0.045	ug/L		07/21/23 09:00	07/25/23 20:23	1
Anthracene	ND		0.21	0.048	ug/L		07/21/23 09:00	07/25/23 20:23	1
Benzo[a]anthracene	ND		0.21	0.035	ug/L		07/21/23 09:00	07/25/23 20:23	1
Benzo[a]pyrene	ND		0.21	0.066	ug/L		07/21/23 09:00	07/25/23 20:23	1
Benzo[b]fluoranthene	ND		0.21	0.038	ug/L		07/21/23 09:00	07/25/23 20:23	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		07/21/23 09:00	07/25/23 20:23	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		07/21/23 09:00	07/25/23 20:23	1
Chrysene	ND		0.21	0.034	ug/L		07/21/23 09:00	07/25/23 20:23	1
Dibenz(a,h)anthracene	ND		0.21	0.049	ug/L		07/21/23 09:00	07/25/23 20:23	1
Fluoranthene	ND		0.21	0.035	ug/L		07/21/23 09:00	07/25/23 20:23	1
Fluorene	ND		0.21	0.092	ug/L		07/21/23 09:00	07/25/23 20:23	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.035	ug/L		07/21/23 09:00	07/25/23 20:23	1
Phenanthrene	ND		0.21	0.093	ug/L		07/21/23 09:00	07/25/23 20:23	1
Pyrene	ND		0.21	0.040	ug/L		07/21/23 09:00	07/25/23 20:23	1
1-Methylnaphthalene	**0.17**	**J**	0.21	0.082	ug/L		07/21/23 09:00	07/25/23 20:23	1
2-Methylnaphthalene	**0.26**		0.21	0.068	ug/L		07/21/23 09:00	07/25/23 20:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*88*		*18 - 147*	*07/21/23 09:00*	*07/25/23 20:23*	*1*
2-Fluorobiphenyl	*83*		*15 - 128*	*07/21/23 09:00*	*07/25/23 20:23*	*1*

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

Job ID: 400-240655-1

Client Sample ID: MW5-ROX-071723
Date Collected: 07/17/23 11:45
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-5
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	07/21/23 09:00	07/25/23 20:23	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		07/21/23 09:00	07/24/23 20:10	1
Benzenethiol	ND	*-	10	1.8	ug/L		07/21/23 09:00	07/24/23 20:10	1
Benzoic acid	ND		31	7.5	ug/L		07/21/23 09:00	07/24/23 20:10	1
Benzyl alcohol	ND		10	2.1	ug/L		07/21/23 09:00	07/24/23 20:10	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/21/23 09:00	07/24/23 20:10	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		07/21/23 09:00	07/24/23 20:10	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/21/23 09:00	07/24/23 20:10	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/21/23 09:00	07/24/23 20:10	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/21/23 09:00	07/24/23 20:10	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		07/21/23 09:00	07/24/23 20:10	1
4-Chloroaniline	ND		10	3.5	ug/L		07/21/23 09:00	07/24/23 20:10	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/21/23 09:00	07/24/23 20:10	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/21/23 09:00	07/24/23 20:10	1
2-Chlorophenol	ND		10	2.3	ug/L		07/21/23 09:00	07/24/23 20:10	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/21/23 09:00	07/24/23 20:10	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 20:10	1
Dibenzofuran	ND		10	0.18	ug/L		07/21/23 09:00	07/24/23 20:10	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/21/23 09:00	07/24/23 20:10	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/21/23 09:00	07/24/23 20:10	1
Diethyl phthalate	**0.27**	**J**	10	0.25	ug/L		07/21/23 09:00	07/24/23 20:10	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/21/23 09:00	07/24/23 20:10	1
Dimethyl phthalate	ND		10	0.18	ug/L		07/21/23 09:00	07/24/23 20:10	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/21/23 09:00	07/24/23 20:10	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/21/23 09:00	07/24/23 20:10	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/21/23 09:00	07/24/23 20:10	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/21/23 09:00	07/24/23 20:10	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/21/23 09:00	07/24/23 20:10	1
Di-n-octyl phthalate	ND		10	0.18	ug/L		07/21/23 09:00	07/24/23 20:10	1
1,4-Dioxane	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 20:10	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 20:10	1
Hexachlorobenzene	ND		10	0.18	ug/L		07/21/23 09:00	07/24/23 20:10	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/21/23 09:00	07/24/23 20:10	1
Hexachloroethane	ND		10	4.3	ug/L		07/21/23 09:00	07/24/23 20:10	1
Indene	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 20:10	1
Isophorone	ND		10	0.14	ug/L		07/21/23 09:00	07/24/23 20:10	1
2-Methylphenol	ND		10	1.9	ug/L		07/21/23 09:00	07/24/23 20:10	1
3 & 4 Methylphenol	ND		21	0.40	ug/L		07/21/23 09:00	07/24/23 20:10	1
2-Nitroaniline	ND		10	2.3	ug/L		07/21/23 09:00	07/24/23 20:10	1
3-Nitroaniline	ND		10	1.9	ug/L		07/21/23 09:00	07/24/23 20:10	1
4-Nitroaniline	ND		10	1.5	ug/L		07/21/23 09:00	07/24/23 20:10	1
Nitrobenzene	ND		10	0.13	ug/L		07/21/23 09:00	07/24/23 20:10	1
2-Nitrophenol	ND		10	5.4	ug/L		07/21/23 09:00	07/24/23 20:10	1
4-Nitrophenol	ND		10	2.2	ug/L		07/21/23 09:00	07/24/23 20:10	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/21/23 09:00	07/24/23 20:10	1

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

Job ID: 400-240655-1

Client Sample ID: MW5-ROX-071723
Date Collected: 07/17/23 11:45
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-5
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	3.4	ug/L		07/21/23 09:00	07/24/23 20:10	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		07/21/23 09:00	07/24/23 20:10	1
Pentachlorophenol	ND		21	1.4	ug/L		07/21/23 09:00	07/24/23 20:10	1
Phenol	ND		10	2.7	ug/L		07/21/23 09:00	07/24/23 20:10	1
Pyridine	ND		10	3.3	ug/L		07/21/23 09:00	07/24/23 20:10	1
Quinoline	ND		10	4.6	ug/L		07/21/23 09:00	07/24/23 20:10	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/21/23 09:00	07/24/23 20:10	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/21/23 09:00	07/24/23 20:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*91*		*46 - 124*	*07/21/23 09:00*	*07/24/23 20:10*	*1*
2-Fluorophenol	*9*	*S1-*	*13 - 113*	*07/21/23 09:00*	*07/24/23 20:10*	*1*
Nitrobenzene-d5	*69*		*36 - 126*	*07/21/23 09:00*	*07/24/23 20:10*	*1*
Phenol-d5	*35*		*17 - 127*	*07/21/23 09:00*	*07/24/23 20:10*	*1*
Terphenyl-d14	*103*		*44 - 149*	*07/21/23 09:00*	*07/24/23 20:10*	*1*
2,4,6-Tribromophenol	*107*		*26 - 150*	*07/21/23 09:00*	*07/24/23 20:10*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/24/23 13:46	07/25/23 17:07	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/24/23 13:46	07/25/23 17:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*51 - 149*	*07/24/23 13:46*	*07/25/23 17:07*	*1*

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

Job ID: 400-240655-1

Client Sample ID: ROST3MW-ROX-071723
Date Collected: 07/17/23 13:00
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-6
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			07/27/23 18:59	1
Acrolein	ND		20	3.3	ug/L			07/27/23 18:59	1
Acrylonitrile	ND		10	2.8	ug/L			07/27/23 18:59	1
Benzene	ND		1.0	0.50	ug/L			07/27/23 18:59	1
Bromobenzene	ND		1.0	0.54	ug/L			07/27/23 18:59	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/27/23 18:59	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/27/23 18:59	1
Bromoform	ND		5.0	0.25	ug/L			07/27/23 18:59	1
Bromomethane	ND		1.0	0.98	ug/L			07/27/23 18:59	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/27/23 18:59	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/27/23 18:59	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/27/23 18:59	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/27/23 18:59	1
Chloroethane	ND		1.0	0.76	ug/L			07/27/23 18:59	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/27/23 18:59	1
Chloroform	ND		1.0	0.90	ug/L			07/27/23 18:59	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/27/23 18:59	1
Chloromethane	ND		1.0	0.90	ug/L			07/27/23 18:59	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/27/23 18:59	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/27/23 18:59	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/27/23 18:59	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/27/23 18:59	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/27/23 18:59	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/27/23 18:59	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/27/23 18:59	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/27/23 18:59	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/27/23 18:59	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 18:59	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 18:59	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 18:59	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 18:59	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/27/23 18:59	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/27/23 18:59	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/27/23 18:59	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/27/23 18:59	1
2-Hexanone	ND		25	1.4	ug/L			07/27/23 18:59	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/27/23 18:59	1
Methylene bromide	ND		5.0	0.22	ug/L			07/27/23 18:59	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/27/23 18:59	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/27/23 18:59	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/27/23 18:59	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/27/23 18:59	1
Naphthalene	ND		5.0	3.0	ug/L			07/27/23 18:59	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/27/23 18:59	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/27/23 18:59	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/27/23 18:59	1
o-Xylene	ND		5.0	0.60	ug/L			07/27/23 18:59	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/27/23 18:59	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/27/23 18:59	1

Client Sample ID: ROST3MW-ROX-071723
Date Collected: 07/17/23 13:00
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-6
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			07/27/23 18:59	1
Styrene	ND		1.0	1.0	ug/L			07/27/23 18:59	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/27/23 18:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/27/23 18:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/27/23 18:59	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/27/23 18:59	1
Toluene	ND		1.0	0.90	ug/L			07/27/23 18:59	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 18:59	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/27/23 18:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/27/23 18:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/27/23 18:59	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/27/23 18:59	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/27/23 18:59	1
Trichloroethene	ND		1.0	0.15	ug/L			07/27/23 18:59	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/27/23 18:59	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/27/23 18:59	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/27/23 18:59	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/27/23 18:59	1
Vinyl acetate	ND		25	0.93	ug/L			07/27/23 18:59	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/27/23 18:59	1
Xylenes, Total	ND		10	1.6	ug/L			07/27/23 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*07/27/23 18:59*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*07/27/23 18:59*	*1*
Toluene-d8 (Surr)	*111*		*64 - 132*		*07/27/23 18:59*	*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		07/21/23 09:00	07/25/23 20:45	1
Acenaphthylene	ND		0.21	0.045	ug/L		07/21/23 09:00	07/25/23 20:45	1
Anthracene	ND		0.21	0.049	ug/L		07/21/23 09:00	07/25/23 20:45	1
Benzo[a]anthracene	ND		0.21	0.035	ug/L		07/21/23 09:00	07/25/23 20:45	1
Benzo[a]pyrene	ND		0.21	0.066	ug/L		07/21/23 09:00	07/25/23 20:45	1
Benzo[b]fluoranthene	ND		0.21	0.038	ug/L		07/21/23 09:00	07/25/23 20:45	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		07/21/23 09:00	07/25/23 20:45	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		07/21/23 09:00	07/25/23 20:45	1
Chrysene	ND		0.21	0.034	ug/L		07/21/23 09:00	07/25/23 20:45	1
Dibenz(a,h)anthracene	ND		0.21	0.050	ug/L		07/21/23 09:00	07/25/23 20:45	1
Fluoranthene	ND		0.21	0.035	ug/L		07/21/23 09:00	07/25/23 20:45	1
Fluorene	ND		0.21	0.092	ug/L		07/21/23 09:00	07/25/23 20:45	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.035	ug/L		07/21/23 09:00	07/25/23 20:45	1
Phenanthrene	ND		0.21	0.093	ug/L		07/21/23 09:00	07/25/23 20:45	1
Pyrene	ND		0.21	0.040	ug/L		07/21/23 09:00	07/25/23 20:45	1
1-Methylnaphthalene	ND		0.21	0.083	ug/L		07/21/23 09:00	07/25/23 20:45	1
2-Methylnaphthalene	ND		0.21	0.068	ug/L		07/21/23 09:00	07/25/23 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*92*		*18 - 147*	*07/21/23 09:00*	*07/25/23 20:45*	*1*
2-Fluorobiphenyl	*83*		*15 - 128*	*07/21/23 09:00*	*07/25/23 20:45*	*1*

Client Sample ID: ROST3MW-ROX-071723
Date Collected: 07/17/23 13:00
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-6
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*	*07/21/23 09:00*	*07/25/23 20:45*	*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		07/21/23 09:00	07/24/23 20:37	1
Benzenethiol	ND	*-	10	1.8	ug/L		07/21/23 09:00	07/24/23 20:37	1
Benzoic acid	ND		31	7.5	ug/L		07/21/23 09:00	07/24/23 20:37	1
Benzyl alcohol	ND		10	2.1	ug/L		07/21/23 09:00	07/24/23 20:37	1
Bis(2-chloroethoxy)methane	ND		10	0.17	ug/L		07/21/23 09:00	07/24/23 20:37	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		07/21/23 09:00	07/24/23 20:37	1
bis (2-chloroisopropyl) ether	ND		10	0.17	ug/L		07/21/23 09:00	07/24/23 20:37	1
Bis(2-ethylhexyl) phthalate	ND		10	5.2	ug/L		07/21/23 09:00	07/24/23 20:37	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/21/23 09:00	07/24/23 20:37	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		07/21/23 09:00	07/24/23 20:37	1
4-Chloroaniline	ND		10	3.5	ug/L		07/21/23 09:00	07/24/23 20:37	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/21/23 09:00	07/24/23 20:37	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/21/23 09:00	07/24/23 20:37	1
2-Chlorophenol	ND		10	2.3	ug/L		07/21/23 09:00	07/24/23 20:37	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/21/23 09:00	07/24/23 20:37	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 20:37	1
Dibenzofuran	ND		10	0.18	ug/L		07/21/23 09:00	07/24/23 20:37	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/21/23 09:00	07/24/23 20:37	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/21/23 09:00	07/24/23 20:37	1
Diethyl phthalate	ND		10	0.25	ug/L		07/21/23 09:00	07/24/23 20:37	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/21/23 09:00	07/24/23 20:37	1
Dimethyl phthalate	ND		10	0.18	ug/L		07/21/23 09:00	07/24/23 20:37	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/21/23 09:00	07/24/23 20:37	1
4,6-Dinitro-ortho-cresol	ND		10	1.7	ug/L		07/21/23 09:00	07/24/23 20:37	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/21/23 09:00	07/24/23 20:37	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/21/23 09:00	07/24/23 20:37	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/21/23 09:00	07/24/23 20:37	1
Di-n-octyl phthalate	ND		10	0.18	ug/L		07/21/23 09:00	07/24/23 20:37	1
1,4-Dioxane	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 20:37	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 20:37	1
Hexachlorobenzene	ND		10	0.18	ug/L		07/21/23 09:00	07/24/23 20:37	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/21/23 09:00	07/24/23 20:37	1
Hexachloroethane	ND		10	4.3	ug/L		07/21/23 09:00	07/24/23 20:37	1
Indene	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 20:37	1
Isophorone	ND		10	0.14	ug/L		07/21/23 09:00	07/24/23 20:37	1
2-Methylphenol	ND		10	1.9	ug/L		07/21/23 09:00	07/24/23 20:37	1
3 & 4 Methylphenol	ND		21	0.40	ug/L		07/21/23 09:00	07/24/23 20:37	1
2-Nitroaniline	ND		10	2.3	ug/L		07/21/23 09:00	07/24/23 20:37	1
3-Nitroaniline	ND		10	1.9	ug/L		07/21/23 09:00	07/24/23 20:37	1
4-Nitroaniline	ND		10	1.5	ug/L		07/21/23 09:00	07/24/23 20:37	1
Nitrobenzene	ND		10	0.13	ug/L		07/21/23 09:00	07/24/23 20:37	1
2-Nitrophenol	ND		10	5.4	ug/L		07/21/23 09:00	07/24/23 20:37	1
4-Nitrophenol	ND		10	2.2	ug/L		07/21/23 09:00	07/24/23 20:37	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/21/23 09:00	07/24/23 20:37	1

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

Job ID: 400-240655-1

Client Sample ID: ROST3MW-ROX-071723
Date Collected: 07/17/23 13:00
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-6
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	3.4	ug/L		07/21/23 09:00	07/24/23 20:37	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		07/21/23 09:00	07/24/23 20:37	1
Pentachlorophenol	ND		21	1.4	ug/L		07/21/23 09:00	07/24/23 20:37	1
Phenol	ND		10	2.7	ug/L		07/21/23 09:00	07/24/23 20:37	1
Pyridine	ND		10	3.3	ug/L		07/21/23 09:00	07/24/23 20:37	1
Quinoline	ND		10	4.6	ug/L		07/21/23 09:00	07/24/23 20:37	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/21/23 09:00	07/24/23 20:37	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/21/23 09:00	07/24/23 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*87*		*46 - 124*	*07/21/23 09:00*	*07/24/23 20:37*	*1*
2-Fluorophenol	*8*	*S1-*	*13 - 113*	*07/21/23 09:00*	*07/24/23 20:37*	*1*
Nitrobenzene-d5	*66*		*36 - 126*	*07/21/23 09:00*	*07/24/23 20:37*	*1*
Phenol-d5	*27*		*17 - 127*	*07/21/23 09:00*	*07/24/23 20:37*	*1*
Terphenyl-d14	*104*		*44 - 149*	*07/21/23 09:00*	*07/24/23 20:37*	*1*
2,4,6-Tribromophenol	*88*		*26 - 150*	*07/21/23 09:00*	*07/24/23 20:37*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.031	0.018	ug/L		07/24/23 13:46	07/25/23 17:29	1
1,2-D bromoethane	ND		0.021	0.015	ug/L		07/24/23 13:46	07/25/23 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*51 - 149*	*07/24/23 13:46*	*07/25/23 17:29*	*1*

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

Job ID: 400-240655-1

Client Sample ID: ROST3MW-ROX-071723-DUP
Date Collected: 07/17/23 13:00
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-7
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			07/27/23 19:24	1
Acrolein	ND		20	3.3	ug/L			07/27/23 19:24	1
Acrylonitrile	ND		10	2.8	ug/L			07/27/23 19:24	1
Benzene	ND		1.0	0.50	ug/L			07/27/23 19:24	1
Bromobenzene	ND		1.0	0.54	ug/L			07/27/23 19:24	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/27/23 19:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/27/23 19:24	1
Bromoform	ND		5.0	0.25	ug/L			07/27/23 19:24	1
Bromomethane	ND		1.0	0.98	ug/L			07/27/23 19:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/27/23 19:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/27/23 19:24	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/27/23 19:24	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/27/23 19:24	1
Chloroethane	ND		1.0	0.76	ug/L			07/27/23 19:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/27/23 19:24	1
Chloroform	ND		1.0	0.90	ug/L			07/27/23 19:24	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/27/23 19:24	1
Chloromethane	ND		1.0	0.90	ug/L			07/27/23 19:24	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/27/23 19:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/27/23 19:24	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/27/23 19:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/27/23 19:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/27/23 19:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/27/23 19:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/27/23 19:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/27/23 19:24	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/27/23 19:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 19:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 19:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 19:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 19:24	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/27/23 19:24	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/27/23 19:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/27/23 19:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/27/23 19:24	1
2-Hexanone	ND		25	1.4	ug/L			07/27/23 19:24	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/27/23 19:24	1
Methylene bromide	ND		5.0	0.22	ug/L			07/27/23 19:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/27/23 19:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/27/23 19:24	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/27/23 19:24	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/27/23 19:24	1
Naphthalene	ND		5.0	3.0	ug/L			07/27/23 19:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/27/23 19:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/27/23 19:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/27/23 19:24	1
o-Xylene	ND		5.0	0.60	ug/L			07/27/23 19:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/27/23 19:24	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/27/23 19:24	1

Client Sample ID: ROST3MW-ROX-071723-DUP
Date Collected: 07/17/23 13:00
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-7
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			07/27/23 19:24	1
Styrene	ND		1.0	1.0	ug/L			07/27/23 19:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/27/23 19:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/27/23 19:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/27/23 19:24	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/27/23 19:24	1
Toluene	ND		1.0	0.90	ug/L			07/27/23 19:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 19:24	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/27/23 19:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/27/23 19:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/27/23 19:24	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/27/23 19:24	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/27/23 19:24	1
Trichloroethene	ND		1.0	0.15	ug/L			07/27/23 19:24	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/27/23 19:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/27/23 19:24	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/27/23 19:24	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/27/23 19:24	1
Vinyl acetate	ND		25	0.93	ug/L			07/27/23 19:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/27/23 19:24	1
Xylenes, Total	ND		10	1.6	ug/L			07/27/23 19:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*07/27/23 19:24*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*07/27/23 19:24*	*1*
Toluene-d8 (Surr)	*109*		*64 - 132*		*07/27/23 19:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		07/21/23 09:00	07/25/23 21:06	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/21/23 09:00	07/25/23 21:06	1
Anthracene	ND		0.20	0.047	ug/L		07/21/23 09:00	07/25/23 21:06	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/21/23 09:00	07/25/23 21:06	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		07/21/23 09:00	07/25/23 21:06	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/21/23 09:00	07/25/23 21:06	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/21/23 09:00	07/25/23 21:06	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		07/21/23 09:00	07/25/23 21:06	1
Chrysene	ND		0.20	0.033	ug/L		07/21/23 09:00	07/25/23 21:06	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/21/23 09:00	07/25/23 21:06	1
Fluoranthene	ND		0.20	0.034	ug/L		07/21/23 09:00	07/25/23 21:06	1
Fluorene	ND		0.20	0.090	ug/L		07/21/23 09:00	07/25/23 21:06	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/21/23 09:00	07/25/23 21:06	1
Phenanthrene	ND		0.20	0.091	ug/L		07/21/23 09:00	07/25/23 21:06	1
Pyrene	ND		0.20	0.039	ug/L		07/21/23 09:00	07/25/23 21:06	1
1-Methylnaphthalene	ND		0.20	0.081	ug/L		07/21/23 09:00	07/25/23 21:06	1
2-Methylnaphthalene	ND		0.20	0.067	ug/L		07/21/23 09:00	07/25/23 21:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*88*		*18 - 147*	*07/21/23 09:00*	*07/25/23 21:06*	*1*
2-Fluorobiphenyl	*82*		*15 - 128*	*07/21/23 09:00*	*07/25/23 21:06*	*1*

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

Job ID: 400-240655-1

Client Sample ID: ROST3MW-ROX-071723-DUP
Date Collected: 07/17/23 13:00
Date Received: 07/18/23 09:00

Lab Sample ID: 400-240655-7
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*	*07/21/23 09:00*	*07/25/23 21:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/21/23 09:00	07/24/23 21:03	1
Benzenethiol	ND	*-	10	1.7	ug/L		07/21/23 09:00	07/24/23 21:03	1
Benzoic acid	ND		30	7.4	ug/L		07/21/23 09:00	07/24/23 21:03	1
Benzyl alcohol	ND		10	2.0	ug/L		07/21/23 09:00	07/24/23 21:03	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/21/23 09:00	07/24/23 21:03	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/21/23 09:00	07/24/23 21:03	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/21/23 09:00	07/24/23 21:03	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/21/23 09:00	07/24/23 21:03	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/21/23 09:00	07/24/23 21:03	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/21/23 09:00	07/24/23 21:03	1
4-Chloroaniline	ND		10	3.4	ug/L		07/21/23 09:00	07/24/23 21:03	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/21/23 09:00	07/24/23 21:03	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/21/23 09:00	07/24/23 21:03	1
2-Chlorophenol	ND		10	2.2	ug/L		07/21/23 09:00	07/24/23 21:03	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/21/23 09:00	07/24/23 21:03	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 21:03	1
Dibenzofuran	ND		10	0.17	ug/L		07/21/23 09:00	07/24/23 21:03	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/21/23 09:00	07/24/23 21:03	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/21/23 09:00	07/24/23 21:03	1
Diethyl phthalate	ND		10	0.24	ug/L		07/21/23 09:00	07/24/23 21:03	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/21/23 09:00	07/24/23 21:03	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/21/23 09:00	07/24/23 21:03	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/21/23 09:00	07/24/23 21:03	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/21/23 09:00	07/24/23 21:03	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/21/23 09:00	07/24/23 21:03	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/21/23 09:00	07/24/23 21:03	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/21/23 09:00	07/24/23 21:03	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/21/23 09:00	07/24/23 21:03	1
1,4-Dioxane	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 21:03	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 21:03	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/21/23 09:00	07/24/23 21:03	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/21/23 09:00	07/24/23 21:03	1
Hexachloroethane	ND		10	4.2	ug/L		07/21/23 09:00	07/24/23 21:03	1
Indene	ND		10	1.0	ug/L		07/21/23 09:00	07/24/23 21:03	1
Isophorone	ND		10	0.14	ug/L		07/21/23 09:00	07/24/23 21:03	1
2-Methylphenol	ND		10	1.8	ug/L		07/21/23 09:00	07/24/23 21:03	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/21/23 09:00	07/24/23 21:03	1
2-Nitroaniline	ND		10	2.2	ug/L		07/21/23 09:00	07/24/23 21:03	1
3-Nitroaniline	ND		10	1.8	ug/L		07/21/23 09:00	07/24/23 21:03	1
4-Nitroaniline	ND		10	1.5	ug/L		07/21/23 09:00	07/24/23 21:03	1
Nitrobenzene	ND		10	0.13	ug/L		07/21/23 09:00	07/24/23 21:03	1
2-Nitrophenol	ND		10	5.2	ug/L		07/21/23 09:00	07/24/23 21:03	1
4-Nitrophenol	ND		10	2.1	ug/L		07/21/23 09:00	07/24/23 21:03	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/21/23 09:00	07/24/23 21:03	1

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

Job ID: 400-240655-1

Client Sample ID: ROST3MW-ROX-071723-DUP

Lab Sample ID: 400-240655-7

Date Collected: 07/17/23 13:00

Matrix: Water

Date Received: 07/18/23 09:00

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		07/21/23 09:00	07/24/23 21:03	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/21/23 09:00	07/24/23 21:03	1
Pentachlorophenol	ND		20	1.4	ug/L		07/21/23 09:00	07/24/23 21:03	1
Phenol	ND		10	2.6	ug/L		07/21/23 09:00	07/24/23 21:03	1
Pyridine	ND		10	3.2	ug/L		07/21/23 09:00	07/24/23 21:03	1
Quinoline	ND		10	4.5	ug/L		07/21/23 09:00	07/24/23 21:03	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/21/23 09:00	07/24/23 21:03	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/21/23 09:00	07/24/23 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*46 - 124*	*07/21/23 09:00*	*07/24/23 21:03*	*1*
2-Fluorophenol	*23*		*13 - 113*	*07/21/23 09:00*	*07/24/23 21:03*	*1*
Nitrobenzene-d5	*60*		*36 - 126*	*07/21/23 09:00*	*07/24/23 21:03*	*1*
Phenol-d5	*41*		*17 - 127*	*07/21/23 09:00*	*07/24/23 21:03*	*1*
Terphenyl-d14	*91*		*44 - 149*	*07/21/23 09:00*	*07/24/23 21:03*	*1*
2,4,6-Tribromophenol	*92*		*26 - 150*	*07/21/23 09:00*	*07/24/23 21:03*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/24/23 13:46	07/25/23 17:51	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/24/23 13:46	07/25/23 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*07/24/23 13:46*	*07/25/23 17:51*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Job ID: 400-240655-1
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
*-	LCS and/or LCSD is outside acceptance limits, low biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
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: 400-240655-1

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)
400-240655-1	TB-ROX-071723-8260	101	102	101
400-240655-3	MW14-ROX-071723-EB	104	105	108
400-240655-4	MW14-ROX-071723	105	103	108
400-240655-5	MW5-ROX-071723	106	106	108
400-240655-6	ROST3MW-ROX-071723	104	102	111
400-240655-7	ROST3MW-ROX-071723-DUP	103	106	109
LCS 400-634747/1002	Lab Control Sample	101	101	102
LCS 400-634952/1002	Lab Control Sample	99	101	101
MB 400-634747/29	Method Blank	105	101	109
MB 400-634952/4	Method Blank	101	105	100

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)
400-240655-3	MW14-ROX-071723-EB	80	13	61	41	100	100
400-240655-4	MW14-ROX-071723	10 S1-	0 S1-	4 S1-	0 S1-	87	14 S1-
400-240655-5	MW5-ROX-071723	91	9 S1-	69	35	103	107
400-240655-6	ROST3MW-ROX-071723	87	8 S1-	66	27	104	88
400-240655-7	ROST3MW-ROX-071723-DUP	77	23	60	41	91	92
LCS 400-633899/2-A	Lab Control Sample	81	40	74	67	95	105
LCS 400-633899/4-A	Lab Control Sample	78	47	64	67	102	80
LCSD 400-633899/3-A	Lab Control Sample Dup	83	21	73	61	99	111
LCSD 400-633899/5-A	Lab Control Sample Dup	82	52	67	70	98	80
MB 400-633899/1-A	Method Blank	70	14	59	44	86	65

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)
400-240655-3	MW14-ROX-071723-EB	91	80	78
400-240655-4	MW14-ROX-071723	75	11 S1-	6 S1-
400-240655-5	MW5-ROX-071723	88	83	82
400-240655-6	ROST3MW-ROX-071723	92	83	81

Surrogate Summary

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

Job ID: 400-240655-1

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)
400-240655-7	ROST3MW-ROX-071723-DUP	88	82	78
LCS 400-633899/6-A	Lab Control Sample	134	134 S1+	107
LCSD 400-633899/7-A	Lab Control Sample Dup	140	141 S1+	112
MB 400-633899/1-A	Method Blank	68	67	50

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)
400-240655-2	TB-ROX-071723-8011	89
400-240655-3	MW14-ROX-071723-EB	94
400-240655-4	MW14-ROX-071723	87
400-240655-5	MW5-ROX-071723	78
400-240655-6	ROST3MW-ROX-071723	86
400-240655-7	ROST3MW-ROX-071723-DUP	94
LCS 400-634344/2-A	Lab Control Sample	91
LCSD 400-634344/3-A	Lab Control Sample Dup	80
MB 400-634344/1-A	Method Blank	78

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-240655-1

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 QUARTERLY GW

Job ID: 400-240655-1

Client Sample ID: TB-ROX-071723-8260
Lab Sample ID: 400-240655-1
Date Collected: 07/17/23 12:00
Matrix: Water
Date Received: 07/18/23 09:00

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	634952	07/28/23 15:23	BPO	EET PEN

Client Sample ID: TB-ROX-071723-8011
Lab Sample ID: 400-240655-2
Date Collected: 07/17/23 12:00
Matrix: Water
Date Received: 07/18/23 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.2 mL	35 mL	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 16:02	PG	EET PEN

Client Sample ID: MW14-ROX-071723-EB
Lab Sample ID: 400-240655-3
Date Collected: 07/17/23 08:15
Matrix: Water
Date Received: 07/18/23 09:00

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	634747	07/27/23 17:44	BPO	EET PEN
Total/NA	Prep	3520C			245.8 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634343	07/24/23 19:17	S1B	EET PEN
Total/NA	Prep	3520C			245.8 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634436	07/25/23 19:41	S1B	EET PEN
Total/NA	Prep	8011			35.5 mL	35 mL	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 16:24	PG	EET PEN

Client Sample ID: MW14-ROX-071723
Lab Sample ID: 400-240655-4
Date Collected: 07/17/23 09:50
Matrix: Water
Date Received: 07/18/23 09:00

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	634747	07/27/23 18:09	BPO	EET PEN
Total/NA	Prep	3520C			229.4 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634343	07/24/23 19:44	S1B	EET PEN
Total/NA	Prep	3520C			229.4 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634436	07/25/23 20:02	S1B	EET PEN
Total/NA	Prep	8011			33.9 mL	35 mL	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 16:45	PG	EET PEN

Client Sample ID: MW5-ROX-071723
Lab Sample ID: 400-240655-5
Date Collected: 07/17/23 11:45
Matrix: Water
Date Received: 07/18/23 09:00

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	634747	07/27/23 18:34	BPO	EET PEN
Total/NA	Prep	3520C			242.8 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634343	07/24/23 20:10	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-240655-1

Client Sample ID: MW5-ROX-071723

Lab Sample ID: 400-240655-5

Date Collected: 07/17/23 11:45

Matrix: Water

Date Received: 07/18/23 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			242.8 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634436	07/25/23 20:23	S1B	EET PEN
Total/NA	Prep	8011			35.2 mL	35 mL	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 17:07	PG	EET PEN

Client Sample ID: ROST3MW-ROX-071723

Lab Sample ID: 400-240655-6

Date Collected: 07/17/23 13:00

Matrix: Water

Date Received: 07/18/23 09:00

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	634747	07/27/23 18:59	BPO	EET PEN
Total/NA	Prep	3520C			242.2 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634343	07/24/23 20:37	S1B	EET PEN
Total/NA	Prep	3520C			242.2 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634436	07/25/23 20:45	S1B	EET PEN
Total/NA	Prep	8011			33.9 mL	35 mL	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 17:29	PG	EET PEN

Client Sample ID: ROST3MW-ROX-071723-DUP

Lab Sample ID: 400-240655-7

Date Collected: 07/17/23 13:00

Matrix: Water

Date Received: 07/18/23 09:00

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	634747	07/27/23 19:24	BPO	EET PEN
Total/NA	Prep	3520C			247.8 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634343	07/24/23 21:03	S1B	EET PEN
Total/NA	Prep	3520C			247.8 mL	1 mL	633899	07/21/23 09:00	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634436	07/25/23 21:06	S1B	EET PEN
Total/NA	Prep	8011			34.6 mL	35 mL	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 17:51	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-633899/1-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 21:12	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 19:54	KJA	EET PEN

Lab Chronicle

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

Job ID: 400-240655-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-634344/1-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	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 12:49	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-634747/29
Date Collected: N/A
Matrix: Water
Date Received: 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	634747	07/27/23 11:26	BPO	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-634952/4
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	634952	07/28/23 10:51	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-633899/2-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 22:20	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-633899/4-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 21:35	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-633899/6-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 20:15	KJA	EET PEN

Lab Chronicle

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

Job ID: 400-240655-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634344/2-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	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 13:10	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634747/1002
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	634747	07/27/23 10:12	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634952/1002
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	634952	07/28/23 09:26	BPO	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633899/3-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 22:43	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633899/5-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	633899	07/20/23 09:40	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634183	07/21/23 21:58	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-633899/7-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	633899	07/20/23 09:41	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634089	07/21/23 20:37	KJA	EET PEN

Client Sample ID: Lab Control Sample Dup

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-634344/3-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	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 13:31	PG	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 634747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240655-3	MW14-ROX-071723-EB	Total/NA	Water	8260D	
400-240655-4	MW14-ROX-071723	Total/NA	Water	8260D	
400-240655-5	MW5-ROX-071723	Total/NA	Water	8260D	
400-240655-6	ROST3MW-ROX-071723	Total/NA	Water	8260D	
400-240655-7	ROST3MW-ROX-071723-DUP	Total/NA	Water	8260D	
MB 400-634747/29	Method Blank	Total/NA	Water	8260D	
LCS 400-634747/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 634952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240655-1	TB-ROX-071723-8260	Total/NA	Water	8260D	
MB 400-634952/4	Method Blank	Total/NA	Water	8260D	
LCS 400-634952/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 633899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240655-3	MW14-ROX-071723-EB	Total/NA	Water	3520C	
400-240655-4	MW14-ROX-071723	Total/NA	Water	3520C	
400-240655-5	MW5-ROX-071723	Total/NA	Water	3520C	
400-240655-6	ROST3MW-ROX-071723	Total/NA	Water	3520C	
400-240655-7	ROST3MW-ROX-071723-DUP	Total/NA	Water	3520C	
MB 400-633899/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-633899/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-633899/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-633899/6-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-633899/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-633899/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-633899/7-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 634089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-633899/1-A	Method Blank	Total/NA	Water	8270E SIM	633899
LCS 400-633899/6-A	Lab Control Sample	Total/NA	Water	8270E SIM	633899
LCSD 400-633899/7-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	633899

Analysis Batch: 634183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-633899/1-A	Method Blank	Total/NA	Water	8270E	633899
LCS 400-633899/2-A	Lab Control Sample	Total/NA	Water	8270E	633899
LCS 400-633899/4-A	Lab Control Sample	Total/NA	Water	8270E	633899
LCSD 400-633899/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	633899
LCSD 400-633899/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	633899

Analysis Batch: 634343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240655-3	MW14-ROX-071723-EB	Total/NA	Water	8270E	633899
400-240655-4	MW14-ROX-071723	Total/NA	Water	8270E	633899
400-240655-5	MW5-ROX-071723	Total/NA	Water	8270E	633899
400-240655-6	ROST3MW-ROX-071723	Total/NA	Water	8270E	633899

GC/MS Semi VOA (Continued)

Analysis Batch: 634343 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240655-7	ROST3MW-ROX-071723-DUP	Total/NA	Water	8270E	633899

Analysis Batch: 634436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240655-3	MW14-ROX-071723-EB	Total/NA	Water	8270E SIM	633899
400-240655-4	MW14-ROX-071723	Total/NA	Water	8270E SIM	633899
400-240655-5	MW5-ROX-071723	Total/NA	Water	8270E SIM	633899
400-240655-6	ROST3MW-ROX-071723	Total/NA	Water	8270E SIM	633899
400-240655-7	ROST3MW-ROX-071723-DUP	Total/NA	Water	8270E SIM	633899

GC Semi VOA

Prep Batch: 634344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240655-2	TB-ROX-071723-8011	Total/NA	Water	8011	
400-240655-3	MW14-ROX-071723-EB	Total/NA	Water	8011	
400-240655-4	MW14-ROX-071723	Total/NA	Water	8011	
400-240655-5	MW5-ROX-071723	Total/NA	Water	8011	
400-240655-6	ROST3MW-ROX-071723	Total/NA	Water	8011	
400-240655-7	ROST3MW-ROX-071723-DUP	Total/NA	Water	8011	
MB 400-634344/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-634344/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-634344/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 634434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240655-2	TB-ROX-071723-8011	Total/NA	Water	8011	634344
400-240655-3	MW14-ROX-071723-EB	Total/NA	Water	8011	634344
400-240655-4	MW14-ROX-071723	Total/NA	Water	8011	634344
400-240655-5	MW5-ROX-071723	Total/NA	Water	8011	634344
400-240655-6	ROST3MW-ROX-071723	Total/NA	Water	8011	634344
400-240655-7	ROST3MW-ROX-071723-DUP	Total/NA	Water	8011	634344
MB 400-634344/1-A	Method Blank	Total/NA	Water	8011	634344
LCS 400-634344/2-A	Lab Control Sample	Total/NA	Water	8011	634344
LCSD 400-634344/3-A	Lab Control Sample Dup	Total/NA	Water	8011	634344

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

Lab Sample ID: MB 400-634747/29
Matrix: Water
Analysis Batch: 634747

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/27/23 11:26	1
Acrolein	ND		20	3.3	ug/L			07/27/23 11:26	1
Acrylonitrile	ND		10	2.8	ug/L			07/27/23 11:26	1
Benzene	ND		1.0	0.50	ug/L			07/27/23 11:26	1
Bromobenzene	ND		1.0	0.54	ug/L			07/27/23 11:26	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/27/23 11:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/27/23 11:26	1
Bromoform	ND		5.0	0.25	ug/L			07/27/23 11:26	1
Bromomethane	ND		1.0	0.98	ug/L			07/27/23 11:26	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/27/23 11:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/27/23 11:26	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/27/23 11:26	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/27/23 11:26	1
Chloroethane	ND		1.0	0.76	ug/L			07/27/23 11:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/27/23 11:26	1
Chloroform	ND		1.0	0.90	ug/L			07/27/23 11:26	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/27/23 11:26	1
Chloromethane	ND		1.0	0.90	ug/L			07/27/23 11:26	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/27/23 11:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/27/23 11:26	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/27/23 11:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/27/23 11:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/27/23 11:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/27/23 11:26	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/27/23 11:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/27/23 11:26	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/27/23 11:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 11:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 11:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 11:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/23 11:26	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/27/23 11:26	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/27/23 11:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/27/23 11:26	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/27/23 11:26	1
2-Hexanone	ND		25	1.4	ug/L			07/27/23 11:26	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/27/23 11:26	1
Methylene bromide	ND		5.0	0.22	ug/L			07/27/23 11:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/27/23 11:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/27/23 11:26	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/27/23 11:26	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/27/23 11:26	1
Naphthalene	ND		5.0	3.0	ug/L			07/27/23 11:26	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/27/23 11:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/27/23 11:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/27/23 11:26	1
o-Xylene	ND		5.0	0.60	ug/L			07/27/23 11:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/27/23 11:26	1

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

Lab Sample ID: MB 400-634747/29
Matrix: Water
Analysis Batch: 634747

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/27/23 11:26	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/27/23 11:26	1
Styrene	ND		1.0	1.0	ug/L			07/27/23 11:26	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/27/23 11:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/27/23 11:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/27/23 11:26	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/27/23 11:26	1
Toluene	ND		1.0	0.90	ug/L			07/27/23 11:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/27/23 11:26	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/27/23 11:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/27/23 11:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/27/23 11:26	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/27/23 11:26	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/27/23 11:26	1
Trichloroethene	0.262	J	1.0	0.15	ug/L			07/27/23 11:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/27/23 11:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/27/23 11:26	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/27/23 11:26	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/27/23 11:26	1
Vinyl acetate	ND		25	0.93	ug/L			07/27/23 11:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/27/23 11:26	1
Xylenes, Total	ND		10	1.6	ug/L			07/27/23 11:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*07/27/23 11:26*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/27/23 11:26*	*1*
Toluene-d8 (Surr)	*109*		*64 - 132*		*07/27/23 11:26*	*1*

Lab Sample ID: LCS 400-634747/1002
Matrix: Water
Analysis Batch: 634747

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	263		ug/L		131	43 - 160
Acrolein	500	491		ug/L		98	38 - 160
Acrylonitrile	500	565		ug/L		113	64 - 142
Benzene	50.0	48.3		ug/L		97	70 - 130
Bromobenzene	50.0	42.6		ug/L		85	70 - 132
Bromochloromethane	50.0	39.7		ug/L		79	70 - 130
Bromodichloromethane	50.0	51.7		ug/L		103	67 - 133
Bromoform	50.0	41.3		ug/L		83	57 - 140
Bromomethane	50.0	79.9		ug/L		160	10 - 160
2-Butanone (MEK)	200	229		ug/L		114	61 - 145
Carbon disulfide	50.0	44.1		ug/L		88	61 - 137
Carbon tetrachloride	50.0	47.6		ug/L		95	61 - 137
Chlorobenzene	50.0	48.2		ug/L		96	70 - 130
Chloroethane	50.0	56.8		ug/L		114	55 - 141
2-Chloroethyl vinyl ether	50.0	66.1		ug/L		132	10 - 160

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

Lab Sample ID: LCS 400-634747/1002
Matrix: Water
Analysis Batch: 634747

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	48.2		ug/L		96	69 - 130
1-Chlorohexane	50.0	55.8		ug/L		112	69 - 130
Chloromethane	50.0	57.3		ug/L		115	58 - 137
cis-1,2-Dichloroethene	50.0	49.1		ug/L		98	68 - 130
cis-1,3-Dichloropropene	50.0	48.8		ug/L		98	69 - 132
Dibromochloromethane	50.0	47.5		ug/L		95	67 - 135
1,2-Dichlorobenzene	50.0	46.7		ug/L		93	67 - 130
1,3-Dichlorobenzene	50.0	46.0		ug/L		92	70 - 130
1,4-Dichlorobenzene	50.0	45.9		ug/L		92	70 - 130
Dichlorodifluoromethane	50.0	56.6		ug/L		113	41 - 146
1,1-Dichloroethane	50.0	48.4		ug/L		97	70 - 130
1,2-Dichloroethane	50.0	53.2		ug/L		106	69 - 130
1,1-Dichloroethene	50.0	46.8		ug/L		94	63 - 134
1,2-Dichloropropane	50.0	54.2		ug/L		108	70 - 130
1,3-Dichloropropane	50.0	52.5		ug/L		105	70 - 130
2,2-Dichloropropane	50.0	44.2		ug/L		88	52 - 135
1,1-Dichloropropene	50.0	48.9		ug/L		98	70 - 130
Ethylbenzene	50.0	50.7		ug/L		101	70 - 130
Ethyl methacrylate	50.0	53.1		ug/L		106	68 - 130
Hexachlorobutadiene	50.0	47.3		ug/L		95	53 - 140
2-Hexanone	200	257		ug/L		129	65 - 137
Isopropy benzene	50.0	51.3		ug/L		103	70 - 130
Methylene bromide	50.0	55.6		ug/L		111	70 - 130
Methylene Chloride	50.0	46.0		ug/L		92	66 - 135
4-Methyl-2-pentanone (MIBK)	200	266		ug/L		133	69 - 138
Methyl tert-butyl ether	50.0	47.0		ug/L		94	66 - 130
m-Xylene & p-Xylene	50.0	50.2		ug/L		100	70 - 130
Naphthalene	50.0	50.7		ug/L		101	47 - 149
n-Butylbenzene	50.0	54.9		ug/L		110	67 - 130
N-Propylbenzene	50.0	49.3		ug/L		99	70 - 130
o-Chlorotoluene	50.0	49.9		ug/L		100	70 - 130
o-Xylene	50.0	48.5		ug/L		97	70 - 130
p-Chlorotoluene	50.0	50.6		ug/L		101	70 - 130
p-Isopropyltoluene	50.0	49.4		ug/L		99	65 - 130
sec-Butylbenzene	50.0	51.0		ug/L		102	66 - 130
Styrene	50.0	46.6		ug/L		93	70 - 130
tert-Butylbenzene	50.0	50.7		ug/L		101	64 - 139
1,1,1,2-Tetrachloroethane	50.0	46.5		ug/L		93	67 - 131
1,1,2,2-Tetrachloroethane	50.0	44.0		ug/L		88	70 - 131
Tetrachloroethene	50.0	56.9		ug/L		114	65 - 130
Toluene	50.0	47.9		ug/L		96	70 - 130
trans-1,2-Dichloroethene	50.0	43.9		ug/L		88	70 - 130
trans-1,3-Dichloropropene	50.0	49.6		ug/L		99	63 - 130
1,2,3-Trichlorobenzene	50.0	43.4		ug/L		87	60 - 138
1,2,4-Trichlorobenzene	50.0	43.8		ug/L		88	60 - 140
1,1,1-Trichloroethane	50.0	47.6		ug/L		95	68 - 130
1,1,2-Trichloroethane	50.0	52.0		ug/L		104	70 - 130
Trichloroethene	50.0	50.2		ug/L		100	70 - 130
Trichlorofluoromethane	50.0	45.2		ug/L		90	65 - 138

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

Lab Sample ID: LCS 400-634747/1002
Matrix: Water
Analysis Batch: 634747

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	53.9		ug/L		108	70 - 130
1,2,4-Trimethy benzene	50.0	48.9		ug/L		98	70 - 130
1,3,5-Trimethy benzene	50.0	49.2		ug/L		98	69 - 130
Vinyl acetate	100	101		ug/L		101	26 - 160
Vinyl chloride	50.0	51.9		ug/L		104	59 - 136
Xylenes, Total	100	98.7		ug/L		99	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*72 - 130*
Dibromofluoromethane	*101*		*75 - 126*
Toluene-d8 (Surr)	*102*		*64 - 132*

Lab Sample ID: MB 400-634952/4
Matrix: Water
Analysis Batch: 634952

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/28/23 10:51	1
Acrolein	ND		20	3.3	ug/L			07/28/23 10:51	1
Acrylonitrile	ND		10	2.8	ug/L			07/28/23 10:51	1
Benzene	ND		1.0	0.50	ug/L			07/28/23 10:51	1
Bromobenzene	ND		1.0	0.54	ug/L			07/28/23 10:51	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/28/23 10:51	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/28/23 10:51	1
Bromoform	ND		5.0	0.25	ug/L			07/28/23 10:51	1
Bromomethane	ND		1.0	0.98	ug/L			07/28/23 10:51	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/28/23 10:51	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/28/23 10:51	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/28/23 10:51	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/28/23 10:51	1
Chloroethane	ND		1.0	0.76	ug/L			07/28/23 10:51	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/28/23 10:51	1
Chloroform	ND		1.0	0.90	ug/L			07/28/23 10:51	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/28/23 10:51	1
Chloromethane	ND		1.0	0.90	ug/L			07/28/23 10:51	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/28/23 10:51	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/28/23 10:51	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/28/23 10:51	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/28/23 10:51	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/28/23 10:51	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/28/23 10:51	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/28/23 10:51	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/28/23 10:51	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/28/23 10:51	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/28/23 10:51	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/28/23 10:51	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/28/23 10:51	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/28/23 10:51	1

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

Lab Sample ID: MB 400-634952/4
Matrix: Water
Analysis Batch: 634952

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/28/23 10:51	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/28/23 10:51	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/28/23 10:51	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/28/23 10:51	1
2-Hexanone	ND		25	1.4	ug/L			07/28/23 10:51	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/28/23 10:51	1
Methylene bromide	ND		5.0	0.22	ug/L			07/28/23 10:51	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/28/23 10:51	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/28/23 10:51	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/28/23 10:51	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/28/23 10:51	1
Naphthalene	ND		5.0	3.0	ug/L			07/28/23 10:51	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/28/23 10:51	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/28/23 10:51	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/28/23 10:51	1
o-Xylene	ND		5.0	0.60	ug/L			07/28/23 10:51	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/28/23 10:51	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/28/23 10:51	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/28/23 10:51	1
Styrene	ND		1.0	1.0	ug/L			07/28/23 10:51	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/28/23 10:51	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/28/23 10:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/28/23 10:51	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/28/23 10:51	1
Toluene	ND		1.0	0.90	ug/L			07/28/23 10:51	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/28/23 10:51	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/28/23 10:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/28/23 10:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/28/23 10:51	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/28/23 10:51	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/28/23 10:51	1
Trichloroethene	ND		1.0	0.15	ug/L			07/28/23 10:51	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/28/23 10:51	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/28/23 10:51	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/28/23 10:51	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/28/23 10:51	1
Vinyl acetate	ND		25	0.93	ug/L			07/28/23 10:51	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/28/23 10:51	1
Xylenes, Total	ND		10	1.6	ug/L			07/28/23 10:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*07/28/23 10:51*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*07/28/23 10:51*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*07/28/23 10:51*	*1*

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

Lab Sample ID: LCS 400-634952/1002
Matrix: Water
Analysis Batch: 634952

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	175		ug/L		88	43 - 160
Acrolein	500	568		ug/L		114	38 - 160
Acrylonitrile	500	507		ug/L		101	64 - 142
Benzene	50.0	47.5		ug/L		95	70 - 130
Bromobenzene	50.0	43.0		ug/L		86	70 - 132
Bromochloromethane	50.0	45.8		ug/L		92	70 - 130
Bromodichloromethane	50.0	47.4		ug/L		95	67 - 133
Bromoform	50.0	43.7		ug/L		87	57 - 140
Bromomethane	50.0	51.3		ug/L		103	10 - 160
2-Butanone (MEK)	200	197		ug/L		99	61 - 145
Carbon disulfide	50.0	42.9		ug/L		86	61 - 137
Carbon tetrachloride	50.0	46.3		ug/L		93	61 - 137
Chlorobenzene	50.0	45.9		ug/L		92	70 - 130
Chloroethane	50.0	61.8		ug/L		124	55 - 141
2-Chloroethyl vinyl ether	50.0	54.5		ug/L		109	10 - 160
Chloroform	50.0	47.6		ug/L		95	69 - 130
1-Chlorohexane	50.0	51.0		ug/L		102	69 - 130
Chloromethane	50.0	45.2		ug/L		90	58 - 137
cis-1,2-Dichloroethene	50.0	48.3		ug/L		97	68 - 130
cis-1,3-Dichloropropene	50.0	46.4		ug/L		93	69 - 132
Dibromochloromethane	50.0	45.3		ug/L		91	67 - 135
1,2-Dichlorobenzene	50.0	45.8		ug/L		92	67 - 130
1,3-Dichlorobenzene	50.0	44.4		ug/L		89	70 - 130
1,4-Dichlorobenzene	50.0	44.7		ug/L		89	70 - 130
Dichlorodifluoromethane	50.0	50.3		ug/L		101	41 - 146
1,1-Dichloroethane	50.0	46.8		ug/L		94	70 - 130
1,2-Dichloroethane	50.0	50.1		ug/L		100	69 - 130
1,1-Dichloroethene	50.0	39.7		ug/L		79	63 - 134
1,2-Dichloropropane	50.0	48.5		ug/L		97	70 - 130
1,3-Dichloropropane	50.0	47.7		ug/L		95	70 - 130
2,2-Dichloropropane	50.0	46.0		ug/L		92	52 - 135
1,1-Dichloropropene	50.0	48.2		ug/L		96	70 - 130
Ethylbenzene	50.0	46.4		ug/L		93	70 - 130
Ethyl methacrylate	50.0	47.8		ug/L		96	68 - 130
Hexachlorobutadiene	50.0	44.8		ug/L		90	53 - 140
2-Hexanone	200	210		ug/L		105	65 - 137
Isopropy benzene	50.0	46.8		ug/L		94	70 - 130
Methylene bromide	50.0	47.3		ug/L		95	70 - 130
Methylene Chloride	50.0	49.6		ug/L		99	66 - 135
4-Methyl-2-pentanone (MIBK)	200	213		ug/L		106	69 - 138
Methyl tert-butyl ether	50.0	44.9		ug/L		90	66 - 130
m-Xylene & p-Xylene	50.0	46.5		ug/L		93	70 - 130
Naphthalene	50.0	45.8		ug/L		92	47 - 149
n-Butylbenzene	50.0	49.3		ug/L		99	67 - 130
N-Propylbenzene	50.0	44.9		ug/L		90	70 - 130
o-Chlorotoluene	50.0	46.3		ug/L		93	70 - 130
o-Xylene	50.0	45.7		ug/L		91	70 - 130
p-Chlorotoluene	50.0	46.2		ug/L		92	70 - 130

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

Lab Sample ID: LCS 400-634952/1002
Matrix: Water
Analysis Batch: 634952

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	46.4		ug/L		93	65 - 130
sec-Butylbenzene	50.0	46.6		ug/L		93	66 - 130
Styrene	50.0	45.1		ug/L		90	70 - 130
tert-Butylbenzene	50.0	45.9		ug/L		92	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	49.2		ug/L		98	65 - 130
Toluene	50.0	46.5		ug/L		93	70 - 130
trans-1,2-Dichloroethene	50.0	46.2		ug/L		92	70 - 130
trans-1,3-Dichloropropene	50.0	47.0		ug/L		94	63 - 130
1,2,3-Trichlorobenzene	50.0	44.2		ug/L		88	60 - 138
1,2,4-Trichlorobenzene	50.0	44.6		ug/L		89	60 - 140
1,1,1-Trichloroethane	50.0	47.5		ug/L		95	68 - 130
1,1,2-Trichloroethane	50.0	47.5		ug/L		95	70 - 130
Trichloroethene	50.0	45.9		ug/L		92	70 - 130
Trichlorofluoromethane	50.0	52.3		ug/L		105	65 - 138
1,2,3-Trichloropropane	50.0	46.1		ug/L		92	70 - 130
1,2,4-Trimethy benzene	50.0	45.6		ug/L		91	70 - 130
1,3,5-Trimethy benzene	50.0	44.2		ug/L		88	69 - 130
Vinyl acetate	100	110		ug/L		110	26 - 160
Vinyl chloride	50.0	50.0		ug/L		100	59 - 136
Xylenes, Total	100	92.1		ug/L		92	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*72 - 130*
Dibromofluoromethane	*101*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

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

Lab Sample ID: MB 400-633899/1-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633899

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/20/23 09:40	07/21/23 21:12	1
Benzenethiol	ND		10	1.7	ug/L		07/20/23 09:40	07/21/23 21:12	1
Benzoic acid	ND		30	7.3	ug/L		07/20/23 09:40	07/21/23 21:12	1
Benzyl alcohol	ND		10	2.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/20/23 09:40	07/21/23 21:12	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/20/23 09:40	07/21/23 21:12	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/20/23 09:40	07/21/23 21:12	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/20/23 09:40	07/21/23 21:12	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Chloroaniline	ND		10	3.4	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/20/23 09:40	07/21/23 21:12	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/20/23 09:40	07/21/23 21:12	1
2-Chlorophenol	ND		10	2.2	ug/L		07/20/23 09:40	07/21/23 21:12	1

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

Lab Sample ID: MB 400-633899/1-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633899

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Dibenzofuran	ND		10	0.17	ug/L		07/20/23 09:40	07/21/23 21:12	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Diethyl phthalate	ND		10	0.24	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/20/23 09:40	07/21/23 21:12	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/20/23 09:40	07/21/23 21:12	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/20/23 09:40	07/21/23 21:12	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/20/23 09:40	07/21/23 21:12	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/20/23 09:40	07/21/23 21:12	1
1,4-Dioxane	ND		10	1.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/20/23 09:40	07/21/23 21:12	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/20/23 09:40	07/21/23 21:12	1
Hexachloroethane	ND		10	4.2	ug/L		07/20/23 09:40	07/21/23 21:12	1
Indene	ND		10	1.0	ug/L		07/20/23 09:40	07/21/23 21:12	1
Isophorone	ND		10	0.14	ug/L		07/20/23 09:40	07/21/23 21:12	1
2-Methylphenol	ND		10	1.8	ug/L		07/20/23 09:40	07/21/23 21:12	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/20/23 09:40	07/21/23 21:12	1
2-Nitroaniline	ND		10	2.2	ug/L		07/20/23 09:40	07/21/23 21:12	1
3-Nitroaniline	ND		10	1.8	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Nitroaniline	ND		10	1.5	ug/L		07/20/23 09:40	07/21/23 21:12	1
Nitrobenzene	ND		10	0.13	ug/L		07/20/23 09:40	07/21/23 21:12	1
2-Nitrophenol	ND		10	5.2	ug/L		07/20/23 09:40	07/21/23 21:12	1
4-Nitrophenol	ND		10	2.1	ug/L		07/20/23 09:40	07/21/23 21:12	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/20/23 09:40	07/21/23 21:12	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/20/23 09:40	07/21/23 21:12	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/20/23 09:40	07/21/23 21:12	1
Pentachlorophenol	ND		20	1.4	ug/L		07/20/23 09:40	07/21/23 21:12	1
Phenol	ND		10	2.6	ug/L		07/20/23 09:40	07/21/23 21:12	1
Pyridine	ND		10	3.2	ug/L		07/20/23 09:40	07/21/23 21:12	1
Quinoline	ND		10	4.5	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/20/23 09:40	07/21/23 21:12	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/20/23 09:40	07/21/23 21:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*46 - 124*	*07/20/23 09:40*	*07/21/23 21:12*	*1*
2-Fluorophenol	*14*		*13 - 113*	*07/20/23 09:40*	*07/21/23 21:12*	*1*
Nitrobenzene-d5	*59*		*36 - 126*	*07/20/23 09:40*	*07/21/23 21:12*	*1*
Phenol-d5	*44*		*17 - 127*	*07/20/23 09:40*	*07/21/23 21:12*	*1*
Terphenyl-d14	*86*		*44 - 149*	*07/20/23 09:40*	*07/21/23 21:12*	*1*
2,4,6-Tribromophenol	*65*		*26 - 150*	*07/20/23 09:40*	*07/21/23 21:12*	*1*

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

Lab Sample ID: LCS 400-633899/2-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	86.0		ug/L		72	21 - 120
Benzoic acid	522	231		ug/L		44	10 - 144
Benzyl alcohol	120	69.5		ug/L		58	28 - 120
Bis(2-chloroethoxy)methane	120	86.1		ug/L		72	47 - 120
Bis(2-chloroethyl)ether	120	83.5		ug/L		70	44 - 120
bis (2-chloroisopropyl) ether	120	86.5		ug/L		72	33 - 121
Bis(2-ethylhexyl) phthalate	120	91.3		ug/L		76	52 - 147
4-Bromophenyl phenyl ether	120	96.2		ug/L		80	54 - 122
Butyl benzyl phthalate	120	100		ug/L		84	54 - 133
4-Chloroaniline	120	72.3		ug/L		60	26 - 120
4-Chloro-3-methylphenol	120	88.6		ug/L		74	48 - 131
2-Chloronaphthalene	120	99.9		ug/L		83	52 - 121
2-Chlorophenol	120	68.9		ug/L		57	40 - 120
4-Chlorophenyl phenyl ether	120	104		ug/L		87	56 - 125
Dibenz[a,h]acridine	110	88.2		ug/L		81	31 - 150
Dibenzofuran	120	105		ug/L		88	56 - 122
3,3'-Dichlorobenzidine	160	144		ug/L		90	36 - 132
2,4-Dichlorophenol	120	86.8		ug/L		72	49 - 120
Diethyl phthalate	120	108		ug/L		90	50 - 137
2,4-Dimethylphenol	120	69.4		ug/L		58	48 - 120
Dimethyl phthalate	120	102		ug/L		85	57 - 124
Di-n-butyl phthalate	120	100		ug/L		84	58 - 126
4,6-Dinitro-ortho-cresol	240	171		ug/L		71	23 - 148
2,4-Dinitrophenol	240	173		ug/L		72	10 - 150
2,4-Dinitrotoluene	120	103		ug/L		86	54 - 142
2,6-Dinitrotoluene	120	101		ug/L		84	55 - 130
Di-n-octyl phthalate	120	91.5		ug/L		76	57 - 138
1,4-Dioxane	120	64.0		ug/L		53	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	83.1		ug/L		69	45 - 124
Hexachlorobenzene	120	113		ug/L		94	52 - 129
Hexachlorocyclopentadiene	120	54.0		ug/L		45	10 - 134
Hexachloroethane	120	79.8		ug/L		66	20 - 120
Indene	120	91.2		ug/L		76	49 - 120
Isophorone	120	85.4		ug/L		71	48 - 120
2-Methylphenol	120	92.4		ug/L		77	46 - 124
3 & 4 Methylphenol	120	91.9		ug/L		77	45 - 120
2-Nitroaniline	120	89.4		ug/L		74	51 - 145
3-Nitroaniline	120	84.8		ug/L		71	37 - 127
4-Nitroaniline	120	112		ug/L		93	36 - 137
Nitrobenzene	120	79.5		ug/L		66	45 - 120
2-Nitrophenol	120	82.0		ug/L		68	40 - 124
4-Nitrophenol	240	152		ug/L		63	23 - 146
N-Nitrosodimethylamine	120	69.6		ug/L		58	29 - 137
N-Nitrosodi-n-propylamine	120	91.2		ug/L		76	45 - 120
N-Nitrosodiphenylamine	119	91.4		ug/L		77	54 - 120
Pentachlorophenol	240	195		ug/L		81	31 - 130
Phenol	120	72.2		ug/L		60	11 - 120
Pyridine	240	114		ug/L		47	16 - 120

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

Lab Sample ID: LCS 400-633899/2-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Quinoline			110	93.1		ug/L		85	49 - 130		
2,4,5-Trichlorophenol			120	95.9		ug/L		80	51 - 136		
2,4,6-Trichlorophenol			120	94.8		ug/L		79	50 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*81*		*46 - 124*
2-Fluorophenol	*40*		*13 - 113*
Nitrobenzene-d5	*74*		*36 - 126*
Phenol-d5	*67*		*17 - 127*
Terphenyl-d14	*95*		*44 - 149*
2,4,6-Tribromophenol	*105*		*26 - 150*

Lab Sample ID: LCS 400-633899/4-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	13.3		ug/L		11	10 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*46 - 124*
2-Fluorophenol	*47*		*13 - 113*
Nitrobenzene-d5	*64*		*36 - 126*
Phenol-d5	*67*		*17 - 127*
Terphenyl-d14	*102*		*44 - 149*
2,4,6-Tribromophenol	*80*		*26 - 150*

Lab Sample ID: LCSD 400-633899/3-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	98.9		ug/L		82	21 - 120	14	30
Benzoic acid			522	249		ug/L		48	10 - 144	7	30
Benzyl alcohol			120	75.2		ug/L		63	28 - 120	8	30
Bis(2-chloroethoxy)methane			120	92.0		ug/L		77	47 - 120	7	30
Bis(2-chloroethyl)ether			120	82.0		ug/L		68	44 - 120	2	30
bis (2-chloroisopropyl) ether			120	86.6		ug/L		72	33 - 121	0	30
Bis(2-ethylhexyl) phthalate			120	98.3		ug/L		82	52 - 147	7	30
4-Bromophenyl phenyl ether			120	106		ug/L		89	54 - 122	10	30
Butyl benzyl phthalate			120	109		ug/L		91	54 - 133	8	30
4-Chloroaniline			120	79.2		ug/L		66	26 - 120	9	30
4-Chloro-3-methylphenol			120	97.7		ug/L		81	48 - 131	10	30
2-Chloronaphthalene			120	107		ug/L		90	52 - 121	7	30
2-Chlorophenol			120	60.5		ug/L		50	40 - 120	13	30
4-Chlorophenyl phenyl ether			120	114		ug/L		95	56 - 125	9	30
Dibenz[a,h]acridine			110	102		ug/L		93	31 - 150	14	30
Dibenzofuran			120	115		ug/L		96	56 - 122	9	30

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

Lab Sample ID: LCSD 400-633899/3-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine			160	157		ug/L		98	36 - 132	9	30
2,4-Dichlorophenol			120	90.9		ug/L		76	49 - 120	5	30
Diethyl phthalate			120	118		ug/L		98	50 - 137	9	30
2,4-Dimethylphenol			120	77.1		ug/L		64	48 - 120	10	30
Dimethyl phthalate			120	113		ug/L		94	57 - 124	10	30
Di-n-butyl phthalate			120	110		ug/L		91	58 - 126	9	30
4,6-Dinitro-ortho-cresol			240	193		ug/L		81	23 - 148	13	30
2,4-Dinitrophenol			240	197		ug/L		82	10 - 150	13	30
2,4-Dinitrotoluene			120	115		ug/L		96	54 - 142	11	30
2,6-Dinitrotoluene			120	113		ug/L		94	55 - 130	11	30
Di-n-octyl phthalate			120	97.2		ug/L		81	57 - 138	6	30
1,4-Dioxane			120	64.3		ug/L		54	31 - 120	0	30
1,2-Diphenylhydrazine (as Azobenzene)			120	88.6		ug/L		74	45 - 124	6	30
Hexachlorobenzene			120	125		ug/L		104	52 - 129	10	30
Hexachlorocyclopentadiene			120	56.5		ug/L		47	10 - 134	5	30
Hexachloroethane			120	75.5		ug/L		63	20 - 120	6	30
Indene			120	93.4		ug/L		78	49 - 120	2	30
Isophorone			120	90.2		ug/L		75	48 - 120	6	30
2-Methylphenol			120	99.8		ug/L		83	46 - 124	8	30
3 & 4 Methylphenol			120	98.3		ug/L		82	45 - 120	7	30
2-Nitroaniline			120	96.3		ug/L		80	51 - 145	7	30
3-Nitroaniline			120	90.8		ug/L		76	37 - 127	7	30
4-Nitroaniline			120	121		ug/L		101	36 - 137	8	30
Nitrobenzene			120	83.2		ug/L		69	45 - 120	5	30
2-Nitrophenol			120	86.0		ug/L		72	40 - 124	5	30
4-Nitrophenol			240	155		ug/L		65	23 - 146	2	30
N-Nitrosodimethylamine			120	78.7		ug/L		66	29 - 137	12	30
N-Nitrosodi-n-propylamine			120	94.2		ug/L		79	45 - 120	3	30
N-Nitrosodiphenylamine			119	102		ug/L		85	54 - 120	11	30
Pentachlorophenol			240	213		ug/L		89	31 - 130	9	30
Phenol			120	69.4		ug/L		58	11 - 120	4	30
Pyridine			240	139		ug/L		58	16 - 120	20	30
Quinoline			110	101		ug/L		92	49 - 130	8	30
2,4,5-Trichlorophenol			120	108		ug/L		90	51 - 136	12	30
2,4,6-Trichlorophenol			120	107		ug/L		89	50 - 127	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*46 - 124*
2-Fluorophenol	*21*		*13 - 113*
Nitrobenzene-d5	*73*		*36 - 126*
Phenol-d5	*61*		*17 - 127*
Terphenyl-d14	*99*		*44 - 149*
2,4,6-Tribromophenol	*111*		*26 - 150*

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

Lab Sample ID: LCSD 400-633899/5-A
Matrix: Water
Analysis Batch: 634183

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	9.83	J *-	ug/L		8	10 - 120	30	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*82*		*46 - 124*
2-Fluorophenol	*52*		*13 - 113*
Nitrobenzene-d5	*67*		*36 - 126*
Phenol-d5	*70*		*17 - 127*
Terphenyl-d14	*98*		*44 - 149*
2,4,6-Tribromophenol	*80*		*26 - 150*

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

Lab Sample ID: MB 400-633899/1-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633899

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/20/23 09:40	07/21/23 19:54	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/20/23 09:40	07/21/23 19:54	1
Anthracene	ND		0.20	0.047	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/20/23 09:40	07/21/23 19:54	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/20/23 09:40	07/21/23 19:54	1
Chrysene	ND		0.20	0.033	ug/L		07/20/23 09:40	07/21/23 19:54	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/20/23 09:40	07/21/23 19:54	1
Fluoranthene	ND		0.20	0.034	ug/L		07/20/23 09:40	07/21/23 19:54	1
Fluorene	ND		0.20	0.089	ug/L		07/20/23 09:40	07/21/23 19:54	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/20/23 09:40	07/21/23 19:54	1
Phenanthrene	ND		0.20	0.090	ug/L		07/20/23 09:40	07/21/23 19:54	1
Pyrene	ND		0.20	0.039	ug/L		07/20/23 09:40	07/21/23 19:54	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/20/23 09:40	07/21/23 19:54	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/20/23 09:40	07/21/23 19:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*68*		*18 - 147*	*07/20/23 09:40*	*07/21/23 19:54*	*1*
2-Fluorobiphenyl	*67*		*15 - 128*	*07/20/23 09:40*	*07/21/23 19:54*	*1*
Nitrobenzene-d5	*50*		*10 - 144*	*07/20/23 09:40*	*07/21/23 19:54*	*1*

Lab Sample ID: LCS 400-633899/6-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acenaphthene			2.00	1.18		ug/L		59	40 - 140		
Acenaphthylene			2.00	1.24		ug/L		62	40 - 140		
Anthracene			2.00	1.24		ug/L		62	40 - 140		

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

Lab Sample ID: LCS 400-633899/6-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzo[a]anthracene			2.00	1.41		ug/L		70	40 - 140		
Benzo[a]pyrene			2.00	1.23		ug/L		61	40 - 140		
Benzo[b]fluoranthene			2.00	1.21		ug/L		60	40 - 140		
Benzo[g,h,i]perylene			2.00	1.36		ug/L		68	40 - 140		
Benzo[k]fluoranthene			2.00	1.18		ug/L		59	40 - 140		
Chrysene			2.00	1.32		ug/L		66	40 - 140		
Dibenz(a,h)anthracene			2.00	1.45		ug/L		72	40 - 140		
Fluoranthene			2.00	1.49		ug/L		74	40 - 140		
Fluorene			2.00	1.30		ug/L		65	40 - 140		
Indeno[1,2,3-cd]pyrene			2.00	1.42		ug/L		71	40 - 140		
Phenanthrene			2.00	1.21		ug/L		60	40 - 140		
Pyrene			2.00	1.02		ug/L		51	40 - 140		
1-Methylnaphthalene			2.00	1.41		ug/L		71	40 - 140		
2-Methylnaphthalene			2.00	1.42		ug/L		71	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*134*		*18 - 147*
2-Fluorobiphenyl	*134*	*S1+*	*15 - 128*
Nitrobenzene-d5	*107*		*10 - 144*

Lab Sample ID: LCSD 400-633899/7-A
Matrix: Water
Analysis Batch: 634089

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633899

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			2.00	1.25		ug/L		63	40 - 140	6	40
Acenaphthylene			2.00	1.30		ug/L		65	40 - 140	5	40
Anthracene			2.00	1.26		ug/L		63	40 - 140	2	40
Benzo[a]anthracene			2.00	1.46		ug/L		73	40 - 140	4	40
Benzo[a]pyrene			2.00	1.30		ug/L		65	40 - 140	6	40
Benzo[b]fluoranthene			2.00	1.26		ug/L		63	40 - 140	4	40
Benzo[g,h,i]perylene			2.00	1.39		ug/L		70	40 - 140	3	40
Benzo[k]fluoranthene			2.00	1.22		ug/L		61	40 - 140	4	40
Chrysene			2.00	1.38		ug/L		69	40 - 140	5	40
Dibenz(a,h)anthracene			2.00	1.50		ug/L		75	40 - 140	4	40
Fluoranthene			2.00	1.55		ug/L		77	40 - 140	4	40
Fluorene			2.00	1.39		ug/L		69	40 - 140	7	40
Indeno[1,2,3-cd]pyrene			2.00	1.44		ug/L		72	40 - 140	1	40
Phenanthrene			2.00	1.25		ug/L		63	40 - 140	4	40
Pyrene			2.00	1.09		ug/L		54	40 - 140	7	40
1-Methylnaphthalene			2.00	1.36		ug/L		68	40 - 140	4	40
2-Methylnaphthalene			2.00	1.37		ug/L		69	40 - 140	3	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*140*		*18 - 147*
2-Fluorobiphenyl	*141*	*S1+*	*15 - 128*
Nitrobenzene-d5	*112*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-634344/1-A
Matrix: Water
Analysis Batch: 634434

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634344

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/24/23 13:46	07/25/23 12:49	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/24/23 13:46	07/25/23 12:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*51 - 149*	*07/24/23 13:46*	*07/25/23 12:49*	*1*

Lab Sample ID: LCS 400-634344/2-A
Matrix: Water
Analysis Batch: 634434

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634344

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-D bromo-3-Chloropropane			0.101	0.135		ug/L		135	60 - 140		
1,2-D bromoethane			0.101	0.107		ug/L		106	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*51 - 149*

Lab Sample ID: LCSD 400-634344/3-A
Matrix: Water
Analysis Batch: 634434

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 634344

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane			0.101	0.138		ug/L		137	60 - 140	2	30
1,2-D bromoethane			0.101	0.0907		ug/L		90	60 - 140	13	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*80*		*51 - 149*

400-240655 COC

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: 7/17/2023
PO #	**GSAP Project ID**	PAGE: 1 of 1
60697537 – 3.3.2	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 60697537 – 3.3.2

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, E. Chalfant, 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, loredana.fillmon@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

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-071723-8260	7/17/2023	0000	Water	2					2	X			
	TB-ROX-071723-8011	7/17/2023	0000	Water	2					2		X		
	MW14-ROX-071723-EB	7/17/2023	0815	Water	6			2		8	X	X	X	X
	MW14-ROX-071723	7/17/2023	0950	Water	6			2		8	X	X	X	X
	MW5-ROX-071723	7/17/2023	1145	Water	6			2		8	X	X	X	X
	ROST3MW-ROX-071723	7/17/2023	1300	Water	6			2		8	X	X	X	X
	ROST3MW-ROX-071723-DUP	7/17/2023	1300	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time
MARY MASSA	FEDEX: 5293 4337 5364	7/17/2023	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time
	Lance Wilson	7-18-23	900
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

0.9°C IR1

Version: 12July23

CUSTODY SEALS: 1599741, 1599740

8/1/2023

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc. Job Number: 400-240655-1

Login Number: 240655 **List Source: Eurofins Pensacola**
List Number: 1
Creator: Whitley, Adrian

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	0.9°C IR11
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: 400-240655-1
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	09-01-23
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-23
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 – 3rd Quarter 2023 Data Review

Laboratory SDG: 400-240817-1-Rev.1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 8/23/2023

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

Sample Identification	Sample Identification
TB-ROX-071823-8260-A	TB-ROX-071823-8011-A
MW27-ROX-071823	MW9-ROX-071823
MW10-ROX-071823	MW2-ROX-071823
TB-ROX-071823-8260-B	TB-ROX-071823-8011-B
P59-ROX-071823	P58-ROX-071823
P58-ROX-071823-DUP	P93B-ROX-071823

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 LCS/LCSD recoveries for dichlorodifluoromethane, n-butylbenzene, and benzenethiol were outside evaluation criteria. Surrogate recoveries for SVOC 2-fluorophenol in several investigative samples were outside criteria. Phenol and 1-methylnaphthalene in field duplicate pair P58-ROX-071823/P58-ROX-071823-DUP were qualified due to field duplicate RPD above evaluation criteria; therefore, results were qualified as estimated (**J**). VOCs and SVOCs in several samples 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. The laboratory report was revised on August 4, 2023, to correct a laboratory transcription error in sample ID MW9-ROX-071823 (400-240817-4).

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 400-635204/1002	VOCs	Dichlorodifluoromethane	**148**	NA	41-146
LCS 400-635204/1002	VOCs	n-Butylbenzene	**131**	NA	67-130
LCS/LCSD 400-634300/4-A/5-A	SVOCs	Benzenethiol	**3/3**	8	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 below evaluation criteria; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW27-ROX-071823	SVOCs	Benzenethiol	**UJ**
MW9-ROX-071823	SVOCs	Benzenethiol	**UJ**
MW10-ROX-071823	SVOCs	Benzenethiol	**UJ**
MW2-ROX-071823	SVOCs	Benzenethiol	**UJ**
P59-ROX-071823	SVOCs	Benzenethiol	**UJ**
P58-ROX-071823	SVOCs	Benzenethiol	**UJ**
P58-ROX-071823-DUP	SVOCs	Benzenethiol	**UJ**
P93B-ROX-071823	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW2-ROX-071823	SVOCs	2-Fluorophenol	**10**	13-113
P59-ROX-071823	SVOCs	2-Fluorophenol	**9**	13-113
P58-ROX-071823-DUP	SVOCs	2-Fluorophenol	**9**	13-113

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?

Yes

Field ID	Field Duplicate ID
P58-ROX-071823	P58-ROX-071823 -DUP

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
P58-ROX-071823	P58-ROX-071823-DUP	SVOCs	Phenol	**68**	**J/J**
P58-ROX-071823	P58-ROX-071823-DUP	PAHs	1-Methylnaphthalene	**52**	**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 sample P93B-ROX-071823 to bring benzene into calibration range of the instrument. VOCs were non-detect at a dilution factor of 1000X, with raised reporting limits of between 1,000 and 25,000 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, VOCs in sample P93B-ROX-071823 were qualified as estimated non-detect due to sample dilution and historical detections.

Sample ID	Parameter	Analyte	Qualification
P93B-ROX-071823	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

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JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-240817-1

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.

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Authorization

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Job ID: 400-240817-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-240817-1

Comments
Revised Report
Report revised to correct samples ID MW9-ROX-071823 (400-240817-4).
Supersedes report dated 8-3-2023 @ 06:40.

Receipt
The samples were received on 7/20/2023 10:11 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.3°C and 2.0°C

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-635204 recovered above the upper control limit for 1,1,2,2-Tetrachloroethane, 1,2,3-Trichloropropane, 1,2-Dichloroethane, 2-Chloroethyl vinyl ether, Bromoform, Chloroethane, Dichlorodifluoromethane, Hexachlorobutadiene, n-Butylbenzene 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 laboratory control sample (LCS) for analytical batch 400-635204 recovered outside control limits for the following analytes: Dichlorodifluoromethane and n-Butylbenzene. 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 following samples were diluted to bring the concentration of target analytes within the calibration range: P59-ROX-071823 (400-240817-9), P58-ROX-071823 (400-240817-10), P58-ROX-071823-DUP (400-240817-11) and P93B-ROX-071823 (400-240817-12). Elevated reporting limits (RLs) are provided.

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-071823-8260-A (400-240817-1), MW27-ROX-071823 (400-240817-3), MW9-ROX-071823 (400-240817-4), MW10-ROX-071823 (400-240817-5), MW2-ROX-071823 (400-240817-6), TB-ROX-071823-8260-B (400-240817-7), P59-ROX-071823 (400-240817-9), P58-ROX-071823 (400-240817-10), P58-ROX-071823-DUP (400-240817-11) and P93B-ROX-071823 (400-240817-12). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

Method 8260D: The initial calibration verification (ICV) analyzed in batch 400-625791 was outside method criteria for the following analyte(s): Hexachlorobutadiene. 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 sample was diluted to bring the concentration of target analytes within the calibration range: P93B-ROX-071823 (400-240817-12). Elevated reporting limits (RLs) are provided.

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: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 400-634300.

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-634300 and analytical batch 400-634499 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.

Job ID: 400-240817-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-634499 recovered above the upper control limit for Bis(2-chloroethyl)ether, 4-Chlorophenyl phenyl ether and 2-Nitrophenol. 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 400-634499 recovered above the upper control limit for Dibenz[a,h]acridine and Quinoline. The samples associated with this CCV were non-detects for the affected analytes; therefore, the 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 samples contained an allowable number of surrogate compounds outside limits: MW2-ROX-071823 (400-240817-6), P59-ROX-071823 (400-240817-9) and P58-ROX-071823-DUP (400-240817-11). 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-071823 (400-240817-10). Elevated reporting limits (RLs) are provided.

Method 8270E_SIM: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 400-634300.

Method 8270E_SIM: The following sample was diluted to bring the concentration of target analytes within the calibration range: P58-ROX-071823 (400-240817-10). 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

Method 8011: The continuing calibration verification (CCV) associated with batch 400-634434 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 QUARTERLY GW

Job ID: 400-240817-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-240817-1	TB-ROX-071823-8260-A	Water	07/18/23 12:00	07/20/23 10:11
400-240817-2	TB-ROX-071823-8011-A	Water	07/18/23 12:00	07/20/23 10:11
400-240817-3	MW27-ROX-071823	Water	07/18/23 09:20	07/20/23 10:11
400-240817-4	MW9-ROX-071823	Water	07/18/23 10:15	07/20/23 10:11
400-240817-5	MW10-ROX-071823	Water	07/18/23 11:15	07/20/23 10:11
400-240817-6	MW2-ROX-071823	Water	07/18/23 13:00	07/20/23 10:11
400-240817-7	TB-ROX-071823-8260-B	Water	07/18/23 12:00	07/20/23 10:11
400-240817-8	TB-ROX-071823-8011-B	Water	07/18/23 12:00	07/20/23 10:11
400-240817-9	P59-ROX-071823	Water	07/18/23 10:05	07/20/23 10:11
400-240817-10	P58-ROX-071823	Water	07/18/23 12:00	07/20/23 10:11
400-240817-11	P58-ROX-071823-DUP	Water	07/18/23 12:00	07/20/23 10:11
400-240817-12	P93B-ROX-071823	Water	07/18/23 13:20	07/20/23 10:11

Detection Summary

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

Job ID: 400-240817-1

Client Sample ID: TB-ROX-071823-8260-A — Lab Sample ID: 400-240817-1

No Detections.

Client Sample ID: TB-ROX-071823-8011-A — Lab Sample ID: 400-240817-2

No Detections.

Client Sample ID: MW27-ROX-071823 — Lab Sample ID: 400-240817-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Butyl benzyl phthalate	0.26	J	10	0.20	ug/L	1		8270E	Total/NA

Client Sample ID: MW9-ROX-071823 — Lab Sample ID: 400-240817-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	3.8		1.0	0.50	ug/L	1		8260D	Total/NA

Client Sample ID: MW10-ROX-071823 — Lab Sample ID: 400-240817-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.63	J	1.0	0.50	ug/L	1		8260D	Total/NA
Diethyl phthalate	0.31	J	9.8	0.24	ug/L	1		8270E	Total/NA

Client Sample ID: MW2-ROX-071823 — Lab Sample ID: 400-240817-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	20	J	25	10	ug/L	1		8260D	Total/NA
Benzene	1.7		1.0	0.50	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	10	J	25	2.6	ug/L	1		8260D	Total/NA
Ethylbenzene	190		1.0	0.50	ug/L	1		8260D	Total/NA
Isopropy benzene	42		1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	100		5.0	0.63	ug/L	1		8260D	Total/NA
Naphthalene	30		5.0	3.0	ug/L	1		8260D	Total/NA
n-Butylbenzene	4.5		1.0	0.76	ug/L	1		8260D	Total/NA
N-Propylbenzene	56		1.0	0.69	ug/L	1		8260D	Total/NA
o-Xylene	8.8		5.0	0.60	ug/L	1		8260D	Total/NA
p-Isopropyltoluene	3.2		1.0	0.71	ug/L	1		8260D	Total/NA
sec-Butylbenzene	3.2		1.0	0.70	ug/L	1		8260D	Total/NA
Toluene	3.7		1.0	0.90	ug/L	1		8260D	Total/NA
1,2,4-Trimethy benzene	32		1.0	0.82	ug/L	1		8260D	Total/NA
1,3,5-Trimethy benzene	26		1.0	0.56	ug/L	1		8260D	Total/NA
Xylenes, Total	110		10	1.6	ug/L	1		8260D	Total/NA
1-Methylnaphthalene	9.0		0.20	0.081	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	17		0.20	0.067	ug/L	1		8270E SIM	Total/NA
Diethyl phthalate	0.62	J	10	0.24	ug/L	1		8270E	Total/NA

Client Sample ID: TB-ROX-071823-8260-B — Lab Sample ID: 400-240817-7

No Detections.

Client Sample ID: TB-ROX-071823-8011-B — Lab Sample ID: 400-240817-8

No Detections.

Client Sample ID: P59-ROX-071823 — Lab Sample ID: 400-240817-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	150		130	50	ug/L	5		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: P59-ROX-071823 (Continued) — Lab Sample ID: 400-240817-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	970		5.0	2.5	ug/L	5		8260D	Total/NA
Ethylbenzene	38		5.0	2.5	ug/L	5		8260D	Total/NA
Isopropy benzene	17		5.0	2.7	ug/L	5		8260D	Total/NA
m-Xylene & p-Xylene	52		25	3.2	ug/L	5		8260D	Total/NA
Naphthalene	29		25	15	ug/L	5		8260D	Total/NA
N-Propylbenzene	23		5.0	3.5	ug/L	5		8260D	Total/NA
Toluene	43		5.0	4.5	ug/L	5		8260D	Total/NA
1,2,4-Trimethy benzene	9.0		5.0	4.1	ug/L	5		8260D	Total/NA
1,3,5-Trimethy benzene	9.5		5.0	2.8	ug/L	5		8260D	Total/NA
Xylenes, Total	54		50	8.0	ug/L	5		8260D	Total/NA
Acenaphthene	0.39		0.20	0.10	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.091	J	0.20	0.035	ug/L	1		8270E SIM	Total/NA
Chrysene	0.082	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.086	J	0.20	0.035	ug/L	1		8270E SIM	Total/NA
Fluorene	0.22		0.20	0.091	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.59		0.20	0.092	ug/L	1		8270E SIM	Total/NA
Pyrene	0.29		0.20	0.040	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	9.9		0.20	0.081	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	13		0.20	0.067	ug/L	1		8270E SIM	Total/NA

Client Sample ID: P58-ROX-071823 — Lab Sample ID: 400-240817-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	220000		1000	500	ug/L	1000		8260D	Total/NA
Acenaphthene	0.62		0.20	0.10	ug/L	1		8270E SIM	Total/NA
Anthracene	0.19	J	0.20	0.047	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.14	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Benzo[a]pyrene	0.099	J	0.20	0.065	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.053	J	0.20	0.037	ug/L	1		8270E SIM	Total/NA
Chrysene	0.14	J	0.20	0.033	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.069	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Fluorene	1.4		0.20	0.090	ug/L	1		8270E SIM	Total/NA
Phenanthrene	1.2		0.20	0.091	ug/L	1		8270E SIM	Total/NA
Pyrene	0.32		0.20	0.039	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	65		1.0	0.40	ug/L	5		8270E SIM	Total/NA
2-Methylnaphthalene	34		0.20	0.067	ug/L	1		8270E SIM	Total/NA
Phenol - DL	510		50	13	ug/L	5		8270E	Total/NA

Client Sample ID: P58-ROX-071823-DUP — Lab Sample ID: 400-240817-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	250000		1000	500	ug/L	1000		8260D	Total/NA
Acenaphthene	0.53		0.20	0.097	ug/L	1		8270E SIM	Total/NA
Anthracene	0.097	J	0.20	0.046	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.065	J	0.20	0.033	ug/L	1		8270E SIM	Total/NA
Fluorene	1.1		0.20	0.087	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.80		0.20	0.088	ug/L	1		8270E SIM	Total/NA
Pyrene	0.069	J	0.20	0.038	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	38		0.20	0.079	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	27		0.20	0.065	ug/L	1		8270E SIM	Total/NA
Phenol	250		9.8	2.6	ug/L	1		8270E	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: 400-240817-1

Client Sample ID: P93B-ROX-071823

Lab Sample ID: 400-240817-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene - DL	1200000		5000	2500	ug/L	5000		8260D	Total/NA
1-Methylnaphthalene	0.085	J	0.20	0.080	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	0.090	J	0.20	0.066	ug/L	1		8270E SIM	Total/NA
2,4-Dimethylphenol	3.6	J	10	3.5	ug/L	1		8270E	Total/NA
Phenol	240		10	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 QUARTERLY GW

Job ID: 400-240817-1

Client Sample ID: TB-ROX-071823-8260-A
Date Collected: 07/18/23 12:00
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-1
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			07/31/23 16:17	1
Acrolein	ND		20	3.3	ug/L			07/31/23 16:17	1
Acrylonitrile	ND		10	2.8	ug/L			07/31/23 16:17	1
Benzene	ND		1.0	0.50	ug/L			07/31/23 16:17	1
Bromobenzene	ND		1.0	0.54	ug/L			07/31/23 16:17	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/31/23 16:17	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/31/23 16:17	1
Bromoform	ND		5.0	0.25	ug/L			07/31/23 16:17	1
Bromomethane	ND		1.0	0.98	ug/L			07/31/23 16:17	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/31/23 16:17	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/31/23 16:17	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/31/23 16:17	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/31/23 16:17	1
Chloroethane	ND		1.0	0.76	ug/L			07/31/23 16:17	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/31/23 16:17	1
Chloroform	ND		1.0	0.90	ug/L			07/31/23 16:17	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/31/23 16:17	1
Chloromethane	ND		1.0	0.90	ug/L			07/31/23 16:17	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/31/23 16:17	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/31/23 16:17	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/31/23 16:17	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/31/23 16:17	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/31/23 16:17	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/31/23 16:17	1
Dichlorodifluoromethane	ND	*+	1.0	0.85	ug/L			07/31/23 16:17	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/31/23 16:17	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/31/23 16:17	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/31/23 16:17	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 16:17	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 16:17	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 16:17	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/31/23 16:17	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/31/23 16:17	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/31/23 16:17	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/31/23 16:17	1
2-Hexanone	ND		25	1.4	ug/L			07/31/23 16:17	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/31/23 16:17	1
Methylene bromide	ND		5.0	0.22	ug/L			07/31/23 16:17	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/31/23 16:17	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/31/23 16:17	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/31/23 16:17	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/31/23 16:17	1
Naphthalene	ND		5.0	3.0	ug/L			07/31/23 16:17	1
n-Butylbenzene	ND	*+	1.0	0.76	ug/L			07/31/23 16:17	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/31/23 16:17	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/31/23 16:17	1
o-Xylene	ND		5.0	0.60	ug/L			07/31/23 16:17	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/31/23 16:17	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/31/23 16:17	1

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

Job ID: 400-240817-1

Client Sample ID: TB-ROX-071823-8260-A
Date Collected: 07/18/23 12:00
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-1
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			07/31/23 16:17	1
Styrene	ND		1.0	1.0	ug/L			07/31/23 16:17	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/31/23 16:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/31/23 16:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/31/23 16:17	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/31/23 16:17	1
Toluene	ND		1.0	0.90	ug/L			07/31/23 16:17	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/31/23 16:17	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/31/23 16:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/31/23 16:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/31/23 16:17	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/31/23 16:17	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/31/23 16:17	1
Trichloroethene	ND		1.0	0.15	ug/L			07/31/23 16:17	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/31/23 16:17	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/31/23 16:17	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/31/23 16:17	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/31/23 16:17	1
Vinyl acetate	ND		25	0.93	ug/L			07/31/23 16:17	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/31/23 16:17	1
Xylenes, Total	ND		10	1.6	ug/L			07/31/23 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*72 - 130*		*07/31/23 16:17*	*1*
Dibromofluoromethane	*114*		*75 - 126*		*07/31/23 16:17*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/31/23 16:17*	*1*

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

Job ID: 400-240817-1

Client Sample ID: TB-ROX-071823-8011-A
Date Collected: 07/18/23 12:00
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-2
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-D bromo-3-Chloropropane	ND		0.051	0.029	ug/L		07/24/23 13:46	07/25/23 18:34	1
1,2-D bromoethane	ND		0.034	0.025	ug/L		07/24/23 13:46	07/25/23 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*121*		*51 - 149*	*07/24/23 13:46*	*07/25/23 18:34*	*1*

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

Job ID: 400-240817-1

Client Sample ID: MW27-ROX-071823
Date Collected: 07/18/23 09:20
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-3
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			07/31/23 16:40	1
Acrolein	ND		20	3.3	ug/L			07/31/23 16:40	1
Acrylonitrile	ND		10	2.8	ug/L			07/31/23 16:40	1
Benzene	ND		1.0	0.50	ug/L			07/31/23 16:40	1
Bromobenzene	ND		1.0	0.54	ug/L			07/31/23 16:40	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/31/23 16:40	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/31/23 16:40	1
Bromoform	ND		5.0	0.25	ug/L			07/31/23 16:40	1
Bromomethane	ND		1.0	0.98	ug/L			07/31/23 16:40	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/31/23 16:40	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/31/23 16:40	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/31/23 16:40	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/31/23 16:40	1
Chloroethane	ND		1.0	0.76	ug/L			07/31/23 16:40	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/31/23 16:40	1
Chloroform	ND		1.0	0.90	ug/L			07/31/23 16:40	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/31/23 16:40	1
Chloromethane	ND		1.0	0.90	ug/L			07/31/23 16:40	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/31/23 16:40	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/31/23 16:40	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/31/23 16:40	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/31/23 16:40	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/31/23 16:40	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/31/23 16:40	1
Dichlorodifluoromethane	ND	*+	1.0	0.85	ug/L			07/31/23 16:40	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/31/23 16:40	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/31/23 16:40	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/31/23 16:40	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 16:40	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 16:40	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 16:40	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/31/23 16:40	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/31/23 16:40	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/31/23 16:40	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/31/23 16:40	1
2-Hexanone	ND		25	1.4	ug/L			07/31/23 16:40	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/31/23 16:40	1
Methylene bromide	ND		5.0	0.22	ug/L			07/31/23 16:40	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/31/23 16:40	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/31/23 16:40	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/31/23 16:40	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/31/23 16:40	1
Naphthalene	ND		5.0	3.0	ug/L			07/31/23 16:40	1
n-Butylbenzene	ND	*+	1.0	0.76	ug/L			07/31/23 16:40	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/31/23 16:40	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/31/23 16:40	1
o-Xylene	ND		5.0	0.60	ug/L			07/31/23 16:40	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/31/23 16:40	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/31/23 16:40	1

Client Sample ID: MW27-ROX-071823
Date Collected: 07/18/23 09:20
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-3
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			07/31/23 16:40	1
Styrene	ND		1.0	1.0	ug/L			07/31/23 16:40	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/31/23 16:40	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/31/23 16:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/31/23 16:40	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/31/23 16:40	1
Toluene	ND		1.0	0.90	ug/L			07/31/23 16:40	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/31/23 16:40	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/31/23 16:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/31/23 16:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/31/23 16:40	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/31/23 16:40	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/31/23 16:40	1
Trichloroethene	ND		1.0	0.15	ug/L			07/31/23 16:40	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/31/23 16:40	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/31/23 16:40	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/31/23 16:40	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/31/23 16:40	1
Vinyl acetate	ND		25	0.93	ug/L			07/31/23 16:40	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/31/23 16:40	1
Xylenes, Total	ND		10	1.6	ug/L			07/31/23 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*07/31/23 16:40*	*1*
Dibromofluoromethane	*113*		*75 - 126*		*07/31/23 16:40*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/31/23 16:40*	*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		07/24/23 10:33	07/26/23 15:03	1
Acenaphthylene	ND		0.21	0.045	ug/L		07/24/23 10:33	07/26/23 15:03	1
Anthracene	ND		0.21	0.048	ug/L		07/24/23 10:33	07/26/23 15:03	1
Benzo[a]anthracene	ND		0.21	0.035	ug/L		07/24/23 10:33	07/26/23 15:03	1
Benzo[a]pyrene	ND		0.21	0.066	ug/L		07/24/23 10:33	07/26/23 15:03	1
Benzo[b]fluoranthene	ND		0.21	0.038	ug/L		07/24/23 10:33	07/26/23 15:03	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		07/24/23 10:33	07/26/23 15:03	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		07/24/23 10:33	07/26/23 15:03	1
Chrysene	ND		0.21	0.034	ug/L		07/24/23 10:33	07/26/23 15:03	1
Dibenz(a,h)anthracene	ND		0.21	0.050	ug/L		07/24/23 10:33	07/26/23 15:03	1
Fluoranthene	ND		0.21	0.035	ug/L		07/24/23 10:33	07/26/23 15:03	1
Fluorene	ND		0.21	0.092	ug/L		07/24/23 10:33	07/26/23 15:03	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.035	ug/L		07/24/23 10:33	07/26/23 15:03	1
Phenanthrene	ND		0.21	0.093	ug/L		07/24/23 10:33	07/26/23 15:03	1
Pyrene	ND		0.21	0.040	ug/L		07/24/23 10:33	07/26/23 15:03	1
1-Methylnaphthalene	ND		0.21	0.083	ug/L		07/24/23 10:33	07/26/23 15:03	1
2-Methylnaphthalene	ND		0.21	0.068	ug/L		07/24/23 10:33	07/26/23 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*110*		*18 - 147*	*07/24/23 10:33*	*07/26/23 15:03*	*1*
2-Fluorobiphenyl	*95*		*15 - 128*	*07/24/23 10:33*	*07/26/23 15:03*	*1*

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

Job ID: 400-240817-1

Client Sample ID: MW27-ROX-071823
Date Collected: 07/18/23 09:20
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-3
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*	*07/24/23 10:33*	*07/26/23 15:03*	*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		07/24/23 10:33	07/25/23 20:06	1
Benzenethiol	ND	*-	10	1.8	ug/L		07/24/23 10:33	07/25/23 20:06	1
Benzoic acid	ND		31	7.5	ug/L		07/24/23 10:33	07/25/23 20:06	1
Benzyl alcohol	ND		10	2.1	ug/L		07/24/23 10:33	07/25/23 20:06	1
Bis(2-chloroethoxy)methane	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 20:06	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		07/24/23 10:33	07/25/23 20:06	1
bis (2-chloroisopropyl) ether	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 20:06	1
Bis(2-ethylhexyl) phthalate	ND		10	5.2	ug/L		07/24/23 10:33	07/25/23 20:06	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/24/23 10:33	07/25/23 20:06	1
Butyl benzyl phthalate	**0.26**	**J**	10	0.20	ug/L		07/24/23 10:33	07/25/23 20:06	1
4-Chloroaniline	ND		10	3.5	ug/L		07/24/23 10:33	07/25/23 20:06	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/24/23 10:33	07/25/23 20:06	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/24/23 10:33	07/25/23 20:06	1
2-Chlorophenol	ND		10	2.3	ug/L		07/24/23 10:33	07/25/23 20:06	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/24/23 10:33	07/25/23 20:06	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 20:06	1
Dibenzofuran	ND		10	0.18	ug/L		07/24/23 10:33	07/25/23 20:06	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/24/23 10:33	07/25/23 20:06	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/24/23 10:33	07/25/23 20:06	1
Diethyl phthalate	ND		10	0.25	ug/L		07/24/23 10:33	07/25/23 20:06	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/24/23 10:33	07/25/23 20:06	1
Dimethyl phthalate	ND		10	0.18	ug/L		07/24/23 10:33	07/25/23 20:06	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/24/23 10:33	07/25/23 20:06	1
4,6-Dinitro-ortho-cresol	ND		10	1.7	ug/L		07/24/23 10:33	07/25/23 20:06	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/24/23 10:33	07/25/23 20:06	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/24/23 10:33	07/25/23 20:06	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/24/23 10:33	07/25/23 20:06	1
Di-n-octyl phthalate	ND		10	0.18	ug/L		07/24/23 10:33	07/25/23 20:06	1
1,4-Dioxane	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 20:06	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 20:06	1
Hexachlorobenzene	ND		10	0.18	ug/L		07/24/23 10:33	07/25/23 20:06	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/24/23 10:33	07/25/23 20:06	1
Hexachloroethane	ND		10	4.3	ug/L		07/24/23 10:33	07/25/23 20:06	1
Indene	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 20:06	1
Isophorone	ND		10	0.14	ug/L		07/24/23 10:33	07/25/23 20:06	1
2-Methylphenol	ND		10	1.9	ug/L		07/24/23 10:33	07/25/23 20:06	1
3 & 4 Methylphenol	ND		21	0.40	ug/L		07/24/23 10:33	07/25/23 20:06	1
2-Nitroaniline	ND		10	2.3	ug/L		07/24/23 10:33	07/25/23 20:06	1
3-Nitroaniline	ND		10	1.9	ug/L		07/24/23 10:33	07/25/23 20:06	1
4-Nitroaniline	ND		10	1.5	ug/L		07/24/23 10:33	07/25/23 20:06	1
Nitrobenzene	ND		10	0.13	ug/L		07/24/23 10:33	07/25/23 20:06	1
2-Nitrophenol	ND		10	5.4	ug/L		07/24/23 10:33	07/25/23 20:06	1
4-Nitrophenol	ND		10	2.2	ug/L		07/24/23 10:33	07/25/23 20:06	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/24/23 10:33	07/25/23 20:06	1

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

Job ID: 400-240817-1

Client Sample ID: MW27-ROX-071823

Date Collected: 07/18/23 09:20
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-3

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	3.4	ug/L		07/24/23 10:33	07/25/23 20:06	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		07/24/23 10:33	07/25/23 20:06	1
Pentachlorophenol	ND		21	1.4	ug/L		07/24/23 10:33	07/25/23 20:06	1
Phenol	ND		10	2.7	ug/L		07/24/23 10:33	07/25/23 20:06	1
Pyridine	ND		10	3.3	ug/L		07/24/23 10:33	07/25/23 20:06	1
Quinoline	ND		10	4.6	ug/L		07/24/23 10:33	07/25/23 20:06	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/24/23 10:33	07/25/23 20:06	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/24/23 10:33	07/25/23 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*46 - 124*	*07/24/23 10:33*	*07/25/23 20:06*	*1*
2-Fluorophenol	*21*		*13 - 113*	*07/24/23 10:33*	*07/25/23 20:06*	*1*
Nitrobenzene-d5	*71*		*36 - 126*	*07/24/23 10:33*	*07/25/23 20:06*	*1*
Phenol-d5	*56*		*17 - 127*	*07/24/23 10:33*	*07/25/23 20:06*	*1*
Terphenyl-d14	*96*		*44 - 149*	*07/24/23 10:33*	*07/25/23 20:06*	*1*
2,4,6-Tribromophenol	*69*		*26 - 150*	*07/24/23 10:33*	*07/25/23 20:06*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.029	0.017	ug/L		07/24/23 13:46	07/25/23 18:56	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/24/23 13:46	07/25/23 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*51 - 149*	*07/24/23 13:46*	*07/25/23 18:56*	*1*

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

Job ID: 400-240817-1

Client Sample ID: MW9-ROX-071823
Date Collected: 07/18/23 10:15
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-4
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			07/31/23 17:03	1
Acrolein	ND		20	3.3	ug/L			07/31/23 17:03	1
Acrylonitrile	ND		10	2.8	ug/L			07/31/23 17:03	1
Benzene	**3.8**		1.0	0.50	ug/L			07/31/23 17:03	1
Bromobenzene	ND		1.0	0.54	ug/L			07/31/23 17:03	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/31/23 17:03	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/31/23 17:03	1
Bromoform	ND		5.0	0.25	ug/L			07/31/23 17:03	1
Bromomethane	ND		1.0	0.98	ug/L			07/31/23 17:03	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/31/23 17:03	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/31/23 17:03	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/31/23 17:03	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/31/23 17:03	1
Chloroethane	ND		1.0	0.76	ug/L			07/31/23 17:03	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/31/23 17:03	1
Chloroform	ND		1.0	0.90	ug/L			07/31/23 17:03	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/31/23 17:03	1
Chloromethane	ND		1.0	0.90	ug/L			07/31/23 17:03	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/31/23 17:03	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/31/23 17:03	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/31/23 17:03	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/31/23 17:03	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/31/23 17:03	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/31/23 17:03	1
Dichlorodifluoromethane	ND	*+	1.0	0.85	ug/L			07/31/23 17:03	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/31/23 17:03	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/31/23 17:03	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/31/23 17:03	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 17:03	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 17:03	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 17:03	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/31/23 17:03	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/31/23 17:03	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/31/23 17:03	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/31/23 17:03	1
2-Hexanone	ND		25	1.4	ug/L			07/31/23 17:03	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/31/23 17:03	1
Methylene bromide	ND		5.0	0.22	ug/L			07/31/23 17:03	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/31/23 17:03	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/31/23 17:03	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/31/23 17:03	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/31/23 17:03	1
Naphthalene	ND		5.0	3.0	ug/L			07/31/23 17:03	1
n-Butylbenzene	ND	*+	1.0	0.76	ug/L			07/31/23 17:03	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/31/23 17:03	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/31/23 17:03	1
o-Xylene	ND		5.0	0.60	ug/L			07/31/23 17:03	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/31/23 17:03	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/31/23 17:03	1

Client Sample ID: MW9-ROX-071823
Date Collected: 07/18/23 10:15
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-4
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			07/31/23 17:03	1
Styrene	ND		1.0	1.0	ug/L			07/31/23 17:03	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/31/23 17:03	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/31/23 17:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/31/23 17:03	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/31/23 17:03	1
Toluene	ND		1.0	0.90	ug/L			07/31/23 17:03	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/31/23 17:03	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/31/23 17:03	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/31/23 17:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/31/23 17:03	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/31/23 17:03	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/31/23 17:03	1
Trichloroethene	ND		1.0	0.15	ug/L			07/31/23 17:03	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/31/23 17:03	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/31/23 17:03	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/31/23 17:03	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/31/23 17:03	1
Vinyl acetate	ND		25	0.93	ug/L			07/31/23 17:03	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/31/23 17:03	1
Xylenes, Total	ND		10	1.6	ug/L			07/31/23 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/31/23 17:03*	*1*
Dibromofluoromethane	*115*		*75 - 126*		*07/31/23 17:03*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*07/31/23 17:03*	*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		07/24/23 10:33	07/26/23 15:24	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/24/23 10:33	07/26/23 15:24	1
Anthracene	ND		0.20	0.048	ug/L		07/24/23 10:33	07/26/23 15:24	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/24/23 10:33	07/26/23 15:24	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		07/24/23 10:33	07/26/23 15:24	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/24/23 10:33	07/26/23 15:24	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/24/23 10:33	07/26/23 15:24	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		07/24/23 10:33	07/26/23 15:24	1
Chrysene	ND		0.20	0.033	ug/L		07/24/23 10:33	07/26/23 15:24	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		07/24/23 10:33	07/26/23 15:24	1
Fluoranthene	ND		0.20	0.034	ug/L		07/24/23 10:33	07/26/23 15:24	1
Fluorene	ND		0.20	0.090	ug/L		07/24/23 10:33	07/26/23 15:24	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/24/23 10:33	07/26/23 15:24	1
Phenanthrene	ND		0.20	0.091	ug/L		07/24/23 10:33	07/26/23 15:24	1
Pyrene	ND		0.20	0.039	ug/L		07/24/23 10:33	07/26/23 15:24	1
1-Methylnaphthalene	ND		0.20	0.081	ug/L		07/24/23 10:33	07/26/23 15:24	1
2-Methylnaphthalene	ND		0.20	0.067	ug/L		07/24/23 10:33	07/26/23 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*79*		*18 - 147*	*07/24/23 10:33*	*07/26/23 15:24*	*1*
2-Fluorobiphenyl	*88*		*15 - 128*	*07/24/23 10:33*	*07/26/23 15:24*	*1*

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

Job ID: 400-240817-1

Client Sample ID: MW9-ROX-071823
Date Collected: 07/18/23 10:15
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*86*		*10 - 144*	*07/24/23 10:33*	*07/26/23 15:24*	*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		07/24/23 10:33	07/25/23 20:33	1
Benzenethiol	ND	*-	10	1.7	ug/L		07/24/23 10:33	07/25/23 20:33	1
Benzoic acid	ND		30	7.4	ug/L		07/24/23 10:33	07/25/23 20:33	1
Benzyl alcohol	ND		10	2.0	ug/L		07/24/23 10:33	07/25/23 20:33	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/24/23 10:33	07/25/23 20:33	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/24/23 10:33	07/25/23 20:33	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/24/23 10:33	07/25/23 20:33	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/24/23 10:33	07/25/23 20:33	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/24/23 10:33	07/25/23 20:33	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/24/23 10:33	07/25/23 20:33	1
4-Chloroaniline	ND		10	3.4	ug/L		07/24/23 10:33	07/25/23 20:33	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/24/23 10:33	07/25/23 20:33	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/24/23 10:33	07/25/23 20:33	1
2-Chlorophenol	ND		10	2.2	ug/L		07/24/23 10:33	07/25/23 20:33	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/24/23 10:33	07/25/23 20:33	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 20:33	1
Dibenzofuran	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 20:33	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/24/23 10:33	07/25/23 20:33	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/24/23 10:33	07/25/23 20:33	1
Diethyl phthalate	ND		10	0.24	ug/L		07/24/23 10:33	07/25/23 20:33	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/24/23 10:33	07/25/23 20:33	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 20:33	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/24/23 10:33	07/25/23 20:33	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/24/23 10:33	07/25/23 20:33	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/24/23 10:33	07/25/23 20:33	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/24/23 10:33	07/25/23 20:33	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/24/23 10:33	07/25/23 20:33	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 20:33	1
1,4-Dioxane	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 20:33	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 20:33	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 20:33	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/24/23 10:33	07/25/23 20:33	1
Hexachloroethane	ND		10	4.2	ug/L		07/24/23 10:33	07/25/23 20:33	1
Indene	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 20:33	1
Isophorone	ND		10	0.14	ug/L		07/24/23 10:33	07/25/23 20:33	1
2-Methylphenol	ND		10	1.8	ug/L		07/24/23 10:33	07/25/23 20:33	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/24/23 10:33	07/25/23 20:33	1
2-Nitroaniline	ND		10	2.2	ug/L		07/24/23 10:33	07/25/23 20:33	1
3-Nitroaniline	ND		10	1.8	ug/L		07/24/23 10:33	07/25/23 20:33	1
4-Nitroaniline	ND		10	1.5	ug/L		07/24/23 10:33	07/25/23 20:33	1
Nitrobenzene	ND		10	0.13	ug/L		07/24/23 10:33	07/25/23 20:33	1
2-Nitrophenol	ND		10	5.3	ug/L		07/24/23 10:33	07/25/23 20:33	1
4-Nitrophenol	ND		10	2.1	ug/L		07/24/23 10:33	07/25/23 20:33	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/24/23 10:33	07/25/23 20:33	1

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

Job ID: 400-240817-1

Client Sample ID: MW9-ROX-071823

Date Collected: 07/18/23 10:15
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-4

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	3.3	ug/L		07/24/23 10:33	07/25/23 20:33	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/24/23 10:33	07/25/23 20:33	1
Pentachlorophenol	ND		20	1.4	ug/L		07/24/23 10:33	07/25/23 20:33	1
Phenol	ND		10	2.6	ug/L		07/24/23 10:33	07/25/23 20:33	1
Pyridine	ND		10	3.2	ug/L		07/24/23 10:33	07/25/23 20:33	1
Quinoline	ND		10	4.6	ug/L		07/24/23 10:33	07/25/23 20:33	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/24/23 10:33	07/25/23 20:33	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/24/23 10:33	07/25/23 20:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*46 - 124*	*07/24/23 10:33*	*07/25/23 20:33*	*1*
2-Fluorophenol	*26*		*13 - 113*	*07/24/23 10:33*	*07/25/23 20:33*	*1*
Nitrobenzene-d5	*71*		*36 - 126*	*07/24/23 10:33*	*07/25/23 20:33*	*1*
Phenol-d5	*52*		*17 - 127*	*07/24/23 10:33*	*07/25/23 20:33*	*1*
Terphenyl-d14	*72*		*44 - 149*	*07/24/23 10:33*	*07/25/23 20:33*	*1*
2,4,6-Tribromophenol	*65*		*26 - 150*	*07/24/23 10:33*	*07/25/23 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-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/24/23 13:46	07/25/23 19:18	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/24/23 13:46	07/25/23 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*51 - 149*	*07/24/23 13:46*	*07/25/23 19:18*	*1*

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

Job ID: 400-240817-1

Client Sample ID: MW10-ROX-071823

Date Collected: 07/18/23 11:15
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-5

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			07/31/23 17:26	1
Acrolein	ND		20	3.3	ug/L			07/31/23 17:26	1
Acrylonitrile	ND		10	2.8	ug/L			07/31/23 17:26	1
Benzene	**0.63**	**J**	1.0	0.50	ug/L			07/31/23 17:26	1
Bromobenzene	ND		1.0	0.54	ug/L			07/31/23 17:26	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/31/23 17:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/31/23 17:26	1
Bromoform	ND		5.0	0.25	ug/L			07/31/23 17:26	1
Bromomethane	ND		1.0	0.98	ug/L			07/31/23 17:26	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/31/23 17:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/31/23 17:26	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/31/23 17:26	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/31/23 17:26	1
Chloroethane	ND		1.0	0.76	ug/L			07/31/23 17:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/31/23 17:26	1
Chloroform	ND		1.0	0.90	ug/L			07/31/23 17:26	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/31/23 17:26	1
Chloromethane	ND		1.0	0.90	ug/L			07/31/23 17:26	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/31/23 17:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/31/23 17:26	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/31/23 17:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/31/23 17:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/31/23 17:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/31/23 17:26	1
Dichlorodifluoromethane	ND	*+	1.0	0.85	ug/L			07/31/23 17:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/31/23 17:26	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/31/23 17:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/31/23 17:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 17:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 17:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 17:26	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/31/23 17:26	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/31/23 17:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/31/23 17:26	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/31/23 17:26	1
2-Hexanone	ND		25	1.4	ug/L			07/31/23 17:26	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/31/23 17:26	1
Methylene bromide	ND		5.0	0.22	ug/L			07/31/23 17:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/31/23 17:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/31/23 17:26	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/31/23 17:26	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/31/23 17:26	1
Naphthalene	ND		5.0	3.0	ug/L			07/31/23 17:26	1
n-Butylbenzene	ND	*+	1.0	0.76	ug/L			07/31/23 17:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/31/23 17:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/31/23 17:26	1
o-Xylene	ND		5.0	0.60	ug/L			07/31/23 17:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/31/23 17:26	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/31/23 17:26	1

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

Job ID: 400-240817-1

Client Sample ID: MW10-ROX-071823
Date Collected: 07/18/23 11:15
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-5
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			07/31/23 17:26	1
Styrene	ND		1.0	1.0	ug/L			07/31/23 17:26	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/31/23 17:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/31/23 17:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/31/23 17:26	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/31/23 17:26	1
Toluene	ND		1.0	0.90	ug/L			07/31/23 17:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/31/23 17:26	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/31/23 17:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/31/23 17:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/31/23 17:26	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/31/23 17:26	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/31/23 17:26	1
Trichloroethene	ND		1.0	0.15	ug/L			07/31/23 17:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/31/23 17:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/31/23 17:26	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/31/23 17:26	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/31/23 17:26	1
Vinyl acetate	ND		25	0.93	ug/L			07/31/23 17:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/31/23 17:26	1
Xylenes, Total	ND		10	1.6	ug/L			07/31/23 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*07/31/23 17:26*	*1*
Dibromofluoromethane	*115*		*75 - 126*		*07/31/23 17:26*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*07/31/23 17:26*	*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		07/24/23 10:33	07/26/23 15:46	1
Acenaphthylene	ND		0.20	0.043	ug/L		07/24/23 10:33	07/26/23 15:46	1
Anthracene	ND		0.20	0.046	ug/L		07/24/23 10:33	07/26/23 15:46	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		07/24/23 10:33	07/26/23 15:46	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/24/23 10:33	07/26/23 15:46	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		07/24/23 10:33	07/26/23 15:46	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/24/23 10:33	07/26/23 15:46	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		07/24/23 10:33	07/26/23 15:46	1
Chrysene	ND		0.20	0.032	ug/L		07/24/23 10:33	07/26/23 15:46	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		07/24/23 10:33	07/26/23 15:46	1
Fluoranthene	ND		0.20	0.033	ug/L		07/24/23 10:33	07/26/23 15:46	1
Fluorene	ND		0.20	0.088	ug/L		07/24/23 10:33	07/26/23 15:46	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		07/24/23 10:33	07/26/23 15:46	1
Phenanthrene	ND		0.20	0.089	ug/L		07/24/23 10:33	07/26/23 15:46	1
Pyrene	ND		0.20	0.038	ug/L		07/24/23 10:33	07/26/23 15:46	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		07/24/23 10:33	07/26/23 15:46	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		07/24/23 10:33	07/26/23 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*103*		*18 - 147*	*07/24/23 10:33*	*07/26/23 15:46*	*1*
2-Fluorobiphenyl	*88*		*15 - 128*	*07/24/23 10:33*	*07/26/23 15:46*	*1*

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

Job ID: 400-240817-1

Client Sample ID: MW10-ROX-071823
Date Collected: 07/18/23 11:15
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-5
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*	*07/24/23 10:33*	*07/26/23 15:46*	*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		07/24/23 10:33	07/25/23 21:00	1
Benzenethiol	ND	*-	9.8	1.7	ug/L		07/24/23 10:33	07/25/23 21:00	1
Benzoic acid	ND		30	7.2	ug/L		07/24/23 10:33	07/25/23 21:00	1
Benzyl alcohol	ND		9.8	2.0	ug/L		07/24/23 10:33	07/25/23 21:00	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		07/24/23 10:33	07/25/23 21:00	1
Bis(2-chloroethyl)ether	ND		9.8	2.7	ug/L		07/24/23 10:33	07/25/23 21:00	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		07/24/23 10:33	07/25/23 21:00	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		07/24/23 10:33	07/25/23 21:00	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		07/24/23 10:33	07/25/23 21:00	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		07/24/23 10:33	07/25/23 21:00	1
4-Chloroaniline	ND		9.8	3.3	ug/L		07/24/23 10:33	07/25/23 21:00	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		07/24/23 10:33	07/25/23 21:00	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		07/24/23 10:33	07/25/23 21:00	1
2-Chlorophenol	ND		9.8	2.2	ug/L		07/24/23 10:33	07/25/23 21:00	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		07/24/23 10:33	07/25/23 21:00	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		07/24/23 10:33	07/25/23 21:00	1
Dibenzofuran	ND		9.8	0.17	ug/L		07/24/23 10:33	07/25/23 21:00	1
3,3'-Dichlorobenzidine	ND		9.8	2.6	ug/L		07/24/23 10:33	07/25/23 21:00	1
2,4-Dichlorophenol	ND		9.8	3.0	ug/L		07/24/23 10:33	07/25/23 21:00	1
Diethyl phthalate	**0.31**	**J**	9.8	0.24	ug/L		07/24/23 10:33	07/25/23 21:00	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		07/24/23 10:33	07/25/23 21:00	1
Dimethyl phthalate	ND		9.8	0.17	ug/L		07/24/23 10:33	07/25/23 21:00	1
Di-n-butyl phthalate	ND		9.8	2.7	ug/L		07/24/23 10:33	07/25/23 21:00	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		07/24/23 10:33	07/25/23 21:00	1
2,4-Dinitrophenol	ND		30	3.3	ug/L		07/24/23 10:33	07/25/23 21:00	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		07/24/23 10:33	07/25/23 21:00	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		07/24/23 10:33	07/25/23 21:00	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		07/24/23 10:33	07/25/23 21:00	1
1,4-Dioxane	ND		9.8	0.98	ug/L		07/24/23 10:33	07/25/23 21:00	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		07/24/23 10:33	07/25/23 21:00	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		07/24/23 10:33	07/25/23 21:00	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/24/23 10:33	07/25/23 21:00	1
Hexachloroethane	ND		9.8	4.1	ug/L		07/24/23 10:33	07/25/23 21:00	1
Indene	ND		9.8	0.98	ug/L		07/24/23 10:33	07/25/23 21:00	1
Isophorone	ND		9.8	0.14	ug/L		07/24/23 10:33	07/25/23 21:00	1
2-Methylphenol	ND		9.8	1.8	ug/L		07/24/23 10:33	07/25/23 21:00	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		07/24/23 10:33	07/25/23 21:00	1
2-Nitroaniline	ND		9.8	2.2	ug/L		07/24/23 10:33	07/25/23 21:00	1
3-Nitroaniline	ND		9.8	1.8	ug/L		07/24/23 10:33	07/25/23 21:00	1
4-Nitroaniline	ND		9.8	1.5	ug/L		07/24/23 10:33	07/25/23 21:00	1
Nitrobenzene	ND		9.8	0.13	ug/L		07/24/23 10:33	07/25/23 21:00	1
2-Nitrophenol	ND		9.8	5.1	ug/L		07/24/23 10:33	07/25/23 21:00	1
4-Nitrophenol	ND		9.8	2.1	ug/L		07/24/23 10:33	07/25/23 21:00	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		07/24/23 10:33	07/25/23 21:00	1

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

Job ID: 400-240817-1

Client Sample ID: MW10-ROX-071823

Date Collected: 07/18/23 11:15
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-5

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		9.8	3.2	ug/L		07/24/23 10:33	07/25/23 21:00	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		07/24/23 10:33	07/25/23 21:00	1
Pentachlorophenol	ND		20	1.4	ug/L		07/24/23 10:33	07/25/23 21:00	1
Phenol	ND		9.8	2.6	ug/L		07/24/23 10:33	07/25/23 21:00	1
Pyridine	ND		9.8	3.1	ug/L		07/24/23 10:33	07/25/23 21:00	1
Quinoline	ND		9.8	4.4	ug/L		07/24/23 10:33	07/25/23 21:00	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		07/24/23 10:33	07/25/23 21:00	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		07/24/23 10:33	07/25/23 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*46 - 124*	*07/24/23 10:33*	*07/25/23 21:00*	*1*
2-Fluorophenol	*16*		*13 - 113*	*07/24/23 10:33*	*07/25/23 21:00*	*1*
Nitrobenzene-d5	*62*		*36 - 126*	*07/24/23 10:33*	*07/25/23 21:00*	*1*
Phenol-d5	*37*		*17 - 127*	*07/24/23 10:33*	*07/25/23 21:00*	*1*
Terphenyl-d14	*81*		*44 - 149*	*07/24/23 10:33*	*07/25/23 21:00*	*1*
2,4,6-Tribromophenol	*46*		*26 - 150*	*07/24/23 10:33*	*07/25/23 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-D bromo-3-Chloropropane	ND		0.029	0.017	ug/L		07/24/23 13:46	07/25/23 19:39	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/24/23 13:46	07/25/23 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*63*		*51 - 149*	*07/24/23 13:46*	*07/25/23 19:39*	*1*

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

Job ID: 400-240817-1

Client Sample ID: MW2-ROX-071823
Date Collected: 07/18/23 13:00
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-6
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			08/01/23 19:40	1
Acrolein	ND		20	3.3	ug/L			07/31/23 17:49	1
Acrylonitrile	ND		10	2.8	ug/L			07/31/23 17:49	1
Benzene	**1.7**		1.0	0.50	ug/L			07/31/23 17:49	1
Bromobenzene	ND		1.0	0.54	ug/L			07/31/23 17:49	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/31/23 17:49	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/31/23 17:49	1
Bromoform	ND		5.0	0.25	ug/L			07/31/23 17:49	1
Bromomethane	ND		1.0	0.98	ug/L			07/31/23 17:49	1
2-Butanone (MEK)	**10**	**J**	25	2.6	ug/L			07/31/23 17:49	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/31/23 17:49	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/31/23 17:49	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/31/23 17:49	1
Chloroethane	ND		1.0	0.76	ug/L			07/31/23 17:49	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/31/23 17:49	1
Chloroform	ND		1.0	0.90	ug/L			07/31/23 17:49	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/31/23 17:49	1
Chloromethane	ND		1.0	0.90	ug/L			07/31/23 17:49	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/31/23 17:49	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/31/23 17:49	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/31/23 17:49	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/31/23 17:49	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/31/23 17:49	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/31/23 17:49	1
Dichlorodifluoromethane	ND	*+	1.0	0.85	ug/L			07/31/23 17:49	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/31/23 17:49	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/31/23 17:49	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/31/23 17:49	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 17:49	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 17:49	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 17:49	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/31/23 17:49	1
Ethylbenzene	**190**		1.0	0.50	ug/L			07/31/23 17:49	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/31/23 17:49	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/31/23 17:49	1
2-Hexanone	ND		25	1.4	ug/L			07/31/23 17:49	1
Isopropylbenzene	**42**		1.0	0.53	ug/L			07/31/23 17:49	1
Methylene bromide	ND		5.0	0.22	ug/L			07/31/23 17:49	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/31/23 17:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/31/23 17:49	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/31/23 17:49	1
m-Xylene & p-Xylene	**100**		5.0	0.63	ug/L			07/31/23 17:49	1
Naphthalene	**30**		5.0	3.0	ug/L			07/31/23 17:49	1
n-Butylbenzene	**4.5**		1.0	0.76	ug/L			08/01/23 19:40	1
N-Propylbenzene	**56**		1.0	0.69	ug/L			07/31/23 17:49	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/31/23 17:49	1
o-Xylene	**8.8**		5.0	0.60	ug/L			07/31/23 17:49	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/31/23 17:49	1
p-Isopropyltoluene	**3.2**		1.0	0.71	ug/L			07/31/23 17:49	1

Client Sample ID: MW2-ROX-071823
Date Collected: 07/18/23 13:00
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-6
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	**3.2**		1.0	0.70	ug/L			07/31/23 17:49	1
Styrene	ND		1.0	1.0	ug/L			07/31/23 17:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/31/23 17:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/31/23 17:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/31/23 17:49	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/31/23 17:49	1
Toluene	**3.7**		1.0	0.90	ug/L			07/31/23 17:49	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/31/23 17:49	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/31/23 17:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/31/23 17:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/31/23 17:49	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/31/23 17:49	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/31/23 17:49	1
Trichloroethene	ND		1.0	0.15	ug/L			07/31/23 17:49	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/31/23 17:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/31/23 17:49	1
1,2,4-Trimethylbenzene	**32**		1.0	0.82	ug/L			07/31/23 17:49	1
1,3,5-Trimethylbenzene	**26**		1.0	0.56	ug/L			07/31/23 17:49	1
Vinyl acetate	ND		25	0.93	ug/L			07/31/23 17:49	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/31/23 17:49	1
Xylenes, Total	**110**		10	1.6	ug/L			07/31/23 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/31/23 17:49*	*1*
4-Bromofluorobenzene	*97*		*72 - 130*		*08/01/23 19:40*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*07/31/23 17:49*	*1*
Dibromofluoromethane	*76*		*75 - 126*		*08/01/23 19:40*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*07/31/23 17:49*	*1*
Toluene-d8 (Surr)	*104*		*64 - 132*		*08/01/23 19:40*	*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		07/24/23 10:33	07/26/23 16:08	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/24/23 10:33	07/26/23 16:08	1
Anthracene	ND		0.20	0.048	ug/L		07/24/23 10:33	07/26/23 16:08	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/24/23 10:33	07/26/23 16:08	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		07/24/23 10:33	07/26/23 16:08	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/24/23 10:33	07/26/23 16:08	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/24/23 10:33	07/26/23 16:08	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		07/24/23 10:33	07/26/23 16:08	1
Chrysene	ND		0.20	0.033	ug/L		07/24/23 10:33	07/26/23 16:08	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		07/24/23 10:33	07/26/23 16:08	1
Fluoranthene	ND		0.20	0.034	ug/L		07/24/23 10:33	07/26/23 16:08	1
Fluorene	ND		0.20	0.090	ug/L		07/24/23 10:33	07/26/23 16:08	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/24/23 10:33	07/26/23 16:08	1
Phenanthrene	ND		0.20	0.091	ug/L		07/24/23 10:33	07/26/23 16:08	1
Pyrene	ND		0.20	0.039	ug/L		07/24/23 10:33	07/26/23 16:08	1
1-Methylnaphthalene	**9.0**		0.20	0.081	ug/L		07/24/23 10:33	07/26/23 16:08	1
2-Methylnaphthalene	**17**		0.20	0.067	ug/L		07/24/23 10:33	07/26/23 16:08	1

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

Job ID: 400-240817-1

Client Sample ID: MW2-ROX-071823
Date Collected: 07/18/23 13:00
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-6
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	85		18 - 147	07/24/23 10:33	07/26/23 16:08	1
2-Fluorobiphenyl	73		15 - 128	07/24/23 10:33	07/26/23 16:08	1
Nitrobenzene-d5	78		10 - 144	07/24/23 10:33	07/26/23 16:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/24/23 10:33	07/25/23 21:26	1
Benzenethiol	ND	*-	10	1.7	ug/L		07/24/23 10:33	07/25/23 21:26	1
Benzoic acid	ND		30	7.4	ug/L		07/24/23 10:33	07/25/23 21:26	1
Benzyl alcohol	ND		10	2.0	ug/L		07/24/23 10:33	07/25/23 21:26	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/24/23 10:33	07/25/23 21:26	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/24/23 10:33	07/25/23 21:26	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/24/23 10:33	07/25/23 21:26	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/24/23 10:33	07/25/23 21:26	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/24/23 10:33	07/25/23 21:26	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/24/23 10:33	07/25/23 21:26	1
4-Chloroaniline	ND		10	3.4	ug/L		07/24/23 10:33	07/25/23 21:26	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/24/23 10:33	07/25/23 21:26	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/24/23 10:33	07/25/23 21:26	1
2-Chlorophenol	ND		10	2.2	ug/L		07/24/23 10:33	07/25/23 21:26	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/24/23 10:33	07/25/23 21:26	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 21:26	1
Dibenzofuran	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 21:26	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/24/23 10:33	07/25/23 21:26	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/24/23 10:33	07/25/23 21:26	1
Diethyl phthalate	**0.62**	**J**	10	0.24	ug/L		07/24/23 10:33	07/25/23 21:26	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/24/23 10:33	07/25/23 21:26	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 21:26	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/24/23 10:33	07/25/23 21:26	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/24/23 10:33	07/25/23 21:26	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/24/23 10:33	07/25/23 21:26	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/24/23 10:33	07/25/23 21:26	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/24/23 10:33	07/25/23 21:26	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 21:26	1
1,4-Dioxane	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 21:26	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 21:26	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 21:26	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/24/23 10:33	07/25/23 21:26	1
Hexachloroethane	ND		10	4.3	ug/L		07/24/23 10:33	07/25/23 21:26	1
Indene	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 21:26	1
Isophorone	ND		10	0.14	ug/L		07/24/23 10:33	07/25/23 21:26	1
2-Methylphenol	ND		10	1.8	ug/L		07/24/23 10:33	07/25/23 21:26	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/24/23 10:33	07/25/23 21:26	1
2-Nitroaniline	ND		10	2.2	ug/L		07/24/23 10:33	07/25/23 21:26	1
3-Nitroaniline	ND		10	1.8	ug/L		07/24/23 10:33	07/25/23 21:26	1
4-Nitroaniline	ND		10	1.5	ug/L		07/24/23 10:33	07/25/23 21:26	1
Nitrobenzene	ND		10	0.13	ug/L		07/24/23 10:33	07/25/23 21:26	1
2-Nitrophenol	ND		10	5.3	ug/L		07/24/23 10:33	07/25/23 21:26	1
4-Nitrophenol	ND		10	2.1	ug/L		07/24/23 10:33	07/25/23 21:26	1

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

Job ID: 400-240817-1

Client Sample ID: MW2-ROX-071823

Date Collected: 07/18/23 13:00
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-6

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		10	3.5	ug/L		07/24/23 10:33	07/25/23 21:26	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/24/23 10:33	07/25/23 21:26	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/24/23 10:33	07/25/23 21:26	1
Pentachlorophenol	ND		20	1.4	ug/L		07/24/23 10:33	07/25/23 21:26	1
Phenol	ND		10	2.6	ug/L		07/24/23 10:33	07/25/23 21:26	1
Pyridine	ND		10	3.2	ug/L		07/24/23 10:33	07/25/23 21:26	1
Quinoline	ND		10	4.6	ug/L		07/24/23 10:33	07/25/23 21:26	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/24/23 10:33	07/25/23 21:26	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/24/23 10:33	07/25/23 21:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*46 - 124*	*07/24/23 10:33*	*07/25/23 21:26*	*1*
2-Fluorophenol	*10*	*S1-*	*13 - 113*	*07/24/23 10:33*	*07/25/23 21:26*	*1*
Nitrobenzene-d5	*64*		*36 - 126*	*07/24/23 10:33*	*07/25/23 21:26*	*1*
Phenol-d5	*36*		*17 - 127*	*07/24/23 10:33*	*07/25/23 21:26*	*1*
Terphenyl-d14	*85*		*44 - 149*	*07/24/23 10:33*	*07/25/23 21:26*	*1*
2,4,6-Tribromophenol	*60*		*26 - 150*	*07/24/23 10:33*	*07/25/23 21:26*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/24/23 13:46	07/25/23 20:01	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/24/23 13:46	07/25/23 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*73*		*51 - 149*	*07/24/23 13:46*	*07/25/23 20:01*	*1*

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

Job ID: 400-240817-1

Client Sample ID: TB-ROX-071823-8260-B
Date Collected: 07/18/23 12:00
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-7
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			07/31/23 18:12	1
Acrolein	ND		20	3.3	ug/L			07/31/23 18:12	1
Acrylonitrile	ND		10	2.8	ug/L			07/31/23 18:12	1
Benzene	ND		1.0	0.50	ug/L			07/31/23 18:12	1
Bromobenzene	ND		1.0	0.54	ug/L			07/31/23 18:12	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/31/23 18:12	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/31/23 18:12	1
Bromoform	ND		5.0	0.25	ug/L			07/31/23 18:12	1
Bromomethane	ND		1.0	0.98	ug/L			07/31/23 18:12	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/31/23 18:12	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/31/23 18:12	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/31/23 18:12	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/31/23 18:12	1
Chloroethane	ND		1.0	0.76	ug/L			07/31/23 18:12	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/31/23 18:12	1
Chloroform	ND		1.0	0.90	ug/L			07/31/23 18:12	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/31/23 18:12	1
Chloromethane	ND		1.0	0.90	ug/L			07/31/23 18:12	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/31/23 18:12	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/31/23 18:12	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/31/23 18:12	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/31/23 18:12	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/31/23 18:12	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/31/23 18:12	1
Dichlorodifluoromethane	ND	*+	1.0	0.85	ug/L			07/31/23 18:12	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/31/23 18:12	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/31/23 18:12	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/31/23 18:12	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 18:12	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 18:12	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 18:12	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/31/23 18:12	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/31/23 18:12	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/31/23 18:12	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/31/23 18:12	1
2-Hexanone	ND		25	1.4	ug/L			07/31/23 18:12	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/31/23 18:12	1
Methylene bromide	ND		5.0	0.22	ug/L			07/31/23 18:12	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/31/23 18:12	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/31/23 18:12	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/31/23 18:12	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/31/23 18:12	1
Naphthalene	ND		5.0	3.0	ug/L			07/31/23 18:12	1
n-Butylbenzene	ND	*+	1.0	0.76	ug/L			07/31/23 18:12	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/31/23 18:12	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/31/23 18:12	1
o-Xylene	ND		5.0	0.60	ug/L			07/31/23 18:12	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/31/23 18:12	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/31/23 18:12	1

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

Job ID: 400-240817-1

Client Sample ID: TB-ROX-071823-8260-B
Date Collected: 07/18/23 12:00
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-7
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			07/31/23 18:12	1
Styrene	ND		1.0	1.0	ug/L			07/31/23 18:12	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/31/23 18:12	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/31/23 18:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/31/23 18:12	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/31/23 18:12	1
Toluene	ND		1.0	0.90	ug/L			07/31/23 18:12	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/31/23 18:12	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/31/23 18:12	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/31/23 18:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/31/23 18:12	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/31/23 18:12	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/31/23 18:12	1
Trichloroethene	ND		1.0	0.15	ug/L			07/31/23 18:12	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/31/23 18:12	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/31/23 18:12	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/31/23 18:12	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/31/23 18:12	1
Vinyl acetate	ND		25	0.93	ug/L			07/31/23 18:12	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/31/23 18:12	1
Xylenes, Total	ND		10	1.6	ug/L			07/31/23 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*72 - 130*		*07/31/23 18:12*	*1*
Dibromofluoromethane	*115*		*75 - 126*		*07/31/23 18:12*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*07/31/23 18:12*	*1*

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

Job ID: 400-240817-1

Client Sample ID: TB-ROX-071823-8011-B
Date Collected: 07/18/23 12:00
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-8
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-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/24/23 13:46	07/25/23 20:23	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/24/23 13:46	07/25/23 20:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*75*		*51 - 149*	*07/24/23 13:46*	*07/25/23 20:23*	*1*

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

Job ID: 400-240817-1

Client Sample ID: P59-ROX-071823
Date Collected: 07/18/23 10:05
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**150**		130	50	ug/L			07/31/23 20:06	5
Acrolein	ND		100	17	ug/L			07/31/23 20:06	5
Acrylonitrile	ND		50	14	ug/L			07/31/23 20:06	5
Benzene	**970**		5.0	2.5	ug/L			07/31/23 20:06	5
Bromobenzene	ND		5.0	2.7	ug/L			07/31/23 20:06	5
Bromochloromethane	ND		5.0	1.1	ug/L			07/31/23 20:06	5
Bromodichloromethane	ND		5.0	2.5	ug/L			07/31/23 20:06	5
Bromoform	ND		25	1.3	ug/L			07/31/23 20:06	5
Bromomethane	ND		5.0	4.9	ug/L			07/31/23 20:06	5
2-Butanone (MEK)	ND		130	13	ug/L			07/31/23 20:06	5
Carbon disulfide	ND		5.0	2.5	ug/L			07/31/23 20:06	5
Carbon tetrachloride	ND		5.0	0.95	ug/L			07/31/23 20:06	5
Chlorobenzene	ND		5.0	0.75	ug/L			07/31/23 20:06	5
Chloroethane	ND		5.0	3.8	ug/L			07/31/23 20:06	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			07/31/23 20:06	5
Chloroform	ND		5.0	4.5	ug/L			07/31/23 20:06	5
1-Chlorohexane	ND		5.0	1.6	ug/L			07/31/23 20:06	5
Chloromethane	ND		5.0	4.5	ug/L			07/31/23 20:06	5
cis-1,2-Dichloroethene	ND		5.0	1.0	ug/L			07/31/23 20:06	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			07/31/23 20:06	5
Dibromochloromethane	ND		5.0	1.2	ug/L			07/31/23 20:06	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			07/31/23 20:06	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			07/31/23 20:06	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			07/31/23 20:06	5
Dichlorodifluoromethane	ND	*+	5.0	4.3	ug/L			07/31/23 20:06	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			07/31/23 20:06	5
1,2-Dichloroethane	ND		5.0	0.95	ug/L			07/31/23 20:06	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			07/31/23 20:06	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			07/31/23 20:06	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			07/31/23 20:06	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			07/31/23 20:06	5
1,1-Dichloropropene	ND		5.0	2.5	ug/L			07/31/23 20:06	5
Ethylbenzene	**38**		5.0	2.5	ug/L			07/31/23 20:06	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			07/31/23 20:06	5
Hexachlorobutadiene	ND		25	4.5	ug/L			07/31/23 20:06	5
2-Hexanone	ND		130	7.0	ug/L			07/31/23 20:06	5
Isopropylbenzene	**17**		5.0	2.7	ug/L			07/31/23 20:06	5
Methylene bromide	ND		25	1.1	ug/L			07/31/23 20:06	5
Methylene Chloride	ND		25	15	ug/L			07/31/23 20:06	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			07/31/23 20:06	5
Methyl tert-butyl ether	ND		5.0	1.1	ug/L			07/31/23 20:06	5
m-Xylene & p-Xylene	**52**		25	3.2	ug/L			07/31/23 20:06	5
Naphthalene	**29**		25	15	ug/L			07/31/23 20:06	5
n-Butylbenzene	ND	*+	5.0	3.8	ug/L			07/31/23 20:06	5
N-Propylbenzene	**23**		5.0	3.5	ug/L			07/31/23 20:06	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			07/31/23 20:06	5
o-Xylene	ND		25	3.0	ug/L			07/31/23 20:06	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			07/31/23 20:06	5
p-Isopropyltoluene	ND		5.0	3.6	ug/L			07/31/23 20:06	5

Client Sample ID: P59-ROX-071823
Date Collected: 07/18/23 10:05
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-9
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		5.0	3.5	ug/L			07/31/23 20:06	5
Styrene	ND		5.0	5.0	ug/L			07/31/23 20:06	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			07/31/23 20:06	5
1,1,1,2-Tetrachloroethane	ND		5.0	0.80	ug/L			07/31/23 20:06	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			07/31/23 20:06	5
Tetrachloroethene	ND		5.0	4.5	ug/L			07/31/23 20:06	5
Toluene	**43**		5.0	4.5	ug/L			07/31/23 20:06	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			07/31/23 20:06	5
trans-1,3-Dichloropropene	ND		25	1.0	ug/L			07/31/23 20:06	5
1,2,3-Trichlorobenzene	ND		5.0	4.5	ug/L			07/31/23 20:06	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			07/31/23 20:06	5
1,1,1-Trichloroethane	ND		5.0	0.90	ug/L			07/31/23 20:06	5
1,1,2-Trichloroethane	ND		25	1.1	ug/L			07/31/23 20:06	5
Trichloroethene	ND		5.0	0.75	ug/L			07/31/23 20:06	5
Trichlorofluoromethane	ND		5.0	2.6	ug/L			07/31/23 20:06	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			07/31/23 20:06	5
1,2,4-Trimethylbenzene	**9.0**		5.0	4.1	ug/L			07/31/23 20:06	5
1,3,5-Trimethylbenzene	**9.5**		5.0	2.8	ug/L			07/31/23 20:06	5
Vinyl acetate	ND		130	4.7	ug/L			07/31/23 20:06	5
Vinyl chloride	ND		5.0	2.5	ug/L			07/31/23 20:06	5
Xylenes, Total	**54**		50	8.0	ug/L			07/31/23 20:06	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*07/31/23 20:06*	*5*
Dibromofluoromethane	*111*		*75 - 126*		*07/31/23 20:06*	*5*
Toluene-d8 (Surr)	*102*		*64 - 132*		*07/31/23 20:06*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.39**		0.20	0.10	ug/L		07/24/23 10:33	07/26/23 16:29	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/24/23 10:33	07/26/23 16:29	1
Anthracene	ND		0.20	0.048	ug/L		07/24/23 10:33	07/26/23 16:29	1
Benzo[a]anthracene	**0.091**	**J**	0.20	0.035	ug/L		07/24/23 10:33	07/26/23 16:29	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		07/24/23 10:33	07/26/23 16:29	1
Benzo[b]fluoranthene	ND		0.20	0.038	ug/L		07/24/23 10:33	07/26/23 16:29	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/24/23 10:33	07/26/23 16:29	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		07/24/23 10:33	07/26/23 16:29	1
Chrysene	**0.082**	**J**	0.20	0.034	ug/L		07/24/23 10:33	07/26/23 16:29	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		07/24/23 10:33	07/26/23 16:29	1
Fluoranthene	**0.086**	**J**	0.20	0.035	ug/L		07/24/23 10:33	07/26/23 16:29	1
Fluorene	**0.22**		0.20	0.091	ug/L		07/24/23 10:33	07/26/23 16:29	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.035	ug/L		07/24/23 10:33	07/26/23 16:29	1
Phenanthrene	**0.59**		0.20	0.092	ug/L		07/24/23 10:33	07/26/23 16:29	1
Pyrene	**0.29**		0.20	0.040	ug/L		07/24/23 10:33	07/26/23 16:29	1
1-Methylnaphthalene	**9.9**		0.20	0.081	ug/L		07/24/23 10:33	07/26/23 16:29	1
2-Methylnaphthalene	**13**		0.20	0.067	ug/L		07/24/23 10:33	07/26/23 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*71*		*18 - 147*	*07/24/23 10:33*	*07/26/23 16:29*	*1*
2-Fluorobiphenyl	*64*		*15 - 128*	*07/24/23 10:33*	*07/26/23 16:29*	*1*

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

Job ID: 400-240817-1

Client Sample ID: P59-ROX-071823
Date Collected: 07/18/23 10:05
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-9
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*	*07/24/23 10:33*	*07/26/23 16:29*	*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		07/24/23 10:33	07/25/23 21:53	1
Benzenethiol	ND	*-	10	1.7	ug/L		07/24/23 10:33	07/25/23 21:53	1
Benzoic acid	ND		31	7.4	ug/L		07/24/23 10:33	07/25/23 21:53	1
Benzyl alcohol	ND		10	2.0	ug/L		07/24/23 10:33	07/25/23 21:53	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/24/23 10:33	07/25/23 21:53	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/24/23 10:33	07/25/23 21:53	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/24/23 10:33	07/25/23 21:53	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/24/23 10:33	07/25/23 21:53	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/24/23 10:33	07/25/23 21:53	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/24/23 10:33	07/25/23 21:53	1
4-Chloroaniline	ND		10	3.5	ug/L		07/24/23 10:33	07/25/23 21:53	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/24/23 10:33	07/25/23 21:53	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/24/23 10:33	07/25/23 21:53	1
2-Chlorophenol	ND		10	2.2	ug/L		07/24/23 10:33	07/25/23 21:53	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/24/23 10:33	07/25/23 21:53	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 21:53	1
Dibenzofuran	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 21:53	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/24/23 10:33	07/25/23 21:53	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/24/23 10:33	07/25/23 21:53	1
Diethyl phthalate	ND		10	0.24	ug/L		07/24/23 10:33	07/25/23 21:53	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/24/23 10:33	07/25/23 21:53	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 21:53	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/24/23 10:33	07/25/23 21:53	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/24/23 10:33	07/25/23 21:53	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/24/23 10:33	07/25/23 21:53	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/24/23 10:33	07/25/23 21:53	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/24/23 10:33	07/25/23 21:53	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 21:53	1
1,4-Dioxane	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 21:53	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 21:53	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 21:53	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/24/23 10:33	07/25/23 21:53	1
Hexachloroethane	ND		10	4.3	ug/L		07/24/23 10:33	07/25/23 21:53	1
Indene	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 21:53	1
Isophorone	ND		10	0.14	ug/L		07/24/23 10:33	07/25/23 21:53	1
2-Methylphenol	ND		10	1.8	ug/L		07/24/23 10:33	07/25/23 21:53	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		07/24/23 10:33	07/25/23 21:53	1
2-Nitroaniline	ND		10	2.2	ug/L		07/24/23 10:33	07/25/23 21:53	1
3-Nitroaniline	ND		10	1.8	ug/L		07/24/23 10:33	07/25/23 21:53	1
4-Nitroaniline	ND		10	1.5	ug/L		07/24/23 10:33	07/25/23 21:53	1
Nitrobenzene	ND		10	0.13	ug/L		07/24/23 10:33	07/25/23 21:53	1
2-Nitrophenol	ND		10	5.3	ug/L		07/24/23 10:33	07/25/23 21:53	1
4-Nitrophenol	ND		10	2.1	ug/L		07/24/23 10:33	07/25/23 21:53	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/24/23 10:33	07/25/23 21:53	1

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

Job ID: 400-240817-1

Client Sample ID: P59-ROX-071823
Date Collected: 07/18/23 10:05
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-9
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	3.4	ug/L		07/24/23 10:33	07/25/23 21:53	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/24/23 10:33	07/25/23 21:53	1
Pentachlorophenol	ND		20	1.4	ug/L		07/24/23 10:33	07/25/23 21:53	1
Phenol	ND		10	2.6	ug/L		07/24/23 10:33	07/25/23 21:53	1
Pyridine	ND		10	3.3	ug/L		07/24/23 10:33	07/25/23 21:53	1
Quinoline	ND		10	4.6	ug/L		07/24/23 10:33	07/25/23 21:53	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/24/23 10:33	07/25/23 21:53	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/24/23 10:33	07/25/23 21:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*46 - 124*	*07/24/23 10:33*	*07/25/23 21:53*	*1*
2-Fluorophenol	*9*	*S1-*	*13 - 113*	*07/24/23 10:33*	*07/25/23 21:53*	*1*
Nitrobenzene-d5	*61*		*36 - 126*	*07/24/23 10:33*	*07/25/23 21:53*	*1*
Phenol-d5	*33*		*17 - 127*	*07/24/23 10:33*	*07/25/23 21:53*	*1*
Terphenyl-d14	*75*		*44 - 149*	*07/24/23 10:33*	*07/25/23 21:53*	*1*
2,4,6-Tribromophenol	*67*		*26 - 150*	*07/24/23 10:33*	*07/25/23 21:53*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/24/23 13:46	07/25/23 20:45	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/24/23 13:46	07/25/23 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*51 - 149*	*07/24/23 13:46*	*07/25/23 20:45*	*1*

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

Job ID: 400-240817-1

Client Sample ID: P58-ROX-071823
Date Collected: 07/18/23 12:00
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	10000	ug/L			07/31/23 20:52	1000
Acrolein	ND		20000	3300	ug/L			07/31/23 20:52	1000
Acrylonitrile	ND		10000	2800	ug/L			07/31/23 20:52	1000
Benzene	**220000**		1000	500	ug/L			07/31/23 20:52	1000
Bromobenzene	ND		1000	540	ug/L			07/31/23 20:52	1000
Bromochloromethane	ND		1000	210	ug/L			07/31/23 20:52	1000
Bromodichloromethane	ND		1000	500	ug/L			07/31/23 20:52	1000
Bromoform	ND		5000	250	ug/L			07/31/23 20:52	1000
Bromomethane	ND		1000	980	ug/L			07/31/23 20:52	1000
2-Butanone (MEK)	ND		25000	2600	ug/L			07/31/23 20:52	1000
Carbon disulfide	ND		1000	500	ug/L			07/31/23 20:52	1000
Carbon tetrachloride	ND		1000	190	ug/L			07/31/23 20:52	1000
Chlorobenzene	ND		1000	150	ug/L			07/31/23 20:52	1000
Chloroethane	ND		1000	760	ug/L			07/31/23 20:52	1000
2-Chloroethyl vinyl ether	ND		5000	2000	ug/L			07/31/23 20:52	1000
Chloroform	ND		1000	900	ug/L			07/31/23 20:52	1000
1-Chlorohexane	ND		1000	320	ug/L			07/31/23 20:52	1000
Chloromethane	ND		1000	900	ug/L			07/31/23 20:52	1000
cis-1,2-Dichloroethene	ND		1000	200	ug/L			07/31/23 20:52	1000
cis-1,3-Dichloropropene	ND		5000	500	ug/L			07/31/23 20:52	1000
Dibromochloromethane	ND		1000	240	ug/L			07/31/23 20:52	1000
1,2-Dichlorobenzene	ND		1000	500	ug/L			07/31/23 20:52	1000
1,3-Dichlorobenzene	ND		1000	540	ug/L			07/31/23 20:52	1000
1,4-Dichlorobenzene	ND		1000	640	ug/L			07/31/23 20:52	1000
Dichlorodifluoromethane	ND	*+	1000	850	ug/L			07/31/23 20:52	1000
1,1-Dichloroethane	ND		1000	500	ug/L			07/31/23 20:52	1000
1,2-Dichloroethane	ND		1000	190	ug/L			07/31/23 20:52	1000
1,1-Dichloroethene	ND		1000	500	ug/L			07/31/23 20:52	1000
1,2-Dichloropropane	ND		1000	500	ug/L			07/31/23 20:52	1000
1,3-Dichloropropane	ND		1000	500	ug/L			07/31/23 20:52	1000
2,2-Dichloropropane	ND		1000	500	ug/L			07/31/23 20:52	1000
1,1-Dichloropropene	ND		1000	500	ug/L			07/31/23 20:52	1000
Ethylbenzene	ND		1000	500	ug/L			07/31/23 20:52	1000
Ethyl methacrylate	ND		1000	600	ug/L			07/31/23 20:52	1000
Hexachlorobutadiene	ND		5000	900	ug/L			07/31/23 20:52	1000
2-Hexanone	ND		25000	1400	ug/L			07/31/23 20:52	1000
Isopropy benzene	ND		1000	530	ug/L			07/31/23 20:52	1000
Methylene bromide	ND		5000	220	ug/L			07/31/23 20:52	1000
Methylene Chloride	ND		5000	3000	ug/L			07/31/23 20:52	1000
4-Methyl-2-pentanone (MIBK)	ND		25000	1800	ug/L			07/31/23 20:52	1000
Methyl tert-butyl ether	ND		1000	220	ug/L			07/31/23 20:52	1000
m-Xylene & p-Xylene	ND		5000	630	ug/L			07/31/23 20:52	1000
Naphthalene	ND		5000	3000	ug/L			07/31/23 20:52	1000
n-Butylbenzene	ND	*+	1000	760	ug/L			07/31/23 20:52	1000
N-Propylbenzene	ND		1000	690	ug/L			07/31/23 20:52	1000
o-Chlorotoluene	ND		1000	570	ug/L			07/31/23 20:52	1000
o-Xylene	ND		5000	600	ug/L			07/31/23 20:52	1000
p-Chlorotoluene	ND		1000	560	ug/L			07/31/23 20:52	1000
p-Isopropyltoluene	ND		1000	710	ug/L			07/31/23 20:52	1000

Client Sample ID: P58-ROX-071823
Date Collected: 07/18/23 12:00
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-10
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			07/31/23 20:52	1000
Styrene	ND		1000	1000	ug/L			07/31/23 20:52	1000
tert-Butylbenzene	ND		1000	630	ug/L			07/31/23 20:52	1000
1,1,1,2-Tetrachloroethane	ND		1000	160	ug/L			07/31/23 20:52	1000
1,1,2,2-Tetrachloroethane	ND		1000	500	ug/L			07/31/23 20:52	1000
Tetrachloroethene	ND		1000	900	ug/L			07/31/23 20:52	1000
Toluene	ND		1000	900	ug/L			07/31/23 20:52	1000
trans-1,2-Dichloroethene	ND		1000	500	ug/L			07/31/23 20:52	1000
trans-1,3-Dichloropropene	ND		5000	200	ug/L			07/31/23 20:52	1000
1,2,3-Trichlorobenzene	ND		1000	900	ug/L			07/31/23 20:52	1000
1,2,4-Trichlorobenzene	ND		1000	820	ug/L			07/31/23 20:52	1000
1,1,1-Trichloroethane	ND		1000	180	ug/L			07/31/23 20:52	1000
1,1,2-Trichloroethane	ND		5000	210	ug/L			07/31/23 20:52	1000
Trichloroethene	ND		1000	150	ug/L			07/31/23 20:52	1000
Trichlorofluoromethane	ND		1000	520	ug/L			07/31/23 20:52	1000
1,2,3-Trichloropropane	ND		5000	840	ug/L			07/31/23 20:52	1000
1,2,4-Trimethy benzene	ND		1000	820	ug/L			07/31/23 20:52	1000
1,3,5-Trimethy benzene	ND		1000	560	ug/L			07/31/23 20:52	1000
Vinyl acetate	ND		25000	930	ug/L			07/31/23 20:52	1000
Vinyl chloride	ND		1000	500	ug/L			07/31/23 20:52	1000
Xylenes, Total	ND		10000	1600	ug/L			07/31/23 20:52	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*72 - 130*		*07/31/23 20:52*	*1000*
Dibromofluoromethane	*110*		*75 - 126*		*07/31/23 20:52*	*1000*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/31/23 20:52*	*1000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.62**		0.20	0.10	ug/L		07/24/23 10:33	07/27/23 09:44	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/24/23 10:33	07/27/23 09:44	1
Anthracene	**0.19**	**J**	0.20	0.047	ug/L		07/24/23 10:33	07/27/23 09:44	1
Benzo[a]anthracene	**0.14**	**J**	0.20	0.034	ug/L		07/24/23 10:33	07/27/23 09:44	1
Benzo[a]pyrene	**0.099**	**J**	0.20	0.065	ug/L		07/24/23 10:33	07/27/23 09:44	1
Benzo[b]fluoranthene	**0.053**	**J**	0.20	0.037	ug/L		07/24/23 10:33	07/27/23 09:44	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/24/23 10:33	07/27/23 09:44	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		07/24/23 10:33	07/27/23 09:44	1
Chrysene	**0.14**	**J**	0.20	0.033	ug/L		07/24/23 10:33	07/27/23 09:44	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/24/23 10:33	07/27/23 09:44	1
Fluoranthene	**0.069**	**J**	0.20	0.034	ug/L		07/24/23 10:33	07/27/23 09:44	1
Fluorene	**1.4**		0.20	0.090	ug/L		07/24/23 10:33	07/27/23 09:44	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/24/23 10:33	07/27/23 09:44	1
Phenanthrene	**1.2**		0.20	0.091	ug/L		07/24/23 10:33	07/27/23 09:44	1
Pyrene	**0.32**		0.20	0.039	ug/L		07/24/23 10:33	07/27/23 09:44	1
1-Methylnaphthalene	**65**		1.0	0.40	ug/L		07/24/23 10:33	07/28/23 10:05	5
2-Methylnaphthalene	**34**		0.20	0.067	ug/L		07/24/23 10:33	07/27/23 09:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*51*		*18 - 147*	*07/24/23 10:33*	*07/27/23 09:44*	*1*
2-Fluorobiphenyl	*62*		*15 - 128*	*07/24/23 10:33*	*07/27/23 09:44*	*1*

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

Job ID: 400-240817-1

Client Sample ID: P58-ROX-071823
Date Collected: 07/18/23 12:00
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-10
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*	*07/24/23 10:33*	*07/27/23 09:44*	*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		07/24/23 10:33	07/25/23 22:19	1
Benzenethiol	ND	*-	10	1.7	ug/L		07/24/23 10:33	07/25/23 22:19	1
Benzoic acid	ND		30	7.4	ug/L		07/24/23 10:33	07/25/23 22:19	1
Benzyl alcohol	ND		10	2.0	ug/L		07/24/23 10:33	07/25/23 22:19	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/24/23 10:33	07/25/23 22:19	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/24/23 10:33	07/25/23 22:19	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/24/23 10:33	07/25/23 22:19	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/24/23 10:33	07/25/23 22:19	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/24/23 10:33	07/25/23 22:19	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/24/23 10:33	07/25/23 22:19	1
4-Chloroaniline	ND		10	3.4	ug/L		07/24/23 10:33	07/25/23 22:19	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/24/23 10:33	07/25/23 22:19	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/24/23 10:33	07/25/23 22:19	1
2-Chlorophenol	ND		10	2.2	ug/L		07/24/23 10:33	07/25/23 22:19	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/24/23 10:33	07/25/23 22:19	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 22:19	1
Dibenzofuran	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 22:19	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/24/23 10:33	07/25/23 22:19	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/24/23 10:33	07/25/23 22:19	1
Diethyl phthalate	ND		10	0.24	ug/L		07/24/23 10:33	07/25/23 22:19	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/24/23 10:33	07/25/23 22:19	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 22:19	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/24/23 10:33	07/25/23 22:19	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/24/23 10:33	07/25/23 22:19	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/24/23 10:33	07/25/23 22:19	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/24/23 10:33	07/25/23 22:19	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/24/23 10:33	07/25/23 22:19	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 22:19	1
1,4-Dioxane	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 22:19	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 22:19	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 22:19	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/24/23 10:33	07/25/23 22:19	1
Hexachloroethane	ND		10	4.2	ug/L		07/24/23 10:33	07/25/23 22:19	1
Indene	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 22:19	1
Isophorone	ND		10	0.14	ug/L		07/24/23 10:33	07/25/23 22:19	1
2-Methylphenol	ND		10	1.8	ug/L		07/24/23 10:33	07/25/23 22:19	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/24/23 10:33	07/25/23 22:19	1
2-Nitroaniline	ND		10	2.2	ug/L		07/24/23 10:33	07/25/23 22:19	1
3-Nitroaniline	ND		10	1.8	ug/L		07/24/23 10:33	07/25/23 22:19	1
4-Nitroaniline	ND		10	1.5	ug/L		07/24/23 10:33	07/25/23 22:19	1
Nitrobenzene	ND		10	0.13	ug/L		07/24/23 10:33	07/25/23 22:19	1
2-Nitrophenol	ND		10	5.2	ug/L		07/24/23 10:33	07/25/23 22:19	1
4-Nitrophenol	ND		10	2.1	ug/L		07/24/23 10:33	07/25/23 22:19	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/24/23 10:33	07/25/23 22:19	1

Client Sample ID: P58-ROX-071823
Date Collected: 07/18/23 12:00
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-10
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	3.3	ug/L		07/24/23 10:33	07/25/23 22:19	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/24/23 10:33	07/25/23 22:19	1
Pentachlorophenol	ND		20	1.4	ug/L		07/24/23 10:33	07/25/23 22:19	1
Pyridine	ND		10	3.2	ug/L		07/24/23 10:33	07/25/23 22:19	1
Quinoline	ND		10	4.5	ug/L		07/24/23 10:33	07/25/23 22:19	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/24/23 10:33	07/25/23 22:19	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/24/23 10:33	07/25/23 22:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*46 - 124*	*07/24/23 10:33*	*07/25/23 22:19*	*1*
2-Fluorophenol	*34*		*13 - 113*	*07/24/23 10:33*	*07/25/23 22:19*	*1*
Nitrobenzene-d5	*64*		*36 - 126*	*07/24/23 10:33*	*07/25/23 22:19*	*1*
Phenol-d5	*56*		*17 - 127*	*07/24/23 10:33*	*07/25/23 22:19*	*1*
Terphenyl-d14	*55*		*44 - 149*	*07/24/23 10:33*	*07/25/23 22:19*	*1*
2,4,6-Tribromophenol	*78*		*26 - 150*	*07/24/23 10:33*	*07/25/23 22:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**510**		50	13	ug/L		07/24/23 10:33	07/26/23 16:11	5

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.029	0.016	ug/L		07/24/23 13:46	07/25/23 21:06	1
1,2-D bromoethane	ND		0.019	0.015	ug/L		07/24/23 13:46	07/25/23 21:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*51 - 149*	*07/24/23 13:46*	*07/25/23 21:06*	*1*

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

Job ID: 400-240817-1

Client Sample ID: P58-ROX-071823-DUP
Date Collected: 07/18/23 12:00
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	10000	ug/L			07/31/23 21:15	1000
Acrolein	ND		20000	3300	ug/L			07/31/23 21:15	1000
Acrylonitrile	ND		10000	2800	ug/L			07/31/23 21:15	1000
Benzene	**250000**		1000	500	ug/L			07/31/23 21:15	1000
Bromobenzene	ND		1000	540	ug/L			07/31/23 21:15	1000
Bromochloromethane	ND		1000	210	ug/L			07/31/23 21:15	1000
Bromodichloromethane	ND		1000	500	ug/L			07/31/23 21:15	1000
Bromoform	ND		5000	250	ug/L			07/31/23 21:15	1000
Bromomethane	ND		1000	980	ug/L			07/31/23 21:15	1000
2-Butanone (MEK)	ND		25000	2600	ug/L			07/31/23 21:15	1000
Carbon disulfide	ND		1000	500	ug/L			07/31/23 21:15	1000
Carbon tetrachloride	ND		1000	190	ug/L			07/31/23 21:15	1000
Chlorobenzene	ND		1000	150	ug/L			07/31/23 21:15	1000
Chloroethane	ND		1000	760	ug/L			07/31/23 21:15	1000
2-Chloroethyl vinyl ether	ND		5000	2000	ug/L			07/31/23 21:15	1000
Chloroform	ND		1000	900	ug/L			07/31/23 21:15	1000
1-Chlorohexane	ND		1000	320	ug/L			07/31/23 21:15	1000
Chloromethane	ND		1000	900	ug/L			07/31/23 21:15	1000
cis-1,2-Dichloroethene	ND		1000	200	ug/L			07/31/23 21:15	1000
cis-1,3-Dichloropropene	ND		5000	500	ug/L			07/31/23 21:15	1000
Dibromochloromethane	ND		1000	240	ug/L			07/31/23 21:15	1000
1,2-Dichlorobenzene	ND		1000	500	ug/L			07/31/23 21:15	1000
1,3-Dichlorobenzene	ND		1000	540	ug/L			07/31/23 21:15	1000
1,4-Dichlorobenzene	ND		1000	640	ug/L			07/31/23 21:15	1000
Dichlorodifluoromethane	ND	*+	1000	850	ug/L			07/31/23 21:15	1000
1,1-Dichloroethane	ND		1000	500	ug/L			07/31/23 21:15	1000
1,2-Dichloroethane	ND		1000	190	ug/L			07/31/23 21:15	1000
1,1-Dichloroethene	ND		1000	500	ug/L			07/31/23 21:15	1000
1,2-Dichloropropane	ND		1000	500	ug/L			07/31/23 21:15	1000
1,3-Dichloropropane	ND		1000	500	ug/L			07/31/23 21:15	1000
2,2-Dichloropropane	ND		1000	500	ug/L			07/31/23 21:15	1000
1,1-Dichloropropene	ND		1000	500	ug/L			07/31/23 21:15	1000
Ethylbenzene	ND		1000	500	ug/L			07/31/23 21:15	1000
Ethyl methacrylate	ND		1000	600	ug/L			07/31/23 21:15	1000
Hexachlorobutadiene	ND		5000	900	ug/L			07/31/23 21:15	1000
2-Hexanone	ND		25000	1400	ug/L			07/31/23 21:15	1000
Isopropy benzene	ND		1000	530	ug/L			07/31/23 21:15	1000
Methylene bromide	ND		5000	220	ug/L			07/31/23 21:15	1000
Methylene Chloride	ND		5000	3000	ug/L			07/31/23 21:15	1000
4-Methyl-2-pentanone (MIBK)	ND		25000	1800	ug/L			07/31/23 21:15	1000
Methyl tert-butyl ether	ND		1000	220	ug/L			07/31/23 21:15	1000
m-Xylene & p-Xylene	ND		5000	630	ug/L			07/31/23 21:15	1000
Naphthalene	ND		5000	3000	ug/L			07/31/23 21:15	1000
n-Butylbenzene	ND	*+	1000	760	ug/L			07/31/23 21:15	1000
N-Propylbenzene	ND		1000	690	ug/L			07/31/23 21:15	1000
o-Chlorotoluene	ND		1000	570	ug/L			07/31/23 21:15	1000
o-Xylene	ND		5000	600	ug/L			07/31/23 21:15	1000
p-Chlorotoluene	ND		1000	560	ug/L			07/31/23 21:15	1000
p-Isopropyltoluene	ND		1000	710	ug/L			07/31/23 21:15	1000

Client Sample ID: P58-ROX-071823-DUP
Date Collected: 07/18/23 12:00
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-11
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		1000	700	ug/L			07/31/23 21:15	1000
Styrene	ND		1000	1000	ug/L			07/31/23 21:15	1000
tert-Butylbenzene	ND		1000	630	ug/L			07/31/23 21:15	1000
1,1,1,2-Tetrachloroethane	ND		1000	160	ug/L			07/31/23 21:15	1000
1,1,2,2-Tetrachloroethane	ND		1000	500	ug/L			07/31/23 21:15	1000
Tetrachloroethene	ND		1000	900	ug/L			07/31/23 21:15	1000
Toluene	ND		1000	900	ug/L			07/31/23 21:15	1000
trans-1,2-Dichloroethene	ND		1000	500	ug/L			07/31/23 21:15	1000
trans-1,3-Dichloropropene	ND		5000	200	ug/L			07/31/23 21:15	1000
1,2,3-Trichlorobenzene	ND		1000	900	ug/L			07/31/23 21:15	1000
1,2,4-Trichlorobenzene	ND		1000	820	ug/L			07/31/23 21:15	1000
1,1,1-Trichloroethane	ND		1000	180	ug/L			07/31/23 21:15	1000
1,1,2-Trichloroethane	ND		5000	210	ug/L			07/31/23 21:15	1000
Trichloroethene	ND		1000	150	ug/L			07/31/23 21:15	1000
Trichlorofluoromethane	ND		1000	520	ug/L			07/31/23 21:15	1000
1,2,3-Trichloropropane	ND		5000	840	ug/L			07/31/23 21:15	1000
1,2,4-Trimethy benzene	ND		1000	820	ug/L			07/31/23 21:15	1000
1,3,5-Trimethy benzene	ND		1000	560	ug/L			07/31/23 21:15	1000
Vinyl acetate	ND		25000	930	ug/L			07/31/23 21:15	1000
Vinyl chloride	ND		1000	500	ug/L			07/31/23 21:15	1000
Xylenes, Total	ND		10000	1600	ug/L			07/31/23 21:15	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/31/23 21:15*	*1000*
Dibromofluoromethane	*110*		*75 - 126*		*07/31/23 21:15*	*1000*
Toluene-d8 (Surr)	*103*		*64 - 132*		*07/31/23 21:15*	*1000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.53**		0.20	0.097	ug/L		07/24/23 10:33	07/27/23 10:05	1
Acenaphthylene	ND		0.20	0.043	ug/L		07/24/23 10:33	07/27/23 10:05	1
Anthracene	**0.097**	**J**	0.20	0.046	ug/L		07/24/23 10:33	07/27/23 10:05	1
Benzo[a]anthracene	**0.065**	**J**	0.20	0.033	ug/L		07/24/23 10:33	07/27/23 10:05	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/24/23 10:33	07/27/23 10:05	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		07/24/23 10:33	07/27/23 10:05	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/24/23 10:33	07/27/23 10:05	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		07/24/23 10:33	07/27/23 10:05	1
Chrysene	ND		0.20	0.032	ug/L		07/24/23 10:33	07/27/23 10:05	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		07/24/23 10:33	07/27/23 10:05	1
Fluoranthene	ND		0.20	0.033	ug/L		07/24/23 10:33	07/27/23 10:05	1
Fluorene	**1.1**		0.20	0.087	ug/L		07/24/23 10:33	07/27/23 10:05	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		07/24/23 10:33	07/27/23 10:05	1
Phenanthrene	**0.80**		0.20	0.088	ug/L		07/24/23 10:33	07/27/23 10:05	1
Pyrene	**0.069**	**J**	0.20	0.038	ug/L		07/24/23 10:33	07/27/23 10:05	1
1-Methylnaphthalene	**38**		0.20	0.079	ug/L		07/24/23 10:33	07/27/23 10:05	1
2-Methylnaphthalene	**27**		0.20	0.065	ug/L		07/24/23 10:33	07/27/23 10:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*52*		*18 - 147*	*07/24/23 10:33*	*07/27/23 10:05*	*1*
2-Fluorobiphenyl	*71*		*15 - 128*	*07/24/23 10:33*	*07/27/23 10:05*	*1*

Client Sample ID: P58-ROX-071823-DUP
Date Collected: 07/18/23 12:00
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-11
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*	*07/24/23 10:33*	*07/27/23 10:05*	*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		07/24/23 10:33	07/25/23 22:45	1
Benzenethiol	ND	*-	9.8	1.7	ug/L		07/24/23 10:33	07/25/23 22:45	1
Benzoic acid	ND		29	7.2	ug/L		07/24/23 10:33	07/25/23 22:45	1
Benzyl alcohol	ND		9.8	2.0	ug/L		07/24/23 10:33	07/25/23 22:45	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		07/24/23 10:33	07/25/23 22:45	1
Bis(2-chloroethyl)ether	ND		9.8	2.7	ug/L		07/24/23 10:33	07/25/23 22:45	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		07/24/23 10:33	07/25/23 22:45	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		07/24/23 10:33	07/25/23 22:45	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		07/24/23 10:33	07/25/23 22:45	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		07/24/23 10:33	07/25/23 22:45	1
4-Chloroaniline	ND		9.8	3.3	ug/L		07/24/23 10:33	07/25/23 22:45	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		07/24/23 10:33	07/25/23 22:45	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		07/24/23 10:33	07/25/23 22:45	1
2-Chlorophenol	ND		9.8	2.2	ug/L		07/24/23 10:33	07/25/23 22:45	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		07/24/23 10:33	07/25/23 22:45	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		07/24/23 10:33	07/25/23 22:45	1
Dibenzofuran	ND		9.8	0.17	ug/L		07/24/23 10:33	07/25/23 22:45	1
3,3'-Dichlorobenzidine	ND		9.8	2.6	ug/L		07/24/23 10:33	07/25/23 22:45	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		07/24/23 10:33	07/25/23 22:45	1
Diethyl phthalate	ND		9.8	0.24	ug/L		07/24/23 10:33	07/25/23 22:45	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		07/24/23 10:33	07/25/23 22:45	1
Dimethyl phthalate	ND		9.8	0.17	ug/L		07/24/23 10:33	07/25/23 22:45	1
Di-n-butyl phthalate	ND		9.8	2.7	ug/L		07/24/23 10:33	07/25/23 22:45	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		07/24/23 10:33	07/25/23 22:45	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/24/23 10:33	07/25/23 22:45	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		07/24/23 10:33	07/25/23 22:45	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		07/24/23 10:33	07/25/23 22:45	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		07/24/23 10:33	07/25/23 22:45	1
1,4-Dioxane	ND		9.8	0.98	ug/L		07/24/23 10:33	07/25/23 22:45	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		07/24/23 10:33	07/25/23 22:45	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		07/24/23 10:33	07/25/23 22:45	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/24/23 10:33	07/25/23 22:45	1
Hexachloroethane	ND		9.8	4.1	ug/L		07/24/23 10:33	07/25/23 22:45	1
Indene	ND		9.8	0.98	ug/L		07/24/23 10:33	07/25/23 22:45	1
Isophorone	ND		9.8	0.14	ug/L		07/24/23 10:33	07/25/23 22:45	1
2-Methylphenol	ND		9.8	1.8	ug/L		07/24/23 10:33	07/25/23 22:45	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		07/24/23 10:33	07/25/23 22:45	1
2-Nitroaniline	ND		9.8	2.2	ug/L		07/24/23 10:33	07/25/23 22:45	1
3-Nitroaniline	ND		9.8	1.8	ug/L		07/24/23 10:33	07/25/23 22:45	1
4-Nitroaniline	ND		9.8	1.5	ug/L		07/24/23 10:33	07/25/23 22:45	1
Nitrobenzene	ND		9.8	0.13	ug/L		07/24/23 10:33	07/25/23 22:45	1
2-Nitrophenol	ND		9.8	5.1	ug/L		07/24/23 10:33	07/25/23 22:45	1
4-Nitrophenol	ND		9.8	2.1	ug/L		07/24/23 10:33	07/25/23 22:45	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		07/24/23 10:33	07/25/23 22:45	1

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

Job ID: 400-240817-1

Client Sample ID: P58-ROX-071823-DUP

Date Collected: 07/18/23 12:00
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-11

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		07/24/23 10:33	07/25/23 22:45	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		07/24/23 10:33	07/25/23 22:45	1
Pentachlorophenol	ND		20	1.4	ug/L		07/24/23 10:33	07/25/23 22:45	1
Phenol	**250**		9.8	2.6	ug/L		07/24/23 10:33	07/25/23 22:45	1
Pyridine	ND		9.8	3.1	ug/L		07/24/23 10:33	07/25/23 22:45	1
Quinoline	ND		9.8	4.4	ug/L		07/24/23 10:33	07/25/23 22:45	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		07/24/23 10:33	07/25/23 22:45	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		07/24/23 10:33	07/25/23 22:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*46 - 124*	*07/24/23 10:33*	*07/25/23 22:45*	*1*
2-Fluorophenol	*9*	*S1-*	*13 - 113*	*07/24/23 10:33*	*07/25/23 22:45*	*1*
Nitrobenzene-d5	*61*		*36 - 126*	*07/24/23 10:33*	*07/25/23 22:45*	*1*
Phenol-d5	*34*		*17 - 127*	*07/24/23 10:33*	*07/25/23 22:45*	*1*
Terphenyl-d14	*56*		*44 - 149*	*07/24/23 10:33*	*07/25/23 22:45*	*1*
2,4,6-Tribromophenol	*67*		*26 - 150*	*07/24/23 10:33*	*07/25/23 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-D bromo-3-Chloropropane	ND		0.029	0.017	ug/L		07/24/23 13:46	07/25/23 21:28	1
1,2-D bromoethane	ND		0.019	0.015	ug/L		07/24/23 13:46	07/25/23 21:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*51 - 149*	*07/24/23 13:46*	*07/25/23 21:28*	*1*

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

Job ID: 400-240817-1

Client Sample ID: P93B-ROX-071823
Date Collected: 07/18/23 13:20
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	10000	ug/L			07/31/23 21:38	1000
Acrolein	ND		20000	3300	ug/L			07/31/23 21:38	1000
Acrylonitrile	ND		10000	2800	ug/L			07/31/23 21:38	1000
Bromobenzene	ND		1000	540	ug/L			07/31/23 21:38	1000
Bromochloromethane	ND		1000	210	ug/L			07/31/23 21:38	1000
Bromodichloromethane	ND		1000	500	ug/L			07/31/23 21:38	1000
Bromoform	ND		5000	250	ug/L			07/31/23 21:38	1000
Bromomethane	ND		1000	980	ug/L			07/31/23 21:38	1000
2-Butanone (MEK)	ND		25000	2600	ug/L			07/31/23 21:38	1000
Carbon disulfide	ND		1000	500	ug/L			07/31/23 21:38	1000
Carbon tetrachloride	ND		1000	190	ug/L			07/31/23 21:38	1000
Chlorobenzene	ND		1000	150	ug/L			07/31/23 21:38	1000
Chloroethane	ND		1000	760	ug/L			07/31/23 21:38	1000
2-Chloroethyl vinyl ether	ND		5000	2000	ug/L			07/31/23 21:38	1000
Chloroform	ND		1000	900	ug/L			07/31/23 21:38	1000
1-Chlorohexane	ND		1000	320	ug/L			07/31/23 21:38	1000
Chloromethane	ND		1000	900	ug/L			07/31/23 21:38	1000
cis-1,2-Dichloroethene	ND		1000	200	ug/L			07/31/23 21:38	1000
cis-1,3-Dichloropropene	ND		5000	500	ug/L			07/31/23 21:38	1000
Dibromochloromethane	ND		1000	240	ug/L			07/31/23 21:38	1000
1,2-Dichlorobenzene	ND		1000	500	ug/L			07/31/23 21:38	1000
1,3-Dichlorobenzene	ND		1000	540	ug/L			07/31/23 21:38	1000
1,4-Dichlorobenzene	ND		1000	640	ug/L			07/31/23 21:38	1000
Dichlorodifluoromethane	ND	*+	1000	850	ug/L			07/31/23 21:38	1000
1,1-Dichloroethane	ND		1000	500	ug/L			07/31/23 21:38	1000
1,2-Dichloroethane	ND		1000	190	ug/L			07/31/23 21:38	1000
1,1-Dichloroethene	ND		1000	500	ug/L			07/31/23 21:38	1000
1,2-Dichloropropane	ND		1000	500	ug/L			07/31/23 21:38	1000
1,3-Dichloropropane	ND		1000	500	ug/L			07/31/23 21:38	1000
2,2-Dichloropropane	ND		1000	500	ug/L			07/31/23 21:38	1000
1,1-Dichloropropene	ND		1000	500	ug/L			07/31/23 21:38	1000
Ethylbenzene	ND		1000	500	ug/L			07/31/23 21:38	1000
Ethyl methacrylate	ND		1000	600	ug/L			07/31/23 21:38	1000
Hexachlorobutadiene	ND		5000	900	ug/L			07/31/23 21:38	1000
2-Hexanone	ND		25000	1400	ug/L			07/31/23 21:38	1000
Isopropy benzene	ND		1000	530	ug/L			07/31/23 21:38	1000
Methylene bromide	ND		5000	220	ug/L			07/31/23 21:38	1000
Methylene Chloride	ND		5000	3000	ug/L			07/31/23 21:38	1000
4-Methyl-2-pentanone (MIBK)	ND		25000	1800	ug/L			07/31/23 21:38	1000
Methyl tert-butyl ether	ND		1000	220	ug/L			07/31/23 21:38	1000
m-Xylene & p-Xylene	ND		5000	630	ug/L			07/31/23 21:38	1000
Naphthalene	ND		5000	3000	ug/L			07/31/23 21:38	1000
n-Butylbenzene	ND	*+	1000	760	ug/L			07/31/23 21:38	1000
N-Propylbenzene	ND		1000	690	ug/L			07/31/23 21:38	1000
o-Chlorotoluene	ND		1000	570	ug/L			07/31/23 21:38	1000
o-Xylene	ND		5000	600	ug/L			07/31/23 21:38	1000
p-Chlorotoluene	ND		1000	560	ug/L			07/31/23 21:38	1000
p-Isopropyltoluene	ND		1000	710	ug/L			07/31/23 21:38	1000
sec-Butylbenzene	ND		1000	700	ug/L			07/31/23 21:38	1000

Client Sample ID: P93B-ROX-071823
Date Collected: 07/18/23 13:20
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-12
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		1000	1000	ug/L			07/31/23 21:38	1000
tert-Butylbenzene	ND		1000	630	ug/L			07/31/23 21:38	1000
1,1,1,2-Tetrachloroethane	ND		1000	160	ug/L			07/31/23 21:38	1000
1,1,2,2-Tetrachloroethane	ND		1000	500	ug/L			07/31/23 21:38	1000
Tetrachloroethene	ND		1000	900	ug/L			07/31/23 21:38	1000
Toluene	ND		1000	900	ug/L			07/31/23 21:38	1000
trans-1,2-Dichloroethene	ND		1000	500	ug/L			07/31/23 21:38	1000
trans-1,3-Dichloropropene	ND		5000	200	ug/L			07/31/23 21:38	1000
1,2,3-Trichlorobenzene	ND		1000	900	ug/L			07/31/23 21:38	1000
1,2,4-Trichlorobenzene	ND		1000	820	ug/L			07/31/23 21:38	1000
1,1,1-Trichloroethane	ND		1000	180	ug/L			07/31/23 21:38	1000
1,1,2-Trichloroethane	ND		5000	210	ug/L			07/31/23 21:38	1000
Trichloroethene	ND		1000	150	ug/L			07/31/23 21:38	1000
Trichlorofluoromethane	ND		1000	520	ug/L			07/31/23 21:38	1000
1,2,3-Trichloropropane	ND		5000	840	ug/L			07/31/23 21:38	1000
1,2,4-Trimethy benzene	ND		1000	820	ug/L			07/31/23 21:38	1000
1,3,5-Trimethy benzene	ND		1000	560	ug/L			07/31/23 21:38	1000
Vinyl acetate	ND		25000	930	ug/L			07/31/23 21:38	1000
Vinyl chloride	ND		1000	500	ug/L			07/31/23 21:38	1000
Xylenes, Total	ND		10000	1600	ug/L			07/31/23 21:38	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*72 - 130*		*07/31/23 21:38*	*1000*
Dibromofluoromethane	*110*		*75 - 126*		*07/31/23 21:38*	*1000*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/31/23 21:38*	*1000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1200000**		5000	2500	ug/L			08/01/23 16:20	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*08/01/23 16:20*	*5000*
Dibromofluoromethane	*105*		*75 - 126*		*08/01/23 16:20*	*5000*
Toluene-d8 (Surr)	*104*		*64 - 132*		*08/01/23 16:20*	*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	0.099	ug/L		07/24/23 10:33	07/27/23 10:27	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/24/23 10:33	07/27/23 10:27	1
Anthracene	ND		0.20	0.047	ug/L		07/24/23 10:33	07/27/23 10:27	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/24/23 10:33	07/27/23 10:27	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/24/23 10:33	07/27/23 10:27	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/24/23 10:33	07/27/23 10:27	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/24/23 10:33	07/27/23 10:27	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/24/23 10:33	07/27/23 10:27	1
Chrysene	ND		0.20	0.033	ug/L		07/24/23 10:33	07/27/23 10:27	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/24/23 10:33	07/27/23 10:27	1
Fluoranthene	ND		0.20	0.034	ug/L		07/24/23 10:33	07/27/23 10:27	1
Fluorene	ND		0.20	0.089	ug/L		07/24/23 10:33	07/27/23 10:27	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/24/23 10:33	07/27/23 10:27	1

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

Job ID: 400-240817-1

Client Sample ID: P93B-ROX-071823
Date Collected: 07/18/23 13:20
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-12
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	0.090	ug/L		07/24/23 10:33	07/27/23 10:27	1
Pyrene	ND		0.20	0.039	ug/L		07/24/23 10:33	07/27/23 10:27	1
1-Methylnaphthalene	**0.085**	**J**	0.20	0.080	ug/L		07/24/23 10:33	07/27/23 10:27	1
2-Methylnaphthalene	**0.090**	**J**	0.20	0.066	ug/L		07/24/23 10:33	07/27/23 10:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*69*		*18 - 147*	*07/24/23 10:33*	*07/27/23 10:27*	*1*
2-Fluorobiphenyl	*93*		*15 - 128*	*07/24/23 10:33*	*07/27/23 10:27*	*1*
Nitrobenzene-d5	*71*		*10 - 144*	*07/24/23 10:33*	*07/27/23 10:27*	*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		07/24/23 10:33	07/25/23 23:12	1
Benzenethiol	ND	*-	10	1.7	ug/L		07/24/23 10:33	07/25/23 23:12	1
Benzoic acid	ND		30	7.3	ug/L		07/24/23 10:33	07/25/23 23:12	1
Benzyl alcohol	ND		10	2.0	ug/L		07/24/23 10:33	07/25/23 23:12	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/24/23 10:33	07/25/23 23:12	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/24/23 10:33	07/25/23 23:12	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/24/23 10:33	07/25/23 23:12	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/24/23 10:33	07/25/23 23:12	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/24/23 10:33	07/25/23 23:12	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/24/23 10:33	07/25/23 23:12	1
4-Chloroaniline	ND		10	3.4	ug/L		07/24/23 10:33	07/25/23 23:12	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/24/23 10:33	07/25/23 23:12	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/24/23 10:33	07/25/23 23:12	1
2-Chlorophenol	ND		10	2.2	ug/L		07/24/23 10:33	07/25/23 23:12	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/24/23 10:33	07/25/23 23:12	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 23:12	1
Dibenzofuran	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 23:12	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/24/23 10:33	07/25/23 23:12	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/24/23 10:33	07/25/23 23:12	1
Diethyl phthalate	ND		10	0.24	ug/L		07/24/23 10:33	07/25/23 23:12	1
2,4-Dimethylphenol	**3.6**	**J**	10	3.5	ug/L		07/24/23 10:33	07/25/23 23:12	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 23:12	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/24/23 10:33	07/25/23 23:12	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/24/23 10:33	07/25/23 23:12	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/24/23 10:33	07/25/23 23:12	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/24/23 10:33	07/25/23 23:12	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/24/23 10:33	07/25/23 23:12	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 23:12	1
1,4-Dioxane	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 23:12	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 23:12	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 23:12	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/24/23 10:33	07/25/23 23:12	1
Hexachloroethane	ND		10	4.2	ug/L		07/24/23 10:33	07/25/23 23:12	1
Indene	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 23:12	1
Isophorone	ND		10	0.14	ug/L		07/24/23 10:33	07/25/23 23:12	1
2-Methylphenol	ND		10	1.8	ug/L		07/24/23 10:33	07/25/23 23:12	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/24/23 10:33	07/25/23 23:12	1

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

Job ID: 400-240817-1

Client Sample ID: P93B-ROX-071823
Date Collected: 07/18/23 13:20
Date Received: 07/20/23 10:11

Lab Sample ID: 400-240817-12
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		07/24/23 10:33	07/25/23 23:12	1
3-Nitroaniline	ND		10	1.8	ug/L		07/24/23 10:33	07/25/23 23:12	1
4-Nitroaniline	ND		10	1.5	ug/L		07/24/23 10:33	07/25/23 23:12	1
Nitrobenzene	ND		10	0.13	ug/L		07/24/23 10:33	07/25/23 23:12	1
2-Nitrophenol	ND		10	5.2	ug/L		07/24/23 10:33	07/25/23 23:12	1
4-Nitrophenol	ND		10	2.1	ug/L		07/24/23 10:33	07/25/23 23:12	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/24/23 10:33	07/25/23 23:12	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/24/23 10:33	07/25/23 23:12	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/24/23 10:33	07/25/23 23:12	1
Pentachlorophenol	ND		20	1.4	ug/L		07/24/23 10:33	07/25/23 23:12	1
Phenol	**240**		10	2.6	ug/L		07/24/23 10:33	07/25/23 23:12	1
Pyridine	ND		10	3.2	ug/L		07/24/23 10:33	07/25/23 23:12	1
Quinoline	ND		10	4.5	ug/L		07/24/23 10:33	07/25/23 23:12	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/24/23 10:33	07/25/23 23:12	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/24/23 10:33	07/25/23 23:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*46 - 124*	*07/24/23 10:33*	*07/25/23 23:12*	*1*
2-Fluorophenol	*23*		*13 - 113*	*07/24/23 10:33*	*07/25/23 23:12*	*1*
Nitrobenzene-d5	*69*		*36 - 126*	*07/24/23 10:33*	*07/25/23 23:12*	*1*
Phenol-d5	*56*		*17 - 127*	*07/24/23 10:33*	*07/25/23 23:12*	*1*
Terphenyl-d14	*66*		*44 - 149*	*07/24/23 10:33*	*07/25/23 23:12*	*1*
2,4,6-Tribromophenol	*82*		*26 - 150*	*07/24/23 10:33*	*07/25/23 23:12*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/24/23 13:46	07/25/23 21:49	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/24/23 13:46	07/25/23 21:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*		*51 - 149*	*07/24/23 13:46*	*07/25/23 21:49*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Job ID: 400-240817-1
Project/Site: ROXANA QUARTERLY GW

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
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 QUARTERLY GW

Job ID: 400-240817-1

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)
400-240817-1	TB-ROX-071823-8260-A	99	114	101
400-240817-3	MW27-ROX-071823	97	113	98
400-240817-4	MW9-ROX-071823	98	115	100
400-240817-5	MW10-ROX-071823	97	115	102
400-240817-6	MW2-ROX-071823	98	108	102
400-240817-6	MW2-ROX-071823	97	76	104
400-240817-7	TB-ROX-071823-8260-B	99	115	102
400-240817-9	P59-ROX-071823	101	111	102
400-240817-10	P58-ROX-071823	96	110	99
400-240817-11	P58-ROX-071823-DUP	98	110	103
400-240817-12	P93B-ROX-071823	96	110	101
400-240817-12 - DL	P93B-ROX-071823	98	105	104
LCS 400-635204/1002	Lab Control Sample	102	111	100
LCS 400-635348/1002	Lab Control Sample	95	99	101
MB 400-635204/5	Method Blank	96	114	100
MB 400-635348/4	Method Blank	96	98	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	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-240817-3	MW27-ROX-071823	84	21	71	56	96	69
400-240817-4	MW9-ROX-071823	80	26	71	52	72	65
400-240817-5	MW10-ROX-071823	76	16	62	37	81	46
400-240817-6	MW2-ROX-071823	75	10 S1-	64	36	85	60
400-240817-9	P59-ROX-071823	75	9 S1-	61	33	75	67
400-240817-10	P58-ROX-071823	76	34	64	56	55	78
400-240817-11	P58-ROX-071823-DUP	73	9 S1-	61	34	56	67
400-240817-12	P93B-ROX-071823	85	23	69	56	66	82
LCS 400-634300/2-A	Lab Control Sample	82	35	78	59	89	74
LCS 400-634300/4-A	Lab Control Sample	86	25	74	53	96	66
LCSD 400-634300/3-A	Lab Control Sample Dup	84	20	81	55	93	77
LCSD 400-634300/5-A	Lab Control Sample Dup	87	37	71	63	90	55
MB 400-634300/1-A	Method Blank	82	70	71	71	88	64

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: 400-240817-1

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)
400-240817-3	MW27-ROX-071823	110	95	90
400-240817-4	MW9-ROX-071823	79	88	86
400-240817-5	MW10-ROX-071823	103	88	81
400-240817-6	MW2-ROX-071823	85	73	78
400-240817-9	P59-ROX-071823	71	64	68
400-240817-10	P58-ROX-071823	51	62	76
400-240817-11	P58-ROX-071823-DUP	52	71	70
400-240817-12	P93B-ROX-071823	69	93	71
LCS 400-634300/6-A	Lab Control Sample	99	92	86
LCSD 400-634300/7-A	Lab Control Sample Dup	92	80	79
MB 400-634300/1-A	Method Blank	98	89	89

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)
400-240817-2	TB-ROX-071823-8011-A	121
400-240817-3	MW27-ROX-071823	81
400-240817-4	MW9-ROX-071823	79
400-240817-5	MW10-ROX-071823	63
400-240817-6	MW2-ROX-071823	73
400-240817-8	TB-ROX-071823-8011-B	75
400-240817-9	P59-ROX-071823	91
400-240817-10	P58-ROX-071823	90
400-240817-11	P58-ROX-071823-DUP	78
400-240817-12	P93B-ROX-071823	76
LCS 400-634344/2-A	Lab Control Sample	91
LCSD 400-634344/3-A	Lab Control Sample Dup	80
MB 400-634344/1-A	Method Blank	78

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-240817-1

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

Client Sample ID: TB-ROX-071823-8260-A
Lab Sample ID: 400-240817-1
Date Collected: 07/18/23 12:00
Matrix: Water
Date Received: 07/20/23 10:11

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	635204	07/31/23 16:17	CH	EET PEN

Client Sample ID: TB-ROX-071823-8011-A
Lab Sample ID: 400-240817-2
Date Collected: 07/18/23 12:00
Matrix: Water
Date Received: 07/20/23 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			20.6 mL	35 mL	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 18:34	PG	EET PEN

Client Sample ID: MW27-ROX-071823
Lab Sample ID: 400-240817-3
Date Collected: 07/18/23 09:20
Matrix: Water
Date Received: 07/20/23 10:11

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	635204	07/31/23 16:40	CH	EET PEN
Total/NA	Prep	3520C			242.4 mL	1 mL	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634499	07/25/23 20:06	S1B	EET PEN
Total/NA	Prep	3520C			242.4 mL	1 mL	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634595	07/26/23 15:03	KJA	EET PEN
Total/NA	Prep	8011			35.6 mL	35 mL	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 18:56	PG	EET PEN

Client Sample ID: MW9-ROX-071823
Lab Sample ID: 400-240817-4
Date Collected: 07/18/23 10:15
Matrix: Water
Date Received: 07/20/23 10:11

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	635204	07/31/23 17:03	CH	EET PEN
Total/NA	Prep	3520C			247.2 mL	1 mL	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634499	07/25/23 20:33	S1B	EET PEN
Total/NA	Prep	3520C			247.2 mL	1 mL	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634595	07/26/23 15:24	KJA	EET PEN
Total/NA	Prep	8011			35.4 mL	35 mL	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 19:18	PG	EET PEN

Client Sample ID: MW10-ROX-071823
Lab Sample ID: 400-240817-5
Date Collected: 07/18/23 11:15
Matrix: Water
Date Received: 07/20/23 10:11

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	635204	07/31/23 17:26	CH	EET PEN
Total/NA	Prep	3520C			254 mL	1 mL	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634499	07/25/23 21:00	S1B	EET PEN

Client Sample ID: MW10-ROX-071823

Lab Sample ID: 400-240817-5

Date Collected: 07/18/23 11:15

Matrix: Water

Date Received: 07/20/23 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			254 mL	1 mL	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634595	07/26/23 15:46	KJA	EET PEN
Total/NA	Prep	8011			35.6 mL	35 mL	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 19:39	PG	EET PEN

Client Sample ID: MW2-ROX-071823

Lab Sample ID: 400-240817-6

Date Collected: 07/18/23 13:00

Matrix: Water

Date Received: 07/20/23 10:11

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	635348	08/01/23 19:40	BPO	EET PEN
Total/NA	Analysis	8260D		1	5 mL	5 mL	635204	07/31/23 17:49	CH	EET PEN
Total/NA	Prep	3520C			247 mL	1 mL	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634499	07/25/23 21:26	S1B	EET PEN
Total/NA	Prep	3520C			247 mL	1 mL	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634595	07/26/23 16:08	KJA	EET PEN
Total/NA	Prep	8011			34.7 mL	35 mL	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 20:01	PG	EET PEN

Client Sample ID: TB-ROX-071823-8260-B

Lab Sample ID: 400-240817-7

Date Collected: 07/18/23 12:00

Matrix: Water

Date Received: 07/20/23 10:11

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	635204	07/31/23 18:12	CH	EET PEN

Client Sample ID: TB-ROX-071823-8011-B

Lab Sample ID: 400-240817-8

Date Collected: 07/18/23 12:00

Matrix: Water

Date Received: 07/20/23 10:11

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	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 20:23	PG	EET PEN

Client Sample ID: P59-ROX-071823

Lab Sample ID: 400-240817-9

Date Collected: 07/18/23 10:05

Matrix: Water

Date Received: 07/20/23 10:11

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	635204	07/31/23 20:06	CH	EET PEN
Total/NA	Prep	3520C			245.8 mL	1 mL	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634499	07/25/23 21:53	S1B	EET PEN
Total/NA	Prep	3520C			245.8 mL	1 mL	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634595	07/26/23 16:29	KJA	EET PEN

Client Sample ID: P59-ROX-071823

Lab Sample ID: 400-240817-9

Date Collected: 07/18/23 10:05

Matrix: Water

Date Received: 07/20/23 10:11

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	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 20:45	PG	EET PEN

Client Sample ID: P58-ROX-071823

Lab Sample ID: 400-240817-10

Date Collected: 07/18/23 12:00

Matrix: Water

Date Received: 07/20/23 10:11

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	635204	07/31/23 20:52	CH	EET PEN
Total/NA	Prep	3520C			247.8 mL	1 mL	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634499	07/25/23 22:19	S1B	EET PEN
Total/NA	Prep	3520C	DL		247.8 mL	1 mL	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E	DL	5	0.4 mL	0.4 mL	634663	07/26/23 16:11	VC1	EET PEN
Total/NA	Prep	3520C			247.8 mL	1 mL	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634736	07/27/23 09:44	KJA	EET PEN
Total/NA	Prep	3520C			247.8 mL	1 mL	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E SIM		5	0.4 mL	0.4 mL	634957	07/28/23 10:05	KJA	EET PEN
Total/NA	Prep	8011			36.2 mL	35 mL	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 21:06	PG	EET PEN

Client Sample ID: P58-ROX-071823-DUP

Lab Sample ID: 400-240817-11

Date Collected: 07/18/23 12:00

Matrix: Water

Date Received: 07/20/23 10:11

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	635204	07/31/23 21:15	CH	EET PEN
Total/NA	Prep	3520C			254.6 mL	1 mL	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634499	07/25/23 22:45	S1B	EET PEN
Total/NA	Prep	3520C			254.6 mL	1 mL	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634736	07/27/23 10:05	KJA	EET PEN
Total/NA	Prep	8011			35.9 mL	35 mL	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 21:28	PG	EET PEN

Client Sample ID: P93B-ROX-071823

Lab Sample ID: 400-240817-12

Date Collected: 07/18/23 13:20

Matrix: Water

Date Received: 07/20/23 10:11

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	5000	5 mL	5 mL	635348	08/01/23 16:20	BPO	EET PEN
Total/NA	Analysis	8260D		1000	5 mL	5 mL	635204	07/31/23 21:38	CH	EET PEN
Total/NA	Prep	3520C			249.6 mL	1 mL	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634499	07/25/23 23:12	S1B	EET PEN
Total/NA	Prep	3520C			249.6 mL	1 mL	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634736	07/27/23 10:27	KJA	EET PEN

Client Sample ID: P93B-ROX-071823

Lab Sample ID: 400-240817-12

Date Collected: 07/18/23 13:20

Matrix: Water

Date Received: 07/20/23 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.6 mL	35 mL	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 21:49	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-634300/1-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	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634499	07/25/23 17:49	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634595	07/26/23 13:58	KJA	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-634344/1-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	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 12:49	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-635204/5

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	635204	07/31/23 12:03	CH	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-635348/4

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	635348	08/01/23 10:54	BPO	EET PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-634300/2-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	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634499	07/25/23 18:19	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-240817-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634300/4-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	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634499	07/25/23 19:13	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634300/6-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	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634595	07/26/23 14:20	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-634344/2-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	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 13:10	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-635204/1002
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	635204	07/31/23 11:00	CH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-635348/1002
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	635348	08/01/23 09:40	BPO	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-634300/3-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	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634499	07/25/23 18:46	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-240817-1

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-634300/5-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	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	634499	07/25/23 19:40	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-634300/7-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	634300	07/24/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	634595	07/26/23 14:41	KJA	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-634344/3-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	634344	07/24/23 13:46	PG	EET PEN
Total/NA	Analysis	8011		1			634434	07/25/23 13:31	PG	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 635204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240817-1	TB-ROX-071823-8260-A	Total/NA	Water	8260D	
400-240817-3	MW27-ROX-071823	Total/NA	Water	8260D	
400-240817-4	MW9-ROX-071823	Total/NA	Water	8260D	
400-240817-5	MW10-ROX-071823	Total/NA	Water	8260D	
400-240817-6	MW2-ROX-071823	Total/NA	Water	8260D	
400-240817-7	TB-ROX-071823-8260-B	Total/NA	Water	8260D	
400-240817-9	P59-ROX-071823	Total/NA	Water	8260D	
400-240817-10	P58-ROX-071823	Total/NA	Water	8260D	
400-240817-11	P58-ROX-071823-DUP	Total/NA	Water	8260D	
400-240817-12	P93B-ROX-071823	Total/NA	Water	8260D	
MB 400-635204/5	Method Blank	Total/NA	Water	8260D	
LCS 400-635204/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 635348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240817-6	MW2-ROX-071823	Total/NA	Water	8260D	
400-240817-12 - DL	P93B-ROX-071823	Total/NA	Water	8260D	
MB 400-635348/4	Method Blank	Total/NA	Water	8260D	
LCS 400-635348/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 634300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240817-3	MW27-ROX-071823	Total/NA	Water	3520C	
400-240817-4	MW9-ROX-071823	Total/NA	Water	3520C	
400-240817-5	MW10-ROX-071823	Total/NA	Water	3520C	
400-240817-6	MW2-ROX-071823	Total/NA	Water	3520C	
400-240817-9	P59-ROX-071823	Total/NA	Water	3520C	
400-240817-10	P58-ROX-071823	Total/NA	Water	3520C	
400-240817-10 - DL	P58-ROX-071823	Total/NA	Water	3520C	
400-240817-11	P58-ROX-071823-DUP	Total/NA	Water	3520C	
400-240817-12	P93B-ROX-071823	Total/NA	Water	3520C	
MB 400-634300/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-634300/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-634300/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-634300/6-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-634300/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-634300/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-634300/7-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 634499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240817-3	MW27-ROX-071823	Total/NA	Water	8270E	634300
400-240817-4	MW9-ROX-071823	Total/NA	Water	8270E	634300
400-240817-5	MW10-ROX-071823	Total/NA	Water	8270E	634300
400-240817-6	MW2-ROX-071823	Total/NA	Water	8270E	634300
400-240817-9	P59-ROX-071823	Total/NA	Water	8270E	634300
400-240817-10	P58-ROX-071823	Total/NA	Water	8270E	634300
400-240817-11	P58-ROX-071823-DUP	Total/NA	Water	8270E	634300
400-240817-12	P93B-ROX-071823	Total/NA	Water	8270E	634300

GC/MS Semi VOA (Continued)

Analysis Batch: 634499 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-634300/1-A	Method Blank	Total/NA	Water	8270E	634300
LCS 400-634300/2-A	Lab Control Sample	Total/NA	Water	8270E	634300
LCS 400-634300/4-A	Lab Control Sample	Total/NA	Water	8270E	634300
LCSD 400-634300/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	634300
LCSD 400-634300/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	634300

Analysis Batch: 634595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240817-3	MW27-ROX-071823	Total/NA	Water	8270E SIM	634300
400-240817-4	MW9-ROX-071823	Total/NA	Water	8270E SIM	634300
400-240817-5	MW10-ROX-071823	Total/NA	Water	8270E SIM	634300
400-240817-6	MW2-ROX-071823	Total/NA	Water	8270E SIM	634300
400-240817-9	P59-ROX-071823	Total/NA	Water	8270E SIM	634300
MB 400-634300/1-A	Method Blank	Total/NA	Water	8270E SIM	634300
LCS 400-634300/6-A	Lab Control Sample	Total/NA	Water	8270E SIM	634300
LCSD 400-634300/7-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	634300

Analysis Batch: 634663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240817-10 - DL	P58-ROX-071823	Total/NA	Water	8270E	634300

Analysis Batch: 634736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240817-10	P58-ROX-071823	Total/NA	Water	8270E SIM	634300
400-240817-11	P58-ROX-071823-DUP	Total/NA	Water	8270E SIM	634300
400-240817-12	P93B-ROX-071823	Total/NA	Water	8270E SIM	634300

Analysis Batch: 634957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240817-10	P58-ROX-071823	Total/NA	Water	8270E SIM	634300

GC Semi VOA

Prep Batch: 634344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240817-2	TB-ROX-071823-8011-A	Total/NA	Water	8011	
400-240817-3	MW27-ROX-071823	Total/NA	Water	8011	
400-240817-4	MW9-ROX-071823	Total/NA	Water	8011	
400-240817-5	MW10-ROX-071823	Total/NA	Water	8011	
400-240817-6	MW2-ROX-071823	Total/NA	Water	8011	
400-240817-8	TB-ROX-071823-8011-B	Total/NA	Water	8011	
400-240817-9	P59-ROX-071823	Total/NA	Water	8011	
400-240817-10	P58-ROX-071823	Total/NA	Water	8011	
400-240817-11	P58-ROX-071823-DUP	Total/NA	Water	8011	
400-240817-12	P93B-ROX-071823	Total/NA	Water	8011	
MB 400-634344/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-634344/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-634344/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

GC Semi VOA

Analysis Batch: 634434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-240817-2	TB-ROX-071823-8011-A	Total/NA	Water	8011	634344
400-240817-3	MW27-ROX-071823	Total/NA	Water	8011	634344
400-240817-4	MW9-ROX-071823	Total/NA	Water	8011	634344
400-240817-5	MW10-ROX-071823	Total/NA	Water	8011	634344
400-240817-6	MW2-ROX-071823	Total/NA	Water	8011	634344
400-240817-8	TB-ROX-071823-8011-B	Total/NA	Water	8011	634344
400-240817-9	P59-ROX-071823	Total/NA	Water	8011	634344
400-240817-10	P58-ROX-071823	Total/NA	Water	8011	634344
400-240817-11	P58-ROX-071823-DUP	Total/NA	Water	8011	634344
400-240817-12	P93B-ROX-071823	Total/NA	Water	8011	634344
MB 400-634344/1-A	Method Blank	Total/NA	Water	8011	634344
LCS 400-634344/2-A	Lab Control Sample	Total/NA	Water	8011	634344
LCSD 400-634344/3-A	Lab Control Sample Dup	Total/NA	Water	8011	634344

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

Lab Sample ID: MB 400-635204/5
Matrix: Water
Analysis Batch: 635204

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/31/23 12:03	1
Acrolein	ND		20	3.3	ug/L			07/31/23 12:03	1
Acrylonitrile	ND		10	2.8	ug/L			07/31/23 12:03	1
Benzene	ND		1.0	0.50	ug/L			07/31/23 12:03	1
Bromobenzene	ND		1.0	0.54	ug/L			07/31/23 12:03	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/31/23 12:03	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/31/23 12:03	1
Bromoform	ND		5.0	0.25	ug/L			07/31/23 12:03	1
Bromomethane	ND		1.0	0.98	ug/L			07/31/23 12:03	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/31/23 12:03	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/31/23 12:03	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/31/23 12:03	1
Chlorobenzene	ND		1.0	0.15	ug/L			07/31/23 12:03	1
Chloroethane	ND		1.0	0.76	ug/L			07/31/23 12:03	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/31/23 12:03	1
Chloroform	ND		1.0	0.90	ug/L			07/31/23 12:03	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/31/23 12:03	1
Chloromethane	ND		1.0	0.90	ug/L			07/31/23 12:03	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/31/23 12:03	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/31/23 12:03	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/31/23 12:03	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/31/23 12:03	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/31/23 12:03	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/31/23 12:03	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/31/23 12:03	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/31/23 12:03	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/31/23 12:03	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/31/23 12:03	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 12:03	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 12:03	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/31/23 12:03	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/31/23 12:03	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/31/23 12:03	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/31/23 12:03	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/31/23 12:03	1
2-Hexanone	ND		25	1.4	ug/L			07/31/23 12:03	1
Isopropy benzene	ND		1.0	0.53	ug/L			07/31/23 12:03	1
Methylene bromide	ND		5.0	0.22	ug/L			07/31/23 12:03	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/31/23 12:03	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/31/23 12:03	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/31/23 12:03	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/31/23 12:03	1
Naphthalene	ND		5.0	3.0	ug/L			07/31/23 12:03	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/31/23 12:03	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/31/23 12:03	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/31/23 12:03	1
o-Xylene	ND		5.0	0.60	ug/L			07/31/23 12:03	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/31/23 12:03	1

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

Lab Sample ID: MB 400-635204/5
Matrix: Water
Analysis Batch: 635204

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/31/23 12:03	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/31/23 12:03	1
Styrene	ND		1.0	1.0	ug/L			07/31/23 12:03	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/31/23 12:03	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/31/23 12:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/31/23 12:03	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/31/23 12:03	1
Toluene	ND		1.0	0.90	ug/L			07/31/23 12:03	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/31/23 12:03	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/31/23 12:03	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/31/23 12:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/31/23 12:03	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/31/23 12:03	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/31/23 12:03	1
Trichloroethene	ND		1.0	0.15	ug/L			07/31/23 12:03	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/31/23 12:03	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/31/23 12:03	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			07/31/23 12:03	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			07/31/23 12:03	1
Vinyl acetate	ND		25	0.93	ug/L			07/31/23 12:03	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/31/23 12:03	1
Xylenes, Total	ND		10	1.6	ug/L			07/31/23 12:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*72 - 130*		*07/31/23 12:03*	*1*
Dibromofluoromethane	*114*		*75 - 126*		*07/31/23 12:03*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*07/31/23 12:03*	*1*

Lab Sample ID: LCS 400-635204/1002
Matrix: Water
Analysis Batch: 635204

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	213		ug/L		106	43 - 160
Acrolein	500	454		ug/L		91	38 - 160
Acrylonitrile	500	532		ug/L		106	64 - 142
Benzene	50.0	50.5		ug/L		101	70 - 130
Bromobenzene	50.0	56.3		ug/L		113	70 - 132
Bromochloromethane	50.0	54.7		ug/L		109	70 - 130
Bromodichloromethane	50.0	54.9		ug/L		110	67 - 133
Bromoform	50.0	60.7		ug/L		121	57 - 140
Bromomethane	50.0	55.4		ug/L		111	10 - 160
2-Butanone (MEK)	200	201		ug/L		100	61 - 145
Carbon disulfide	50.0	45.3		ug/L		91	61 - 137
Carbon tetrachloride	50.0	55.2		ug/L		110	61 - 137
Chlorobenzene	50.0	53.5		ug/L		107	70 - 130
Chloroethane	50.0	66.9		ug/L		134	55 - 141
2-Chloroethyl vinyl ether	50.0	60.7		ug/L		121	10 - 160

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

Lab Sample ID: LCS 400-635204/1002
Matrix: Water
Analysis Batch: 635204

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	54.4		ug/L		109	69 - 130
1-Chlorohexane	50.0	55.0		ug/L		110	69 - 130
Chloromethane	50.0	45.3		ug/L		91	58 - 137
cis-1,2-Dichloroethene	50.0	51.1		ug/L		102	68 - 130
cis-1,3-Dichloropropene	50.0	49.1		ug/L		98	69 - 132
Dibromochloromethane	50.0	58.8		ug/L		118	67 - 135
1,2-Dichlorobenzene	50.0	59.8		ug/L		120	67 - 130
1,3-Dichlorobenzene	50.0	59.1		ug/L		118	70 - 130
1,4-Dichlorobenzene	50.0	59.3		ug/L		119	70 - 130
Dichlorodifluoromethane	50.0	73.8	*+	ug/L		148	41 - 146
1,1-Dichloroethane	50.0	51.5		ug/L		103	70 - 130
1,2-Dichloroethane	50.0	60.7		ug/L		121	69 - 130
1,1-Dichloroethene	50.0	49.1		ug/L		98	63 - 134
1,2-Dichloropropane	50.0	53.2		ug/L		106	70 - 130
1,3-Dichloropropane	50.0	56.1		ug/L		112	70 - 130
2,2-Dichloropropane	50.0	42.5		ug/L		85	52 - 135
1,1-Dichloropropene	50.0	49.5		ug/L		99	70 - 130
Ethylbenzene	50.0	53.7		ug/L		107	70 - 130
Ethyl methacrylate	50.0	53.4		ug/L		107	68 - 130
Hexachlorobutadiene	50.0	60.8		ug/L		122	53 - 140
2-Hexanone	200	223		ug/L		111	65 - 137
Isopropy benzene	50.0	55.0		ug/L		110	70 - 130
Methylene bromide	50.0	58.5		ug/L		117	70 - 130
Methylene Chloride	50.0	51.8		ug/L		104	66 - 135
4-Methyl-2-pentanone (MIBK)	200	229		ug/L		114	69 - 138
Methyl tert-butyl ether	50.0	50.4		ug/L		101	66 - 130
m-Xylene & p-Xylene	50.0	53.5		ug/L		107	70 - 130
Naphthalene	50.0	55.0		ug/L		110	47 - 149
n-Butylbenzene	50.0	65.6	*+	ug/L		131	67 - 130
N-Propylbenzene	50.0	59.7		ug/L		119	70 - 130
o-Chlorotoluene	50.0	59.7		ug/L		119	70 - 130
o-Xylene	50.0	53.4		ug/L		107	70 - 130
p-Chlorotoluene	50.0	60.0		ug/L		120	70 - 130
p-Isopropyltoluene	50.0	59.0		ug/L		118	65 - 130
sec-Butylbenzene	50.0	59.4		ug/L		119	66 - 130
Styrene	50.0	53.5		ug/L		107	70 - 130
tert-Butylbenzene	50.0	59.9		ug/L		120	64 - 139
1,1,1,2-Tetrachloroethane	50.0	58.0		ug/L		116	67 - 131
1,1,2,2-Tetrachloroethane	50.0	60.1		ug/L		120	70 - 131
Tetrachloroethene	50.0	51.8		ug/L		104	65 - 130
Toluene	50.0	49.6		ug/L		99	70 - 130
trans-1,2-Dichloroethene	50.0	50.0		ug/L		100	70 - 130
trans-1,3-Dichloropropene	50.0	55.9		ug/L		112	63 - 130
1,2,3-Trichlorobenzene	50.0	55.5		ug/L		111	60 - 138
1,2,4-Trichlorobenzene	50.0	56.2		ug/L		112	60 - 140
1,1,1-Trichloroethane	50.0	51.8		ug/L		104	68 - 130
1,1,2-Trichloroethane	50.0	57.0		ug/L		114	70 - 130
Trichloroethene	50.0	51.3		ug/L		103	70 - 130
Trichlorofluoromethane	50.0	56.1		ug/L		112	65 - 138

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

Lab Sample ID: LCS 400-635204/1002
Matrix: Water
Analysis Batch: 635204

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	61.3		ug/L		123	70 - 130
1,2,4-Trimethy benzene	50.0	57.4		ug/L		115	70 - 130
1,3,5-Trimethy benzene	50.0	58.3		ug/L		117	69 - 130
Vinyl acetate	100	136		ug/L		136	26 - 160
Vinyl chloride	50.0	48.4		ug/L		97	59 - 136
Xylenes, Total	100	107		ug/L		107	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*72 - 130*
Dibromofluoromethane	*111*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

Lab Sample ID: MB 400-635348/4
Matrix: Water
Analysis Batch: 635348

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			08/01/23 10:54	1
Benzene	ND		1.0	0.50	ug/L			08/01/23 10:54	1
n-Butylbenzene	ND		1.0	0.76	ug/L			08/01/23 10:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*72 - 130*		*08/01/23 10:54*	*1*
Dibromofluoromethane	*98*		*75 - 126*		*08/01/23 10:54*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*08/01/23 10:54*	*1*

Lab Sample ID: LCS 400-635348/1002
Matrix: Water
Analysis Batch: 635348

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	211		ug/L		105	43 - 160
Benzene	50.0	47.9		ug/L		96	70 - 130
n-Butylbenzene	50.0	50.7		ug/L		101	67 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*72 - 130*
Dibromofluoromethane	*99*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

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

Lab Sample ID: MB 400-634300/1-A
Matrix: Water
Analysis Batch: 634499

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634300

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/24/23 10:33	07/25/23 17:49	1

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

Lab Sample ID: MB 400-634300/1-A
Matrix: Water
Analysis Batch: 634499

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634300

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzenethiol	ND		10	1.7	ug/L		07/24/23 10:33	07/25/23 17:49	1
Benzoic acid	ND		30	7.3	ug/L		07/24/23 10:33	07/25/23 17:49	1
Benzyl alcohol	ND		10	2.0	ug/L		07/24/23 10:33	07/25/23 17:49	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/24/23 10:33	07/25/23 17:49	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/24/23 10:33	07/25/23 17:49	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/24/23 10:33	07/25/23 17:49	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/24/23 10:33	07/25/23 17:49	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/24/23 10:33	07/25/23 17:49	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/24/23 10:33	07/25/23 17:49	1
4-Chloroaniline	ND		10	3.4	ug/L		07/24/23 10:33	07/25/23 17:49	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/24/23 10:33	07/25/23 17:49	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/24/23 10:33	07/25/23 17:49	1
2-Chlorophenol	ND		10	2.2	ug/L		07/24/23 10:33	07/25/23 17:49	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/24/23 10:33	07/25/23 17:49	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 17:49	1
Dibenzofuran	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 17:49	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/24/23 10:33	07/25/23 17:49	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/24/23 10:33	07/25/23 17:49	1
Diethyl phthalate	ND		10	0.24	ug/L		07/24/23 10:33	07/25/23 17:49	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/24/23 10:33	07/25/23 17:49	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 17:49	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/24/23 10:33	07/25/23 17:49	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/24/23 10:33	07/25/23 17:49	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/24/23 10:33	07/25/23 17:49	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/24/23 10:33	07/25/23 17:49	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/24/23 10:33	07/25/23 17:49	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 17:49	1
1,4-Dioxane	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 17:49	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 17:49	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/24/23 10:33	07/25/23 17:49	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/24/23 10:33	07/25/23 17:49	1
Hexachloroethane	ND		10	4.2	ug/L		07/24/23 10:33	07/25/23 17:49	1
Indene	ND		10	1.0	ug/L		07/24/23 10:33	07/25/23 17:49	1
Isophorone	ND		10	0.14	ug/L		07/24/23 10:33	07/25/23 17:49	1
2-Methylphenol	ND		10	1.8	ug/L		07/24/23 10:33	07/25/23 17:49	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/24/23 10:33	07/25/23 17:49	1
2-Nitroaniline	ND		10	2.2	ug/L		07/24/23 10:33	07/25/23 17:49	1
3-Nitroaniline	ND		10	1.8	ug/L		07/24/23 10:33	07/25/23 17:49	1
4-Nitroaniline	ND		10	1.5	ug/L		07/24/23 10:33	07/25/23 17:49	1
Nitrobenzene	ND		10	0.13	ug/L		07/24/23 10:33	07/25/23 17:49	1
2-Nitrophenol	ND		10	5.2	ug/L		07/24/23 10:33	07/25/23 17:49	1
4-Nitrophenol	ND		10	2.1	ug/L		07/24/23 10:33	07/25/23 17:49	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/24/23 10:33	07/25/23 17:49	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/24/23 10:33	07/25/23 17:49	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/24/23 10:33	07/25/23 17:49	1
Pentachlorophenol	ND		20	1.4	ug/L		07/24/23 10:33	07/25/23 17:49	1
Phenol	ND		10	2.6	ug/L		07/24/23 10:33	07/25/23 17:49	1
Pyridine	ND		10	3.2	ug/L		07/24/23 10:33	07/25/23 17:49	1

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

Lab Sample ID: MB 400-634300/1-A
Matrix: Water
Analysis Batch: 634499

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634300

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Quinoline	ND		10	4.5	ug/L		07/24/23 10:33	07/25/23 17:49	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/24/23 10:33	07/25/23 17:49	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/24/23 10:33	07/25/23 17:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*46 - 124*	*07/24/23 10:33*	*07/25/23 17:49*	*1*
2-Fluorophenol	*70*		*13 - 113*	*07/24/23 10:33*	*07/25/23 17:49*	*1*
Nitrobenzene-d5	*71*		*36 - 126*	*07/24/23 10:33*	*07/25/23 17:49*	*1*
Phenol-d5	*71*		*17 - 127*	*07/24/23 10:33*	*07/25/23 17:49*	*1*
Terphenyl-d14	*88*		*44 - 149*	*07/24/23 10:33*	*07/25/23 17:49*	*1*
2,4,6-Tribromophenol	*64*		*26 - 150*	*07/24/23 10:33*	*07/25/23 17:49*	*1*

Lab Sample ID: LCS 400-634300/2-A
Matrix: Water
Analysis Batch: 634499

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634300

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	80.2		ug/L		67	21 - 120
Benzoic acid	522	178		ug/L		34	10 - 144
Benzyl alcohol	120	75.2		ug/L		63	28 - 120
Bis(2-chloroethoxy)methane	120	85.9		ug/L		72	47 - 120
Bis(2-chloroethyl)ether	120	91.3		ug/L		76	44 - 120
bis (2-chloroisopropyl) ether	120	86.9		ug/L		72	33 - 121
Bis(2-ethylhexyl) phthalate	120	94.5		ug/L		79	52 - 147
4-Bromophenyl phenyl ether	120	93.9		ug/L		78	54 - 122
Butyl benzyl phthalate	120	97.5		ug/L		81	54 - 133
4-Chloroaniline	120	67.5		ug/L		56	26 - 120
4-Chloro-3-methylphenol	120	95.5		ug/L		80	48 - 131
2-Chloronaphthalene	120	89.7		ug/L		75	52 - 121
2-Chlorophenol	120	65.5		ug/L		55	40 - 120
4-Chlorophenyl phenyl ether	120	94.2		ug/L		78	56 - 125
Dibenz[a,h]acridine	120	108		ug/L		90	31 - 150
Dibenzofuran	120	91.1		ug/L		76	56 - 122
3,3'-Dichlorobenzidine	160	113		ug/L		71	36 - 132
2,4-Dichlorophenol	120	84.8		ug/L		71	49 - 120
Diethyl phthalate	120	94.9		ug/L		79	50 - 137
2,4-Dimethylphenol	120	80.2		ug/L		67	48 - 120
Dimethyl phthalate	120	88.9		ug/L		74	57 - 124
Di-n-butyl phthalate	120	103		ug/L		85	58 - 126
4,6-Dinitro-ortho-cresol	240	182		ug/L		76	23 - 148
2,4-Dinitrophenol	240	151		ug/L		63	10 - 150
2,4-Dinitrotoluene	120	94.0		ug/L		78	54 - 142
2,6-Dinitrotoluene	120	88.8		ug/L		74	55 - 130
Di-n-octyl phthalate	120	94.2		ug/L		78	57 - 138
1,4-Dioxane	120	59.8		ug/L		50	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	93.2		ug/L		78	45 - 124
Hexachlorobenzene	120	95.9		ug/L		80	52 - 129
Hexachlorocyclopentadiene	120	48.6		ug/L		40	10 - 134

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

Lab Sample ID: LCS 400-634300/2-A
Matrix: Water
Analysis Batch: 634499

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634300

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Hexachloroethane			120	76.0		ug/L		63	20 - 120		
Indene			120	88.9		ug/L		74	49 - 120		
Isophorone			120	87.6		ug/L		73	48 - 120		
2-Methylphenol			120	89.0		ug/L		74	46 - 124		
3 & 4 Methylphenol			120	81.1		ug/L		68	45 - 120		
2-Nitroaniline			120	82.5		ug/L		69	51 - 145		
3-Nitroaniline			120	82.0		ug/L		68	37 - 127		
4-Nitroaniline			120	92.7		ug/L		77	36 - 137		
Nitrobenzene			120	80.9		ug/L		67	45 - 120		
2-Nitrophenol			120	85.1		ug/L		71	40 - 124		
4-Nitrophenol			240	119		ug/L		50	23 - 146		
N-Nitrosodimethylamine			120	81.5		ug/L		68	29 - 137		
N-Nitrosodi-n-propylamine			120	89.5		ug/L		75	45 - 120		
N-Nitrosodiphenylamine			119	90.2		ug/L		76	54 - 120		
Pentachlorophenol			240	168		ug/L		70	31 - 130		
Phenol			120	66.8		ug/L		56	11 - 120		
Pyridine			240	129		ug/L		54	16 - 120		
Quinoline			120	103		ug/L		86	49 - 130		
2,4,5-Trichlorophenol			120	96.1		ug/L		80	51 - 136		
2,4,6-Trichlorophenol			120	93.1		ug/L		78	50 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*82*		*46 - 124*
2-Fluorophenol	*35*		*13 - 113*
Nitrobenzene-d5	*78*		*36 - 126*
Phenol-d5	*59*		*17 - 127*
Terphenyl-d14	*89*		*44 - 149*
2,4,6-Tribromophenol	*74*		*26 - 150*

Lab Sample ID: LCS 400-634300/4-A
Matrix: Water
Analysis Batch: 634499

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634300

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	3.82	J *-	ug/L		3	10 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*86*		*46 - 124*
2-Fluorophenol	*25*		*13 - 113*
Nitrobenzene-d5	*74*		*36 - 126*
Phenol-d5	*53*		*17 - 127*
Terphenyl-d14	*96*		*44 - 149*
2,4,6-Tribromophenol	*66*		*26 - 150*

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

Lab Sample ID: LCSD 400-634300/3-A
Matrix: Water
Analysis Batch: 634499

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 634300

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	80.5		ug/L		67	21 - 120	0	30
Benzoic acid			522	210		ug/L		40	10 - 144	17	30
Benzyl alcohol			120	87.5		ug/L		73	28 - 120	15	30
Bis(2-chloroethoxy)methane			120	95.6		ug/L		80	47 - 120	11	30
Bis(2-chloroethyl)ether			120	113		ug/L		94	44 - 120	21	30
bis (2-chloroisopropyl) ether			120	94.1		ug/L		78	33 - 121	8	30
Bis(2-ethylhexyl) phthalate			120	103		ug/L		86	52 - 147	9	30
4-Bromophenyl phenyl ether			120	103		ug/L		86	54 - 122	10	30
Butyl benzyl phthalate			120	106		ug/L		88	54 - 133	8	30
4-Chloroaniline			120	71.7		ug/L		60	26 - 120	6	30
4-Chloro-3-methylphenol			120	98.3		ug/L		82	48 - 131	3	30
2-Chloronaphthalene			120	97.1		ug/L		81	52 - 121	8	30
2-Chlorophenol			120	56.4		ug/L		47	40 - 120	15	30
4-Chlorophenyl phenyl ether			120	97.3		ug/L		81	56 - 125	3	30
Dibenz[a,h]acridine			120	113		ug/L		95	31 - 150	5	30
Dibenzofuran			120	98.3		ug/L		82	56 - 122	8	30
3,3'-Dichlorobenzidine			160	118		ug/L		73	36 - 132	4	30
2,4-Dichlorophenol			120	80.5		ug/L		67	49 - 120	5	30
Diethyl phthalate			120	101		ug/L		84	50 - 137	6	30
2,4-Dimethylphenol			120	87.7		ug/L		73	48 - 120	9	30
Dimethyl phthalate			120	96.3		ug/L		80	57 - 124	8	30
Di-n-butyl phthalate			120	110		ug/L		91	58 - 126	7	30
4,6-Dinitro-ortho-cresol			240	192		ug/L		80	23 - 148	5	30
2,4-Dinitrophenol			240	156		ug/L		65	10 - 150	4	30
2,4-Dinitrotoluene			120	103		ug/L		86	54 - 142	9	30
2,6-Dinitrotoluene			120	96.7		ug/L		81	55 - 130	9	30
Di-n-octyl phthalate			120	104		ug/L		86	57 - 138	10	30
1,4-Dioxane			120	67.8		ug/L		57	31 - 120	13	30
1,2-Diphenylhydrazine (as Azobenzene)			120	102		ug/L		85	45 - 124	9	30
Hexachlorobenzene			120	103		ug/L		85	52 - 129	7	30
Hexachlorocyclopentadiene			120	48.7		ug/L		41	10 - 134	0	30
Hexachloroethane			120	80.6		ug/L		67	20 - 120	6	30
Indene			120	100		ug/L		84	49 - 120	12	30
Isophorone			120	94.7		ug/L		79	48 - 120	8	30
2-Methylphenol			120	90.8		ug/L		76	46 - 124	2	30
3 & 4 Methylphenol			120	84.5		ug/L		70	45 - 120	4	30
2-Nitroaniline			120	88.9		ug/L		74	51 - 145	7	30
3-Nitroaniline			120	84.5		ug/L		70	37 - 127	3	30
4-Nitroaniline			120	95.2		ug/L		79	36 - 137	3	30
Nitrobenzene			120	89.4		ug/L		75	45 - 120	10	30
2-Nitrophenol			120	81.7		ug/L		68	40 - 124	4	30
4-Nitrophenol			240	116		ug/L		48	23 - 146	3	30
N-Nitrosodimethylamine			120	83.0		ug/L		69	29 - 137	2	30
N-Nitrosodi-n-propylamine			120	97.8		ug/L		82	45 - 120	9	30
N-Nitrosodiphenylamine			119	99.1		ug/L		83	54 - 120	9	30
Pentachlorophenol			240	182		ug/L		76	31 - 130	8	30
Phenol			120	62.1		ug/L		52	11 - 120	7	30
Pyridine			240	142		ug/L		59	16 - 120	10	30

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

Lab Sample ID: LCSD 400-634300/3-A
Matrix: Water
Analysis Batch: 634499

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 634300

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Quinoline			120	110		ug/L		92	49 - 130	6	30
2,4,5-Trichlorophenol			120	102		ug/L		85	51 - 136	6	30
2,4,6-Trichlorophenol			120	96.2		ug/L		80	50 - 127	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*46 - 124*
2-Fluorophenol	*20*		*13 - 113*
Nitrobenzene-d5	*81*		*36 - 126*
Phenol-d5	*55*		*17 - 127*
Terphenyl-d14	*93*		*44 - 149*
2,4,6-Tribromophenol	*77*		*26 - 150*

Lab Sample ID: LCSD 400-634300/5-A
Matrix: Water
Analysis Batch: 634499

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 634300

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	3.53	J *-	ug/L		3	10 - 120	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*87*		*46 - 124*
2-Fluorophenol	*37*		*13 - 113*
Nitrobenzene-d5	*71*		*36 - 126*
Phenol-d5	*63*		*17 - 127*
Terphenyl-d14	*90*		*44 - 149*
2,4,6-Tribromophenol	*55*		*26 - 150*

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

Lab Sample ID: MB 400-634300/1-A
Matrix: Water
Analysis Batch: 634595

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634300

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/24/23 10:33	07/26/23 13:58	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/24/23 10:33	07/26/23 13:58	1
Anthracene	ND		0.20	0.047	ug/L		07/24/23 10:33	07/26/23 13:58	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/24/23 10:33	07/26/23 13:58	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/24/23 10:33	07/26/23 13:58	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/24/23 10:33	07/26/23 13:58	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/24/23 10:33	07/26/23 13:58	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/24/23 10:33	07/26/23 13:58	1
Chrysene	ND		0.20	0.033	ug/L		07/24/23 10:33	07/26/23 13:58	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/24/23 10:33	07/26/23 13:58	1
Fluoranthene	ND		0.20	0.034	ug/L		07/24/23 10:33	07/26/23 13:58	1
Fluorene	ND		0.20	0.089	ug/L		07/24/23 10:33	07/26/23 13:58	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/24/23 10:33	07/26/23 13:58	1
Phenanthrene	ND		0.20	0.090	ug/L		07/24/23 10:33	07/26/23 13:58	1

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

Lab Sample ID: MB 400-634300/1-A
Matrix: Water
Analysis Batch: 634595

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634300

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		0.20	0.039	ug/L		07/24/23 10:33	07/26/23 13:58	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/24/23 10:33	07/26/23 13:58	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/24/23 10:33	07/26/23 13:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*98*		*18 - 147*	*07/24/23 10:33*	*07/26/23 13:58*	*1*
2-Fluorobiphenyl	*89*		*15 - 128*	*07/24/23 10:33*	*07/26/23 13:58*	*1*
Nitrobenzene-d5	*89*		*10 - 144*	*07/24/23 10:33*	*07/26/23 13:58*	*1*

Lab Sample ID: LCS 400-634300/6-A
Matrix: Water
Analysis Batch: 634595

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634300

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	2.00	1.71		ug/L		86	40 - 140
Acenaphthylene	2.00	1.67		ug/L		83	40 - 140
Anthracene	2.00	1.62		ug/L		81	40 - 140
Benzo[a]anthracene	2.00	1.75		ug/L		87	40 - 140
Benzo[a]pyrene	2.00	1.50		ug/L		75	40 - 140
Benzo[b]fluoranthene	2.00	1.59		ug/L		79	40 - 140
Benzo[g,h,i]perylene	2.00	1.56		ug/L		78	40 - 140
Benzo[k]fluoranthene	2.00	1.60		ug/L		80	40 - 140
Chrysene	2.00	1.77		ug/L		88	40 - 140
Dibenz(a,h)anthracene	2.00	1.54		ug/L		77	40 - 140
Fluoranthene	2.00	1.63		ug/L		82	40 - 140
Fluorene	2.00	1.74		ug/L		87	40 - 140
Indeno[1,2,3-cd]pyrene	2.00	1.54		ug/L		77	40 - 140
Phenanthrene	2.00	1.68		ug/L		84	40 - 140
Pyrene	2.00	1.75		ug/L		87	40 - 140
1-Methylnaphthalene	2.00	1.67		ug/L		84	40 - 140
2-Methylnaphthalene	2.00	1.65		ug/L		83	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*99*		*18 - 147*
2-Fluorobiphenyl	*92*		*15 - 128*
Nitrobenzene-d5	*86*		*10 - 144*

Lab Sample ID: LCSD 400-634300/7-A
Matrix: Water
Analysis Batch: 634595

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 634300

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	2.00	1.57		ug/L		79	40 - 140	9	40
Acenaphthylene	2.00	1.57		ug/L		79	40 - 140	6	40
Anthracene	2.00	1.53		ug/L		76	40 - 140	6	40
Benzo[a]anthracene	2.00	1.66		ug/L		83	40 - 140	5	40
Benzo[a]pyrene	2.00	1.34		ug/L		67	40 - 140	11	40
Benzo[b]fluoranthene	2.00	1.43		ug/L		72	40 - 140	10	40

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

Lab Sample ID: LCSD 400-634300/7-A
Matrix: Water
Analysis Batch: 634595

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 634300

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[g,h,i]perylene			2.00	1.48		ug/L		74	40 - 140	5	40
Benzo[k]fluoranthene			2.00	1.48		ug/L		74	40 - 140	8	40
Chrysene			2.00	1.66		ug/L		83	40 - 140	6	40
Dibenz(a,h)anthracene			2.00	1.51		ug/L		75	40 - 140	2	40
Fluoranthene			2.00	1.56		ug/L		78	40 - 140	4	40
Fluorene			2.00	1.60		ug/L		80	40 - 140	9	40
Indeno[1,2,3-cd]pyrene			2.00	1.47		ug/L		73	40 - 140	5	40
Phenanthrene			2.00	1.64		ug/L		82	40 - 140	2	40
Pyrene			2.00	1.67		ug/L		83	40 - 140	5	40
1-Methylnaphthalene			2.00	1.58		ug/L		79	40 - 140	5	40
2-Methylnaphthalene			2.00	1.60		ug/L		80	40 - 140	3	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*92*		*18 - 147*
2-Fluorobiphenyl	*80*		*15 - 128*
Nitrobenzene-d5	*79*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-634344/1-A
Matrix: Water
Analysis Batch: 634434

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634344

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/24/23 13:46	07/25/23 12:49	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		07/24/23 13:46	07/25/23 12:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*51 - 149*	*07/24/23 13:46*	*07/25/23 12:49*	*1*

Lab Sample ID: LCS 400-634344/2-A
Matrix: Water
Analysis Batch: 634434

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634344

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-D bromo-3-Chloropropane			0.101	0.135		ug/L		135	60 - 140
1,2-D bromoethane			0.101	0.107		ug/L		106	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*51 - 149*

Lab Sample ID: LCSD 400-634344/3-A
Matrix: Water
Analysis Batch: 634434

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 634344

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane			0.101	0.138		ug/L		137	60 - 140	2	30
1,2-D bromoethane			0.101	0.0907		ug/L		90	60 - 140	17	30

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-634344/3-A
Matrix: Water
Analysis Batch: 634434

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 634344

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	80		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: 7/18/2023
PO #	**GSAP Project ID**	PAGE: 1 of 2
60697537 – 3.3.2	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 60697537 – 3.3.2

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, E. Chalfant	

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; loredana.filimon@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes:

400-240817 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-071823-8260-A	7/18/2023	0000	Water	2					2	X			
	TB-ROX-071823-8011-A	7/18/2023	0000	Water	2					2		X		
	MW27-ROX-071823	7/18/2023	0920	Water	6			2		8	X	X	X	X
	MW9-ROX-071823	7/18/2023	1015	Water	6			2		8	X	X	X	X
	MW10-ROX-071823	7/18/2023	1115	Water	6			2		8	X	X	X	X
	MW2-ROX-071823	7/18/2023	1300	Water	6			2		8	X	X	X	X

Relinquished by (Signature)	Received by (Signature)	Date	Time
MARY MASSA	FEDEX: 5293 4337 5386, 5293 4337 5375	7/18/2023	1600
Relinquished by (Signature)	Received by (Signature)	Date: 7-20-23	Time 1011 [illegible]°C IR#
Relinquished by (Signature)	Received by (Signature)	Date	Time 1430 IR# 2.0°C IR#

Version: 12July23

CUSTODY SEALS: 1599742, 1599743, 1599745, 1599744

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: 7/18/2023
PO #	**GSAP Project ID**	PAGE: 2 of 2
60697537 – 3.3.2	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 60697537 – 3.3.2

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): J. Mayer, 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; loredana.filimon@aecom.com

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

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-071823-8260-B	7/18/2023	0000	Water	2					2	X			
	TB-ROX-071823-8011-B	7/18/2023	0000	Water	2					2		X		
	P59-ROX-071823	7/18/2023	1005	Water	6			2		8	X	X	X	X
	P58-ROX-071823	7/18/2023	1200	Water	6			2		8	X	X	X	X
	P58-ROX-071823-DUP	7/18/2023	1200	Water	6			2		8	X	X	X	X
	P93B-ROX-071823	7/18/2023	1320	Water	6			2		8	X	X	X	X

7-18-23

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time
Joe Mayer	FEDEX: See page 1	7/18/2023	1600
Relinquished by: (Signature)	Received by: (Signature)	Date	Time:
		7-20-23	1011 2.0°C IR11
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
			1.3°C IR11

Version: 13Oct22

CUSTODY SEALS: See page 1

Page 74 of 76

8/3/2023 (Rev. 1)

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc. Job Number: 400-240817-1

Login Number: 240817 **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	1.3°C, 2.0°C IR11
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: 400-240817-1
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	09-01-23
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-23
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

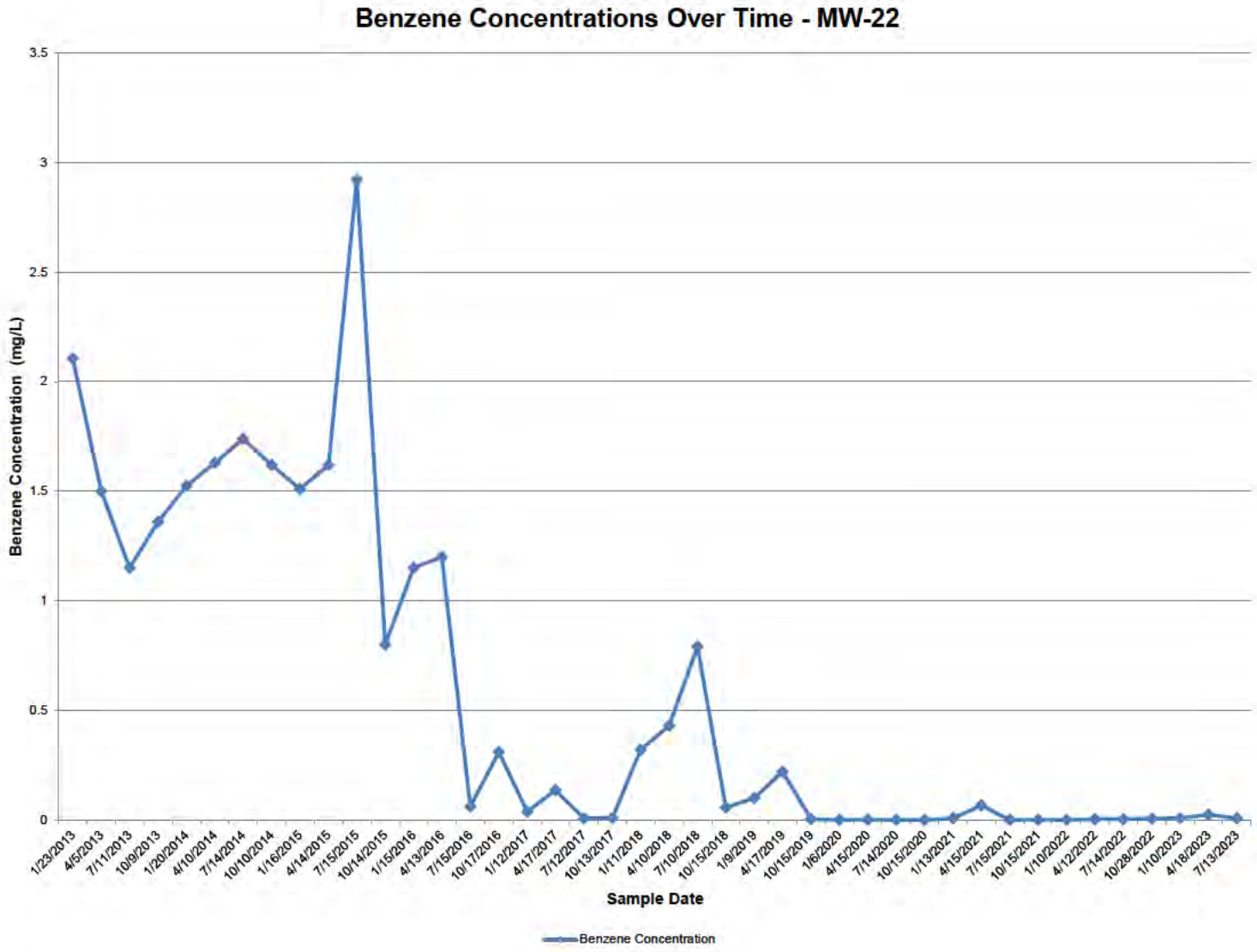
Appendix D

Appendix D – 1 Charts – Benzene Concentrations Over Time

Appendix D – 2 GWSDAT Charts

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

4th Street Area



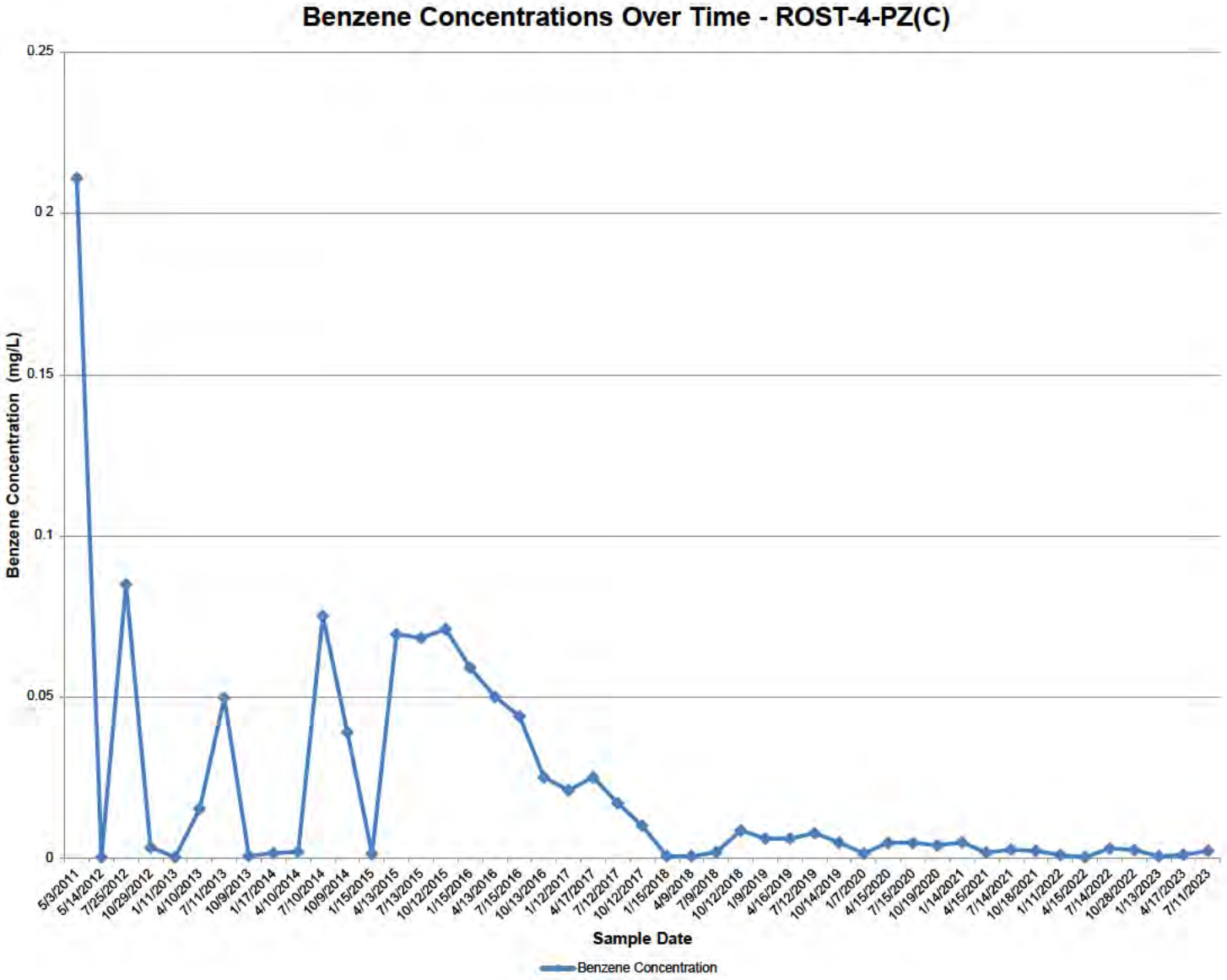
Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Non-detect values are shown at half the reporting limit.



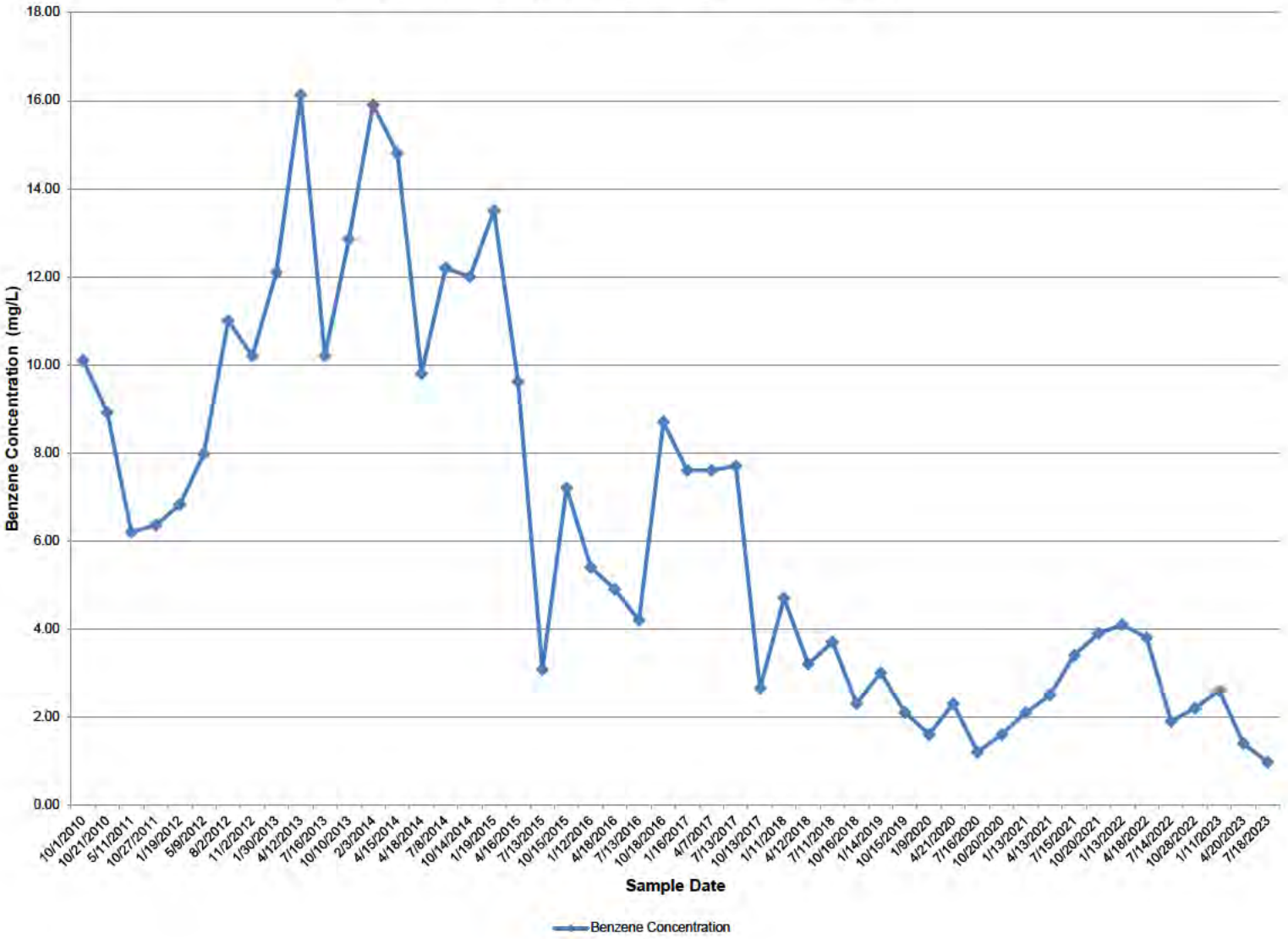
Notes:

mg/L = milligrams per liter

Timeframe specific to available data.

Non-detect values are shown at half the reporting limit.

Benzene Concentrations Over Time - P-59

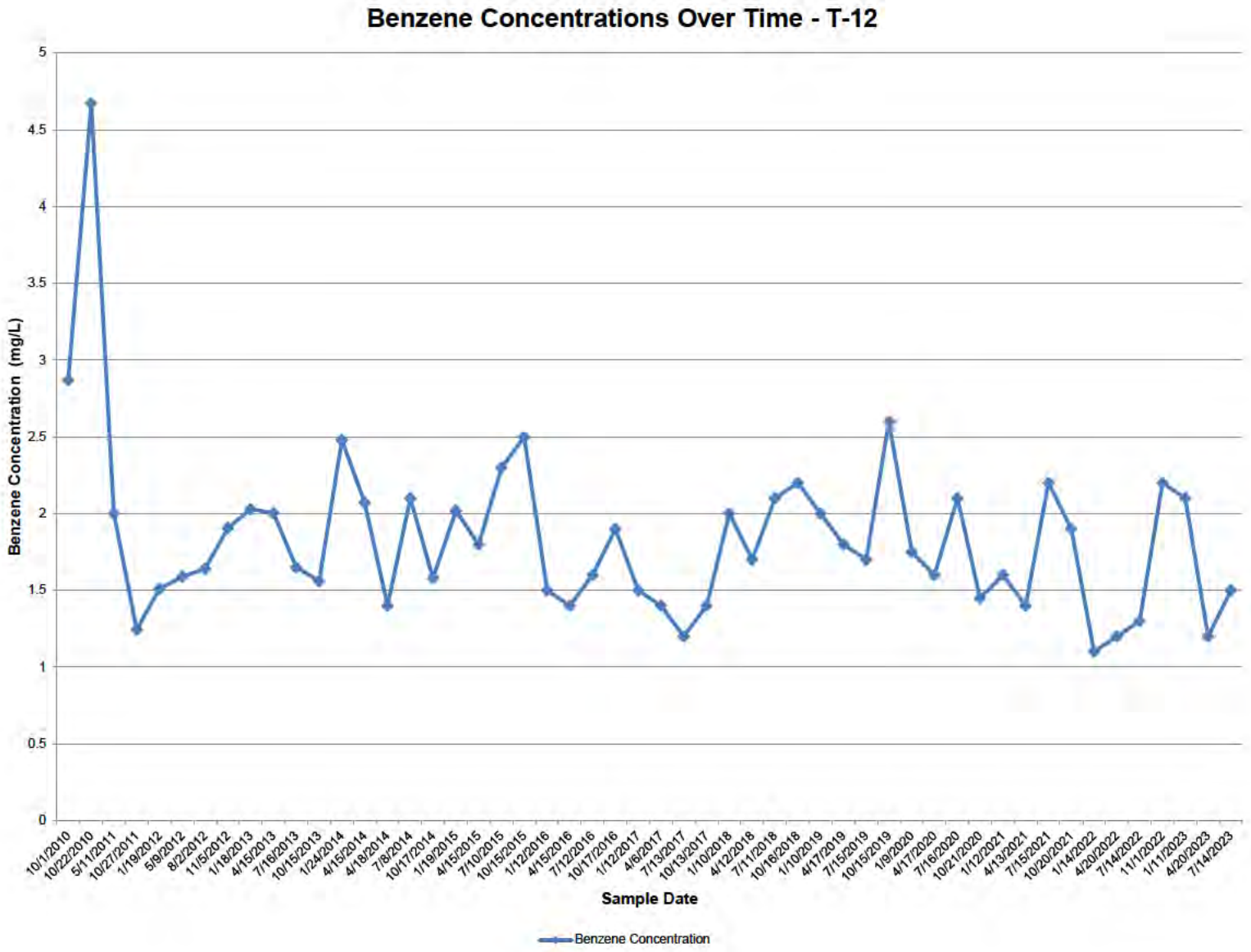


Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.



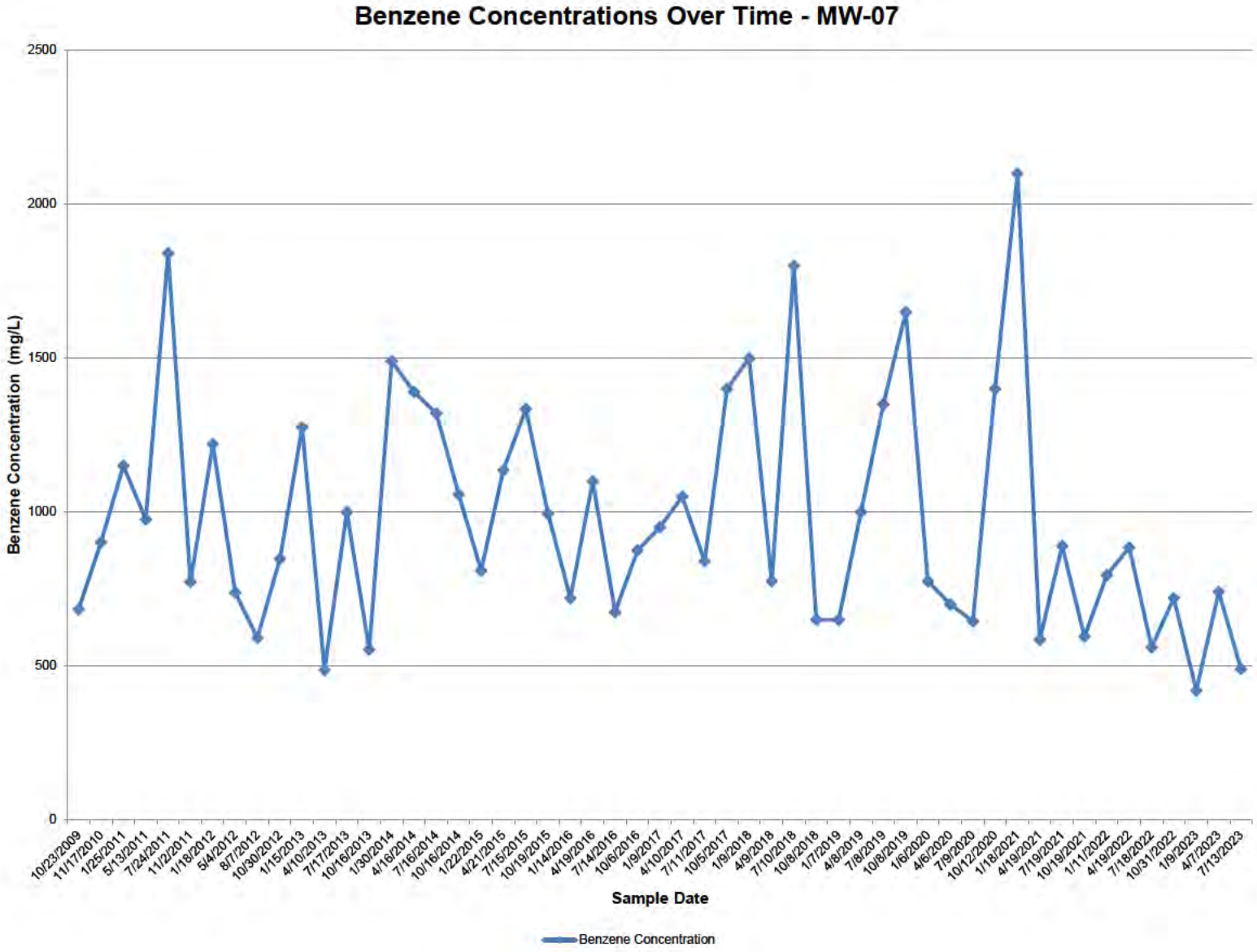
Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Public Works Yard Area



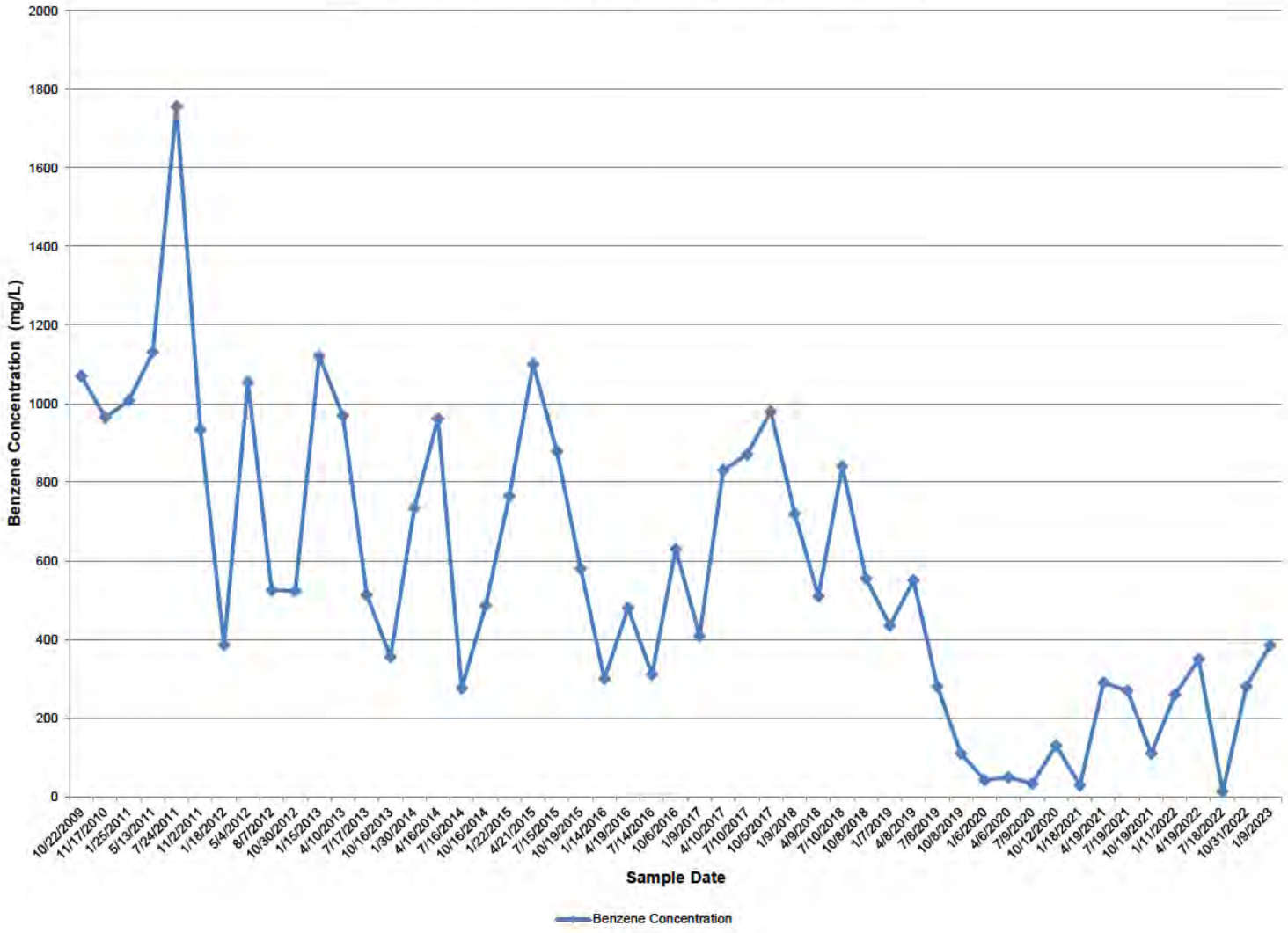
Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Benzene Concentrations Over Time - MW-08



Notes:

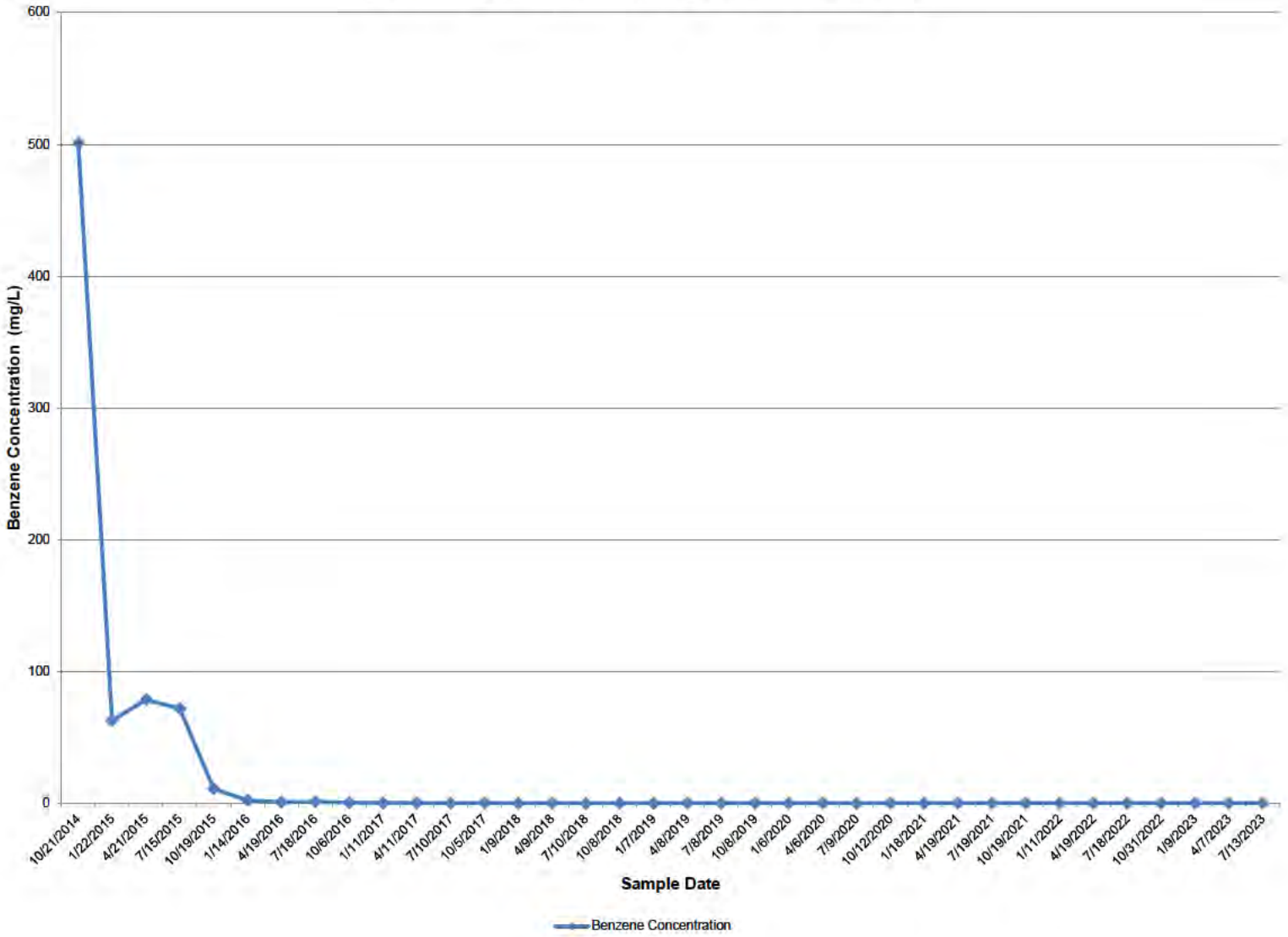
mg/L = milligrams per liter

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 EPA 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.

Benzene Concentrations Over Time - MW-25



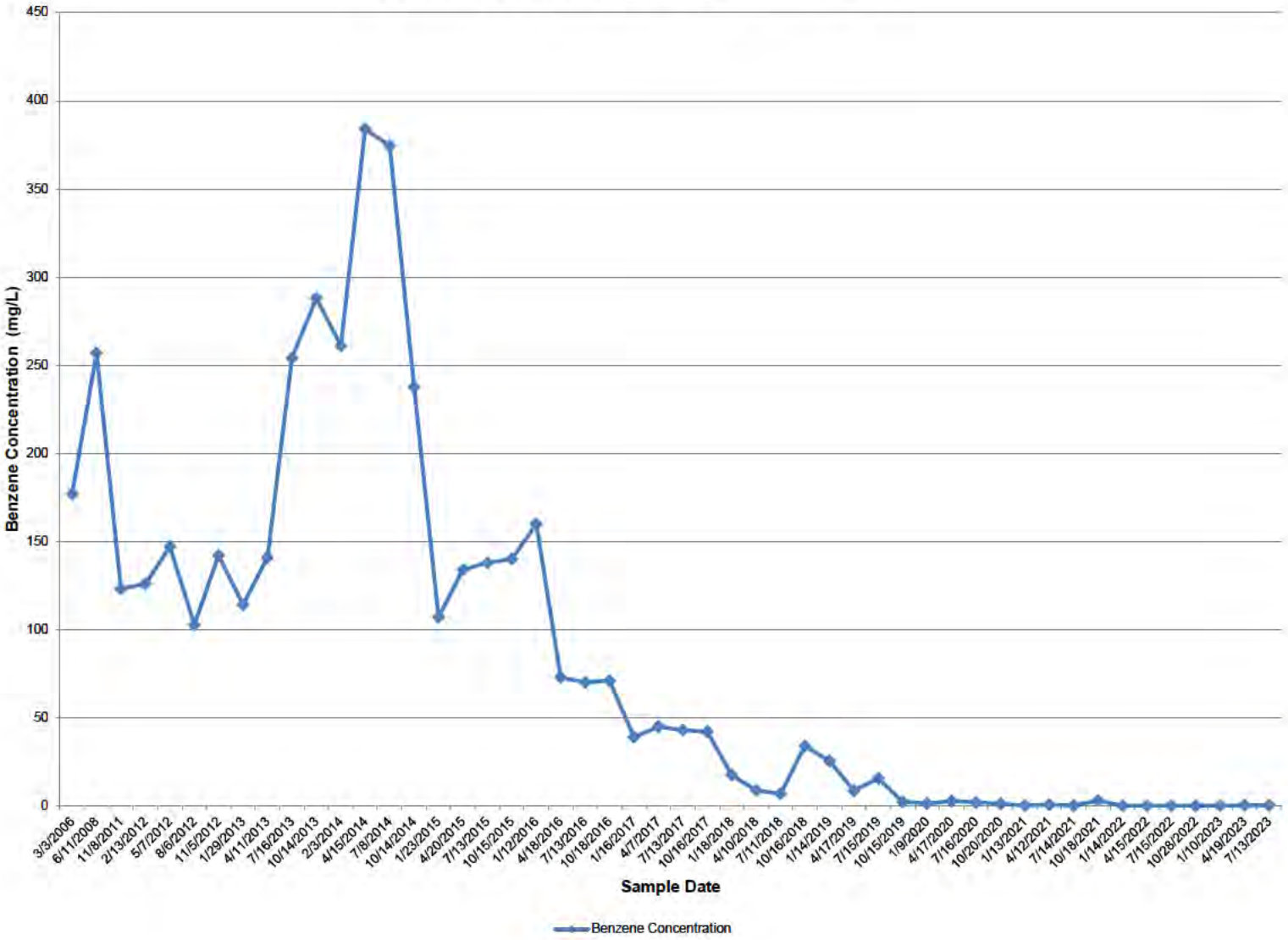
Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Benzene Concentrations Over Time - P-57



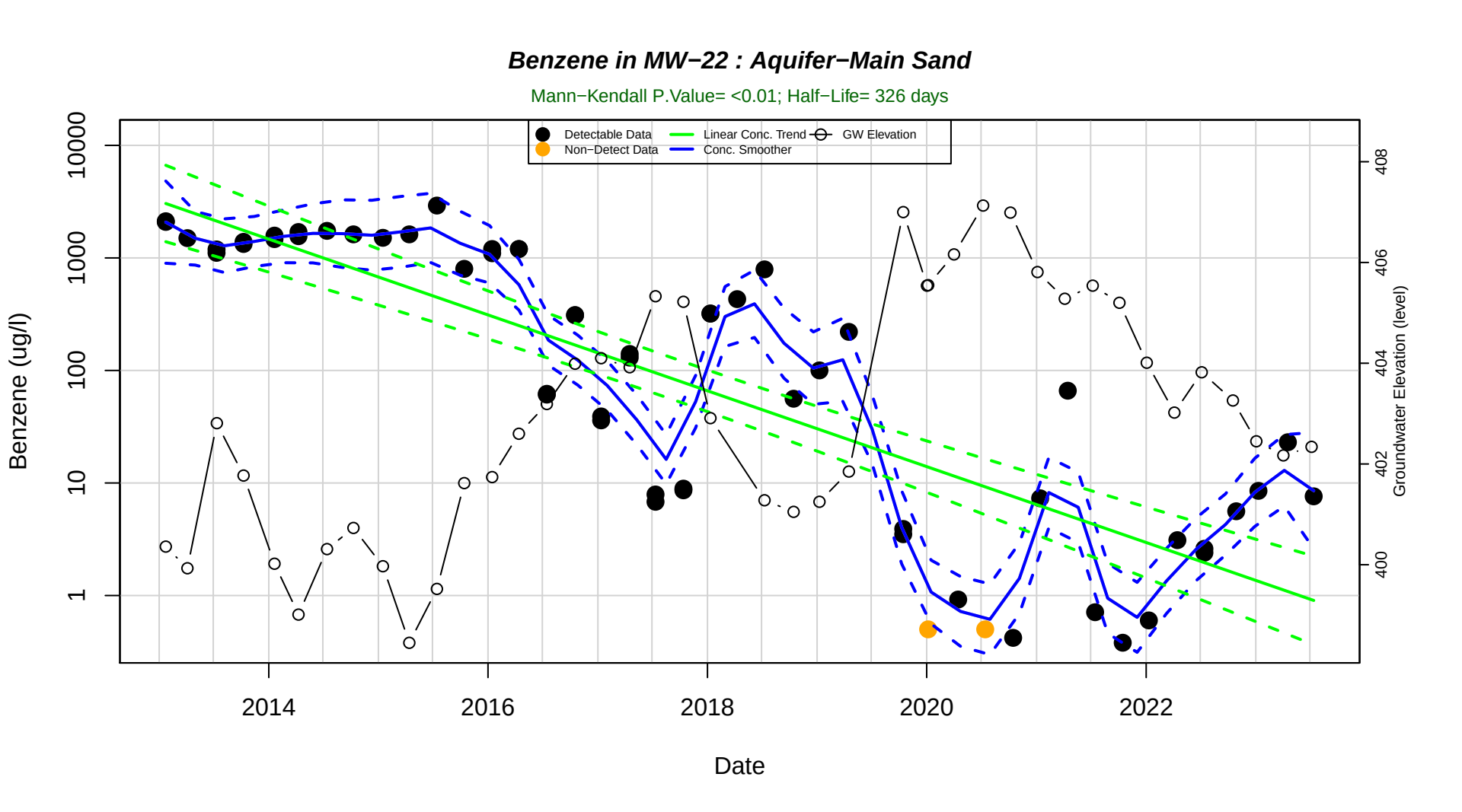
Notes:

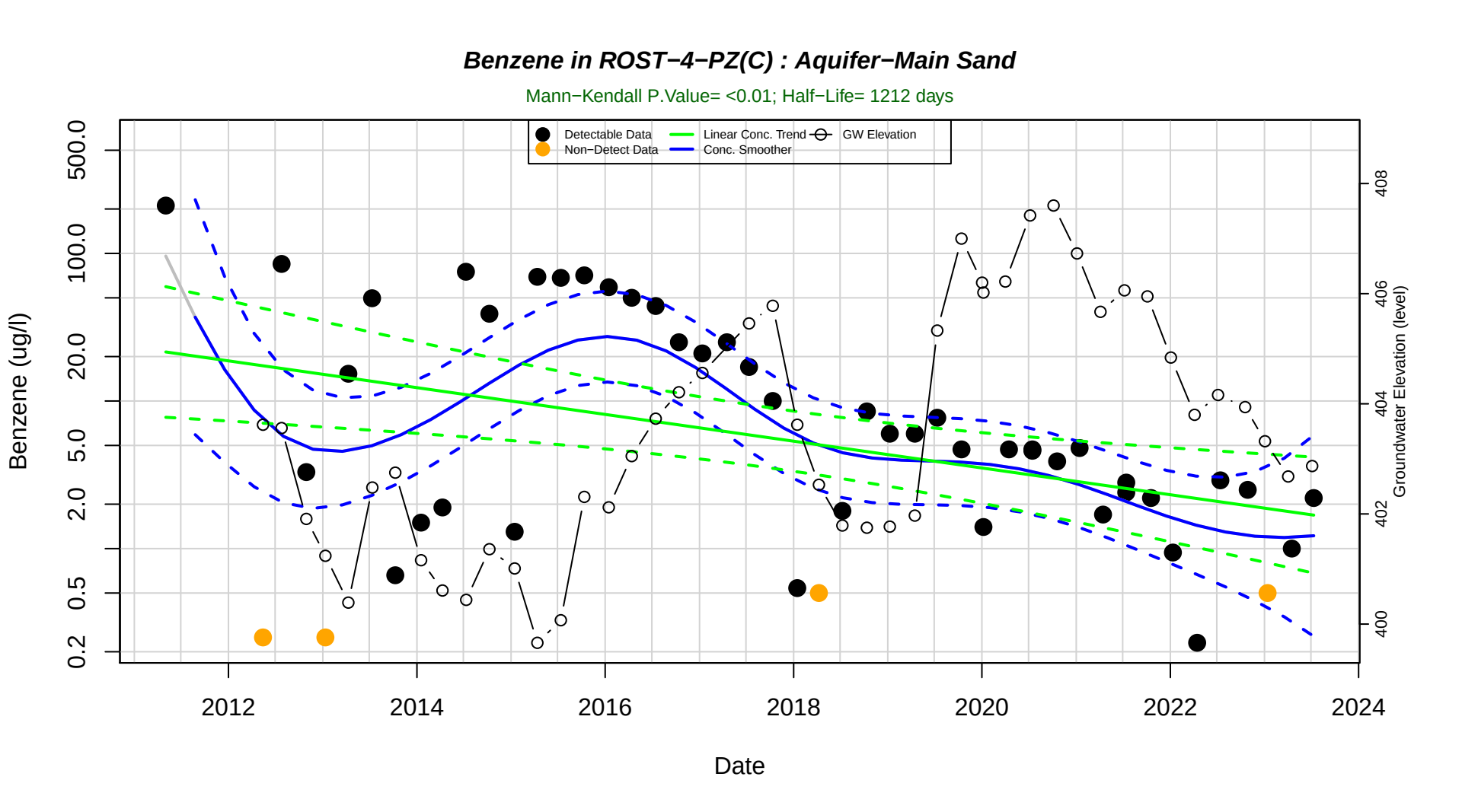
mg/L = milligrams per liter

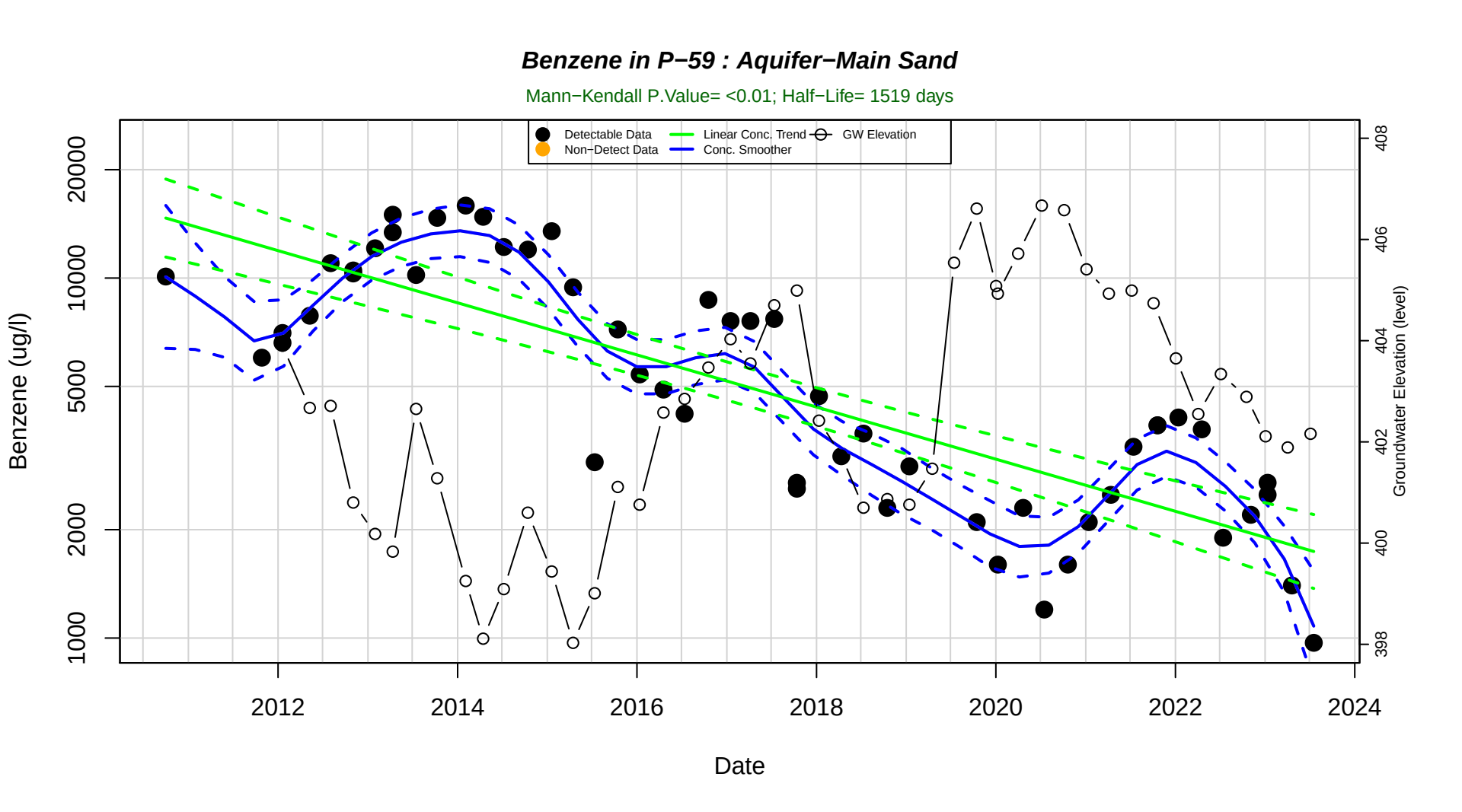
Duplicate values were averaged.

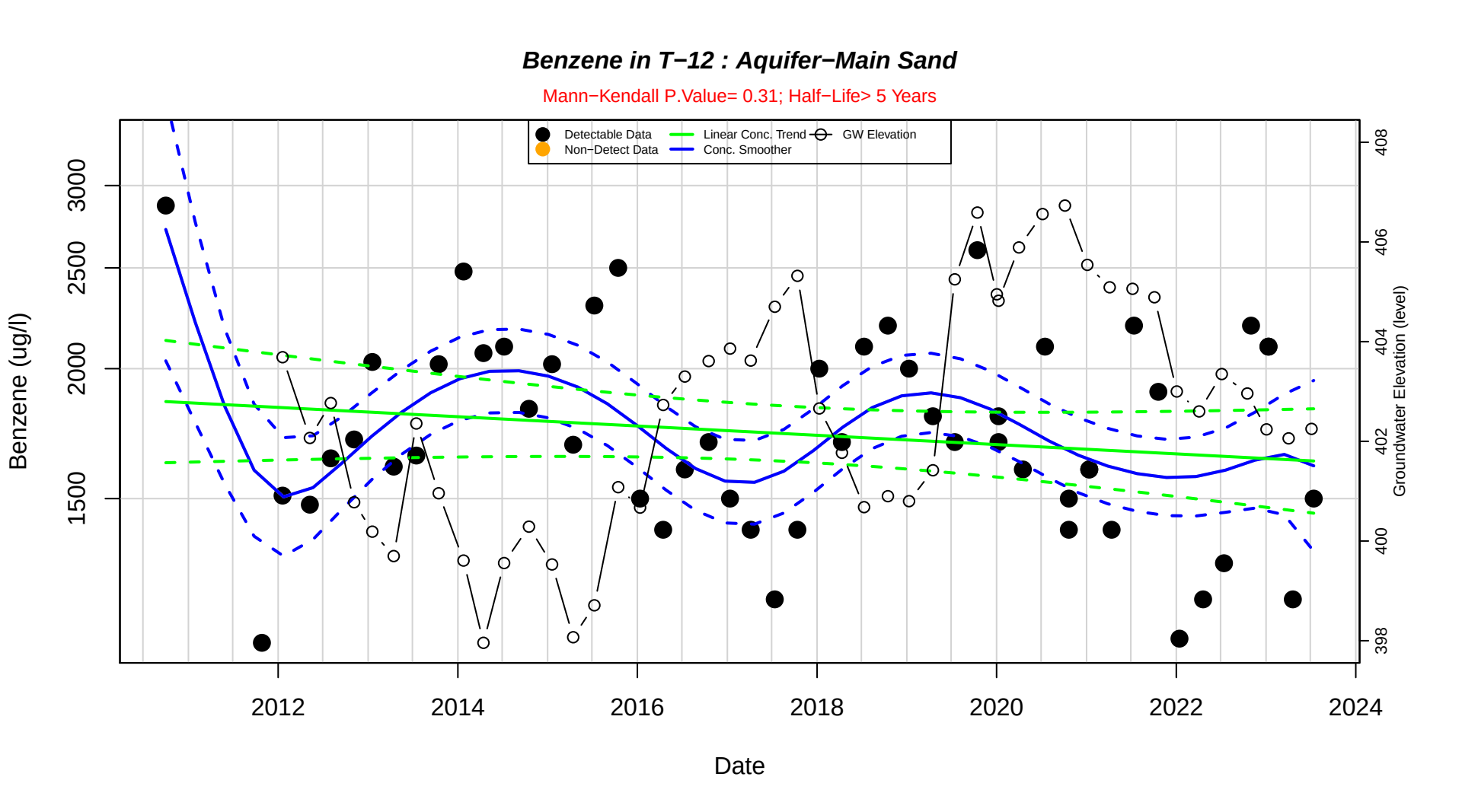
Timeframe specific to available data.

4th Street Area

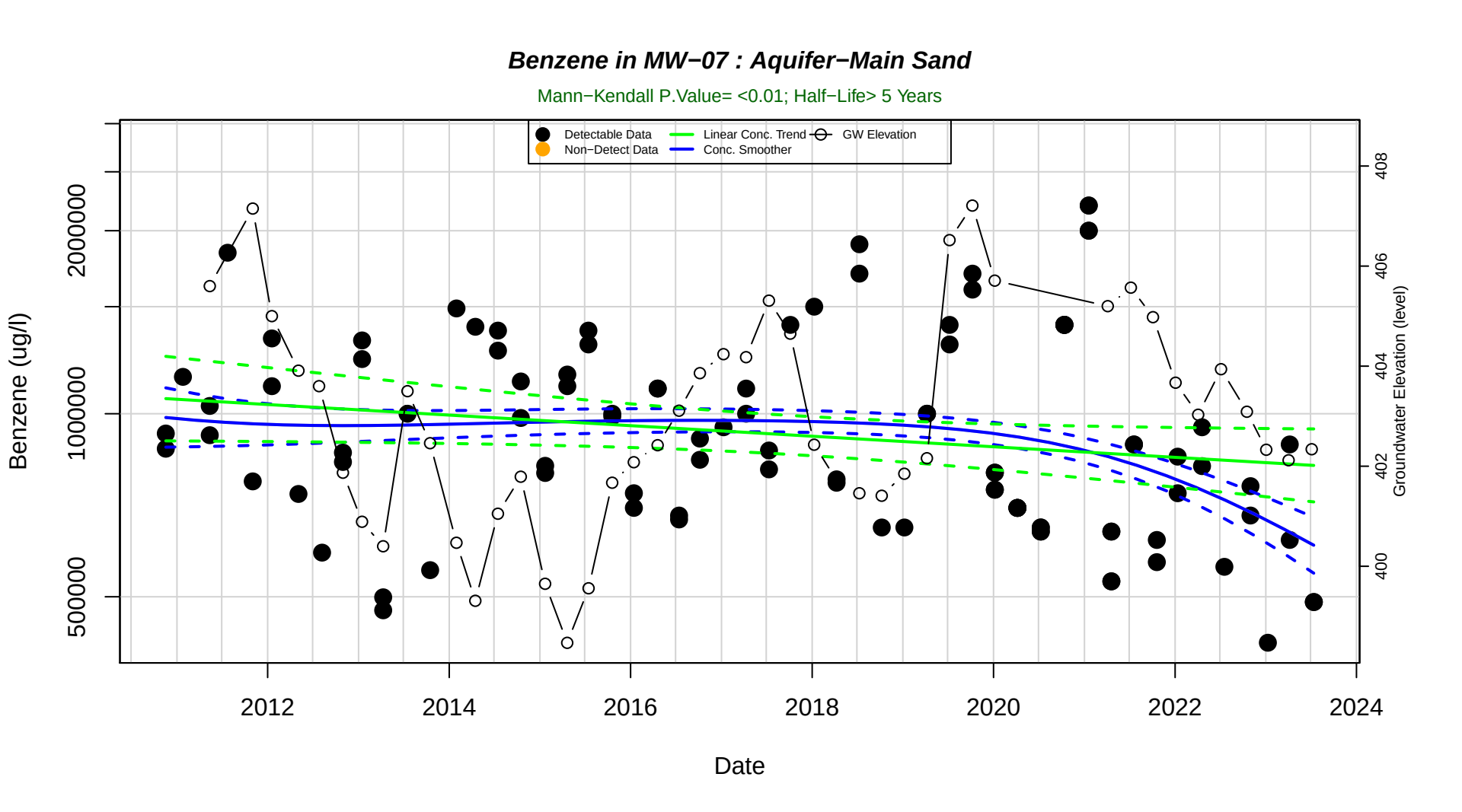

Benzene in MW−22 : Aquifer−Main Sand
Mann−Kendall P.Value= <0.01; Half−Life= 326 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
10000
1000
100
10
1
Groundwater Elevation (level)
408
406
404
402
400
2014
2016
2018
2020
2022
Date


Benzene in ROST−4−PZ(C) : Aquifer−Main Sand
Mann−Kendall P.Value= <0.01; Half−Life= 1212 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
0.2
0.5
2.0
5.0
20.0
100.0
500.0
Groundwater Elevation (level)
400
402
404
406
408
2012
2014
2016
2018
2020
2022
2024
Date


Benzene in P−59 : Aquifer−Main Sand
Mann−Kendall P.Value= <0.01; Half−Life= 1519 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
2012
2014
2016
2018
2020
2022
2024
Date

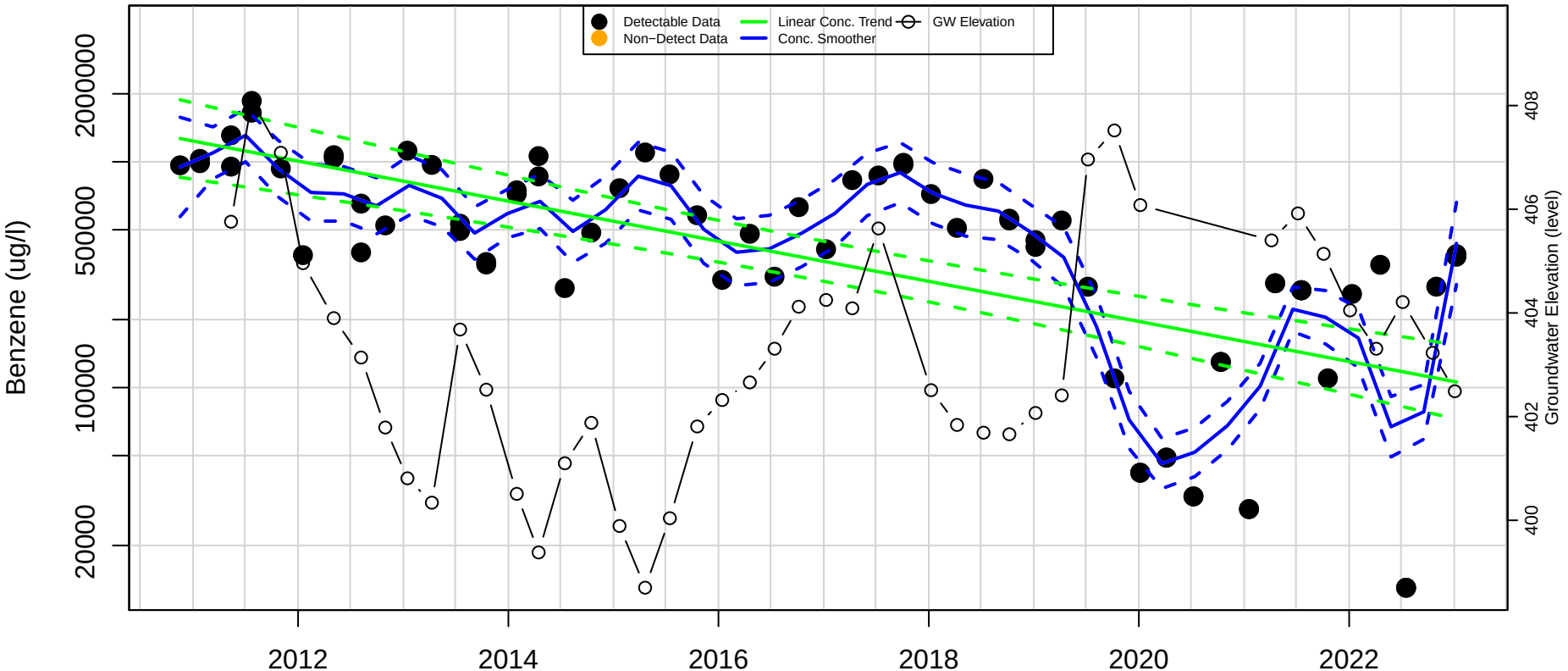

Benzene in T−12 : Aquifer−Main Sand
Mann−Kendall P.Value= 0.31; Half−Life> 5 Years
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
1500
2000
2500
3000
Groundwater Elevation (level)
398
400
402
404
406
408
2012
2014
2016
2018
2020
2022
2024
Date

Public Works Yard Area

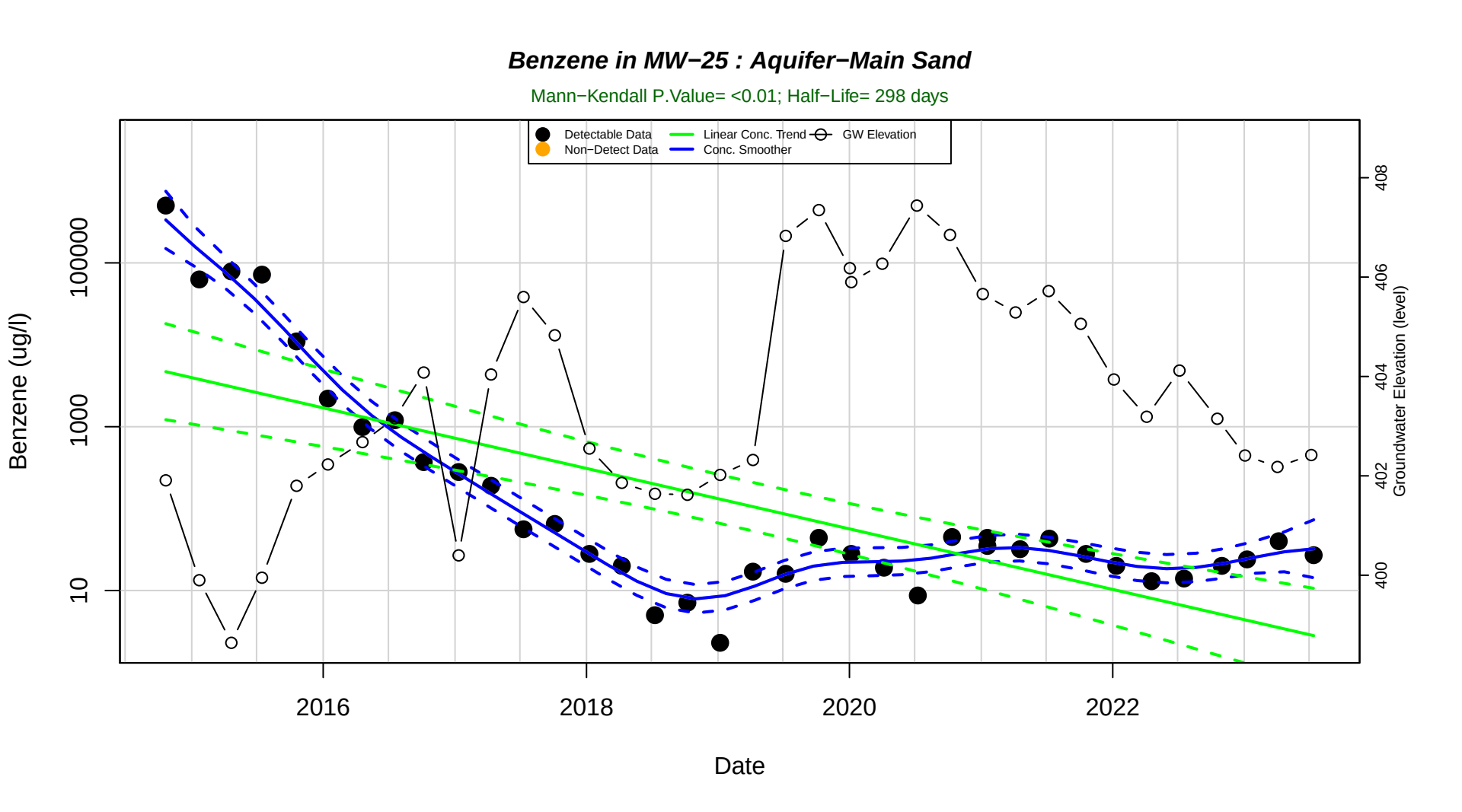

Benzene in MW−07 : Aquifer−Main Sand
Mann−Kendall P.Value= <0.01; Half−Life> 5 Years
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
500000
1000000
2000000
Groundwater Elevation (level)
400
402
404
406
408
2012
2014
2016
2018
2020
2022
2024
Date

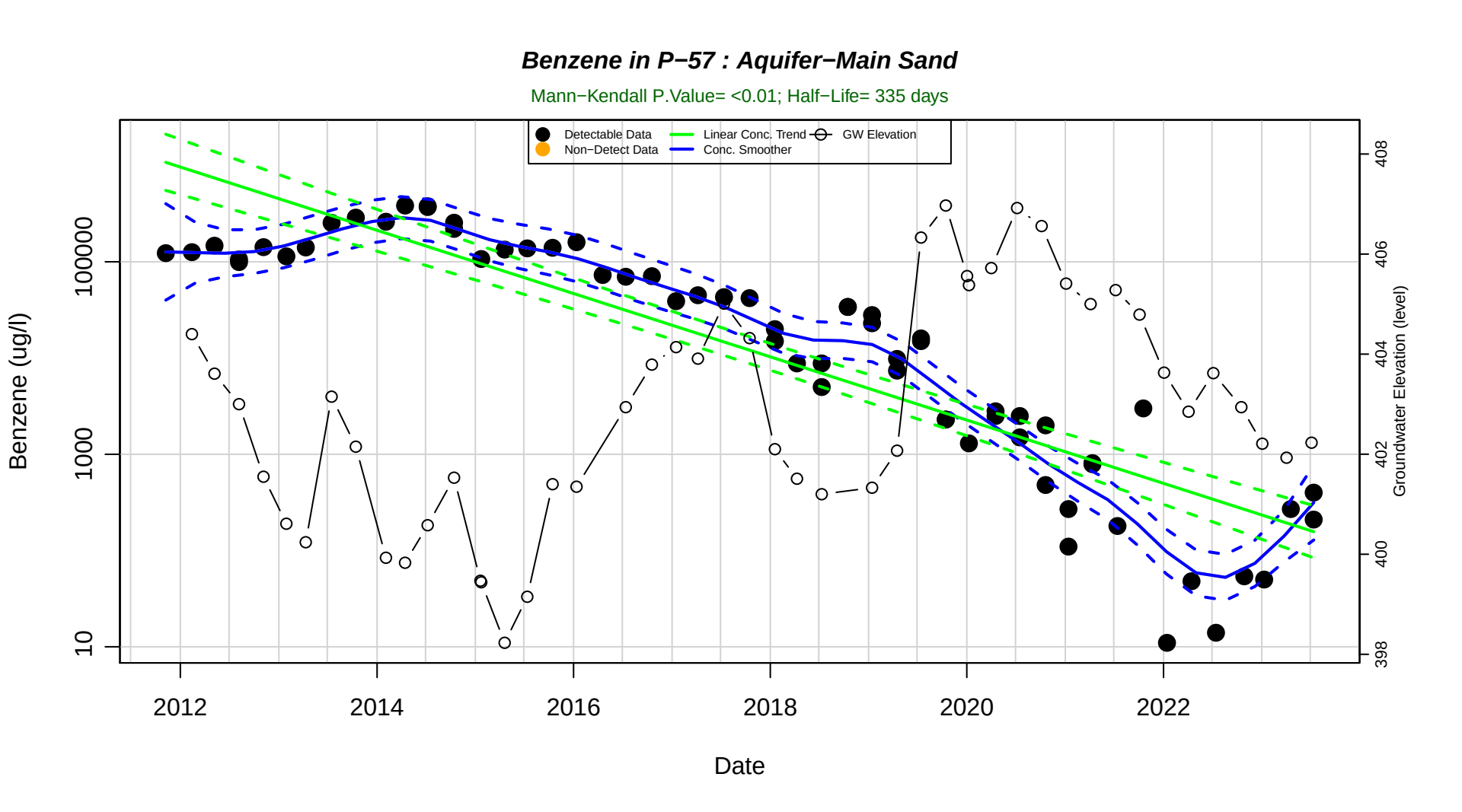
Benzene in MW−08 : Aquifer−Main Sand

Mann−Kendall P.Value= <0.01; Half−Life= 1239 days



Note: 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).


Benzene in MW−25 : Aquifer−Main Sand
Mann−Kendall P.Value= <0.01; Half−Life= 298 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
10
1000
100000
Groundwater Elevation (level)
400
402
404
406
408
2016
2018
2020
2022
Date


Benzene in P−57 : Aquifer−Main Sand
Mann−Kendall P.Value= <0.01; Half−Life= 335 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
100000
1000
10
Groundwater Elevation (level)
408
406
404
402
400
398
2012
2014
2016
2018
2020
2022
Date

Appendix E

Monthly Groundwater Report Attachments

- Summary of Groundwater Monitoring Well Analytical Detections and Exceedances (Aug/Sept 23)
- Data Review Forms and Laboratory Analytical Reports (Aug/Sept 23)
- Figure 1 – Groundwater Contours August 2023 – West Fenceline
- Figure 1 – Groundwater Contours September 2023 – West Fenceline
- Figure 6 – Aug/Sept 23 Dissolved Phase Benzene Concentrations in GW
- Figure 7 – Aug/Sept 23 Cross-Section of Benzene GW Results – Chaffer

SEE LAST PAGE OF TABLE FOR NOTES

APPENDIX E
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES
AUGUST/SEPTEMBER 2023

			VOCs											
			Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Cymene (p-Isopropyltoluene)	Ethylbenzene	Isopropylbenzene (Cumene)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene
Screening Values (mg/L)			6.3 [1]	0.005 [1]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]		0.7	0.7 [1]	0.7 [1]	0.07 [1]	0.14 [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**											
MW-01	MW1-ROX-082923	8/29/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0010
MW-02	MW2-ROX-090523	9/5/2023	< 0.13	< 0.0050	**0.018 J**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.32**	**0.012**	< 0.0050	**0.025**	**0.012**
MW-03	MW3-ROX-082823	8/28/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.0015**	< 0.0050	< 0.0010
MW-04	MW4-ROX-090623	9/6/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.00033 J**	< 0.0050	< 0.0010
MW-05	MW5-ROX-083123	8/31/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	**0.0021**	< 0.0010	< 0.0010	< 0.0010	**0.0036**	< 0.0050	< 0.0010
MW-06A	MW6A-ROX-082923	8/29/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.00028 J**	< 0.0050	< 0.0010
MW-06B	MW6B-ROX-083023	8/30/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.00042 J**	< 0.0050	< 0.0010
	MW6B-ROX-083023-DUP	8/30/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.00047 J**	< 0.0050	< 0.0010
MW-06C	MW6C-ROX-082923	8/29/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0010
MW-06D	MW6D-ROX-082923	8/29/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0010
MW-07	MW7-ROX-090623	9/6/2023	< 50	**560**	< 50	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2
	MW7-ROX-090623-DUP	9/6/2023	< 130	**460**	< 130	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 25	< 5
MW-09	MW9-ROX-090523	9/5/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0010
MW-10	MW10-ROX-090523	9/5/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0010
MW-11	MW11-ROX-083023	8/30/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0010
MW-12	MW12-ROX-083023	8/30/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0010
MW-13	MW13-ROX-083123	8/31/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.0014**	< 0.0050	< 0.0010
MW-14	MW14-ROX-090123	9/1/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0010
MW-16	MW16-ROX-082823	8/28/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0010
MW-22	MW22-ROX-083023	8/30/2023	< 0.025	**0.015**	< 0.025	**0.011**	**0.0064**	**0.014**	**0.0073**	**0.058**	**0.05**	< 0.0010	**0.089**	**0.11**
MW-23	MW23-ROX-083123	8/31/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.00089 J**	< 0.0050	< 0.0010
MW-24	MW24-ROX-082823	8/28/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0010
MW-25	MW25-ROX-090623	9/6/2023	< 0.025	**0.016**	< 0.025	< 0.0010	< 0.0010	**0.00071 J**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0010
MW-26	MW26-ROX-082923	8/29/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0010
MW-27	MW27-ROX-090523	9/5/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0010
MW-28	MW28-ROX-083023	8/30/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.0017**	< 0.0050	< 0.0010
P-54	P54-ROX-083023	8/30/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0010
P-56	P56-ROX-082923	8/29/2023	**0.022 J**	< 0.0010	< 0.025	< 0.0010	**0.00082 J**	< 0.0010	< 0.0010	< 0.0010	**0.0074**	< 0.0010	< 0.0050	**0.0073**

SEE LAST PAGE OF TABLE FOR NOTES

APPENDIX E
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES
AUGUST/SEPTEMBER 2023

			VOCs											
			Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Cymene (p-Isopropyltoluene)	Ethylbenzene	Isopropylbenzene (Cumene)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene
Screening Values (mg/L)			6.3 [1]	0.005 [1]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]		0.7	0.7 [1]	0.7 [1]	0.07 [1]	0.14 [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**											
P-57	P57-ROX-083123	8/31/2023	0.013 J	0.01	0.0044 J	0.0028	0.0054	0.0069	< 0.0010	0.00079 J	0.025	< 0.0010	< 0.0050	0.028
P-58	P58-ROX-090623	9/6/2023	< 50	320	< 50	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2
	P58-ROX-090623-DUP	9/6/2023	< 50	330	< 50	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2
P-59	P59-ROX-090623	9/6/2023	0.099	0.89	< 0.025	0.0039	0.0021	< 0.0010	< 0.0010	0.035	0.033	< 0.0010	0.029	0.058
P-93A	P93A-ROX-082923	8/29/2023	< 0.025	0.084	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0010
P-93B	P93B-ROX-090623	9/6/2023	< 130	480	< 130	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 25	< 5
P-93C	P93C-ROX-083123	8/31/2023	< 0.025	0.047	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0030	< 0.0050	< 0.0010
	P93C-ROX-083123-DUP	8/31/2023	< 0.025	0.042	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0027	< 0.0050	< 0.0010
P-93D	P93D-ROX-083023	8/30/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.00081 J	< 0.0050	< 0.0010
P-114R	P114R-ROX-083123	8/31/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0022	< 0.0050	< 0.0010
ROST-3-MW	ROST3MW-ROX-090123	9/1/2023	0.01 J	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0010
	ROST3MW-ROX-090123-DUP	9/1/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0010
ROST-4-PZ(C)	ROST4PZ(C)-ROX-083023	8/30/2023	< 0.025	0.0026	0.011 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0019	0.0042	< 0.0010	0.047	0.0067
ROST-4-PZ(E)	ROST4PZ(E)-ROX-083023	8/30/2023	< 0.025	0.0020	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0077	0.0018	< 0.0010	0.0059	0.0018
ROST-4-PZ(G)	ROST4PZ(G)-ROX-082923	8/29/2023	0.011 J	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0010
T-12	T12-ROX-083123	8/31/2023	< 0.13	1.9	< 0.13	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.011	0.022	0.0015 J	0.017 J	0.03

SEE LAST PAGE OF TABLE FOR NOTES

APPENDIX E
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES
AUGUST/SEPTEMBER 2023

			VOCs						SVOCs					
			Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzoic Acid	bis(2-Ethylhexyl)phthalate
Screening Values (mg/L)			0.7 [3]	0.07 [3]	0.07 [3]	10 [1]		10 [1]	0.42 [1]	0.42 [3]	2.1 [1]	0.00013 [1]	28 [1]	0.006 [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**											
MW-01	MW1-ROX-082923	8/29/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	< 0.0095
MW-02	MW2-ROX-090523	9/5/2023	< 0.0050	**0.043**	**0.013**	**0.17**	**0.012 J**	**0.19**	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029 UJ	< 0.0096
MW-03	MW3-ROX-082823	8/28/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0099
MW-04	MW4-ROX-090623	9/6/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029 UJ	< 0.0098
MW-05	MW5-ROX-083123	8/31/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0097
MW-06A	MW6A-ROX-082923	8/29/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01
MW-06B	MW6B-ROX-083023	8/30/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01
	MW6B-ROX-083023-DUP	8/30/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098
MW-06C	MW6C-ROX-082923	8/29/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01
MW-06D	MW6D-ROX-082923	8/29/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01
MW-07	MW7-ROX-090623	9/6/2023	< 2	< 2	< 2	< 10	< 10	< 20	**0.00013 J**	< 0.00020	< 0.00020	< 0.00020	< 0.029 UJ	< 0.0098
	MW7-ROX-090623-DUP	9/6/2023	< 5	< 5	< 5	< 25	< 25	< 50	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029 UJ	< 0.0096
MW-09	MW9-ROX-090523	9/5/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029 UJ	< 0.0097
MW-10	MW10-ROX-090523	9/5/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028 UJ	< 0.0095
MW-11	MW11-ROX-083023	8/30/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01
MW-12	MW12-ROX-083023	8/30/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019 H UJ	< 0.00019	< 0.00019 H UJ	< 0.028	< 0.0095
MW-13	MW13-ROX-083123	8/31/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	**0.018 J**	< 0.0098
MW-14	MW14-ROX-090123	9/1/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0098 H UJ
MW-16	MW16-ROX-082823	8/28/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.01
MW-22	MW22-ROX-083023	8/30/2023	**0.023**	**0.24**	**0.14**	**0.4**	< 0.01	**0.4**	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	< 0.0095
MW-23	MW23-ROX-083123	8/31/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0097
MW-24	MW24-ROX-082823	8/28/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	< 0.0098
MW-25	MW25-ROX-090623	9/6/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028 UJ	< 0.0094
MW-26	MW26-ROX-082923	8/29/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098
MW-27	MW27-ROX-090523	9/5/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029 UJ	< 0.0096
MW-28	MW28-ROX-083023	8/30/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0097
P-54	P54-ROX-083023	8/30/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020 H UJ	< 0.00020	< 0.00020 H UJ	< 0.03	< 0.0099
P-56	P56-ROX-082923	8/29/2023	< 0.0010	**0.0016**	**0.0010**	**0.0066**	< 0.0050	**0.0066 J**	**0.00040**	< 0.00019	**0.000072 J**	< 0.00019	< 0.029	< 0.0095

SEE LAST PAGE OF TABLE FOR NOTES

APPENDIX E
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES
AUGUST/SEPTEMBER 2023

			VOCs						SVOCs					
			Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzoic Acid	bis(2-Ethylhexyl)phthalate
Screening Values (mg/L)			0.7 [3]	0.07 [3]	0.07 [3]	10 [1]		10 [1]	0.42 [1]	0.42 [3]	2.1 [1]	0.00013 [1]	28 [1]	0.006 [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**											
P-57	P57-ROX-083123	8/31/2023	**0.0035**	< 0.0010	< 0.0010	**0.00079 J**	< 0.0050	< 0.01	**0.00016 J**	< 0.00019	**0.000061 J**	< 0.00019	< 0.029	< 0.0096
P-58	P58-ROX-090623	9/6/2023	< 2	< 2	< 2	< 10	< 10	< 20	**0.00046**	< 0.00019	< 0.00019	**0.000059 J**	< 0.028 UJ	< 0.0094
	P58-ROX-090623-DUP	9/6/2023	< 2	< 2	< 2	< 10	< 10	< 20	**0.00030**	< 0.00019	< 0.00019	**0.000038 J**	< 0.029 UJ	< 0.0096
P-59	P59-ROX-090623	9/6/2023	**0.048**	**0.017**	**0.023**	**0.075**	**0.0026 J**	**0.077**	**0.00033**	< 0.00019	< 0.00019	**0.000063 J**	< 0.029 UJ	< 0.0096
P-93A	P93A-ROX-082923	8/29/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0095
P-93B	P93B-ROX-090623	9/6/2023	< 5	< 5	< 5	< 25	< 25	< 50	< 0.00019	< 0.00019	< 0.00019	< 0.00019	**0.018 J*-*1 J**	**0.0051 J**
P-93C	P93C-ROX-083123	8/31/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.029	< 0.0096
	P93C-ROX-083123-DUP	8/31/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	< 0.0095
P-93D	P93D-ROX-083023	8/30/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019 H UJ	< 0.00019	< 0.00019	< 0.028	< 0.0095
P-114R	P114R-ROX-083123	8/31/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	**0.00085**	**0.00018 J**	< 0.00020	< 0.00020	< 0.029	< 0.0098
ROST-3-MW	ROST3MW-ROX-090123	9/1/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.03	**0.0056 J**
	ROST3MW-ROX-090123-DUP	9/1/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.029	< 0.0098
ROST-4-PZ(C)	ROST4PZ(C)-ROX-083023	8/30/2023	**0.0059**	**0.0050**	**0.0011**	**0.028**	**0.0020 J**	**0.03**	**0.00066**	< 0.00019	**0.00027**	< 0.00019	< 0.028	< 0.0095
ROST-4-PZ(E)	ROST4PZ(E)-ROX-083023	8/30/2023	< 0.0010	**0.029**	< 0.0010	**0.011**	**0.0021 J**	**0.013**	**0.00099**	< 0.00019	**0.00076**	< 0.00019	< 0.029	< 0.0095
ROST-4-PZ(G)	ROST4PZ(G)-ROX-082923	8/29/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.028	< 0.0094
T-12	T12-ROX-083123	8/31/2023	**0.041**	< 0.0050	**0.0088**	**0.047**	**0.0032 J**	**0.05**	**0.00039**	< 0.00019	**0.00015 J**	< 0.00019	< 0.029	< 0.0096

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APPENDIX E
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES
AUGUST/SEPTEMBER 2023

			SVOCs											
			Butyl benzyl phthalate	Dibenzo(a,h)acridine	Dibenzofuran	Diethyl phthalate	Di-n-butyl phthalate	Fluoranthene	Fluorene	1-Methylnaphthalene	2-Methylnaphthalene	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)			1.4 [2]		0.007 [3]	5.6 [1]	0.7 [1]	0.28 [1]	0.28 [1]	0.49 [3]	0.028 [1]	0.21 [3]	0.1 [1]	0.21 [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**											
MW-01	MW1-ROX-082923	8/29/2023	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0095	< 0.00019
MW-02	MW2-ROX-090523	9/5/2023	< 0.0096	< 0.0096	< 0.0096	**0.00052 J**	< 0.0096	< 0.00019	< 0.00019	**0.0099**	**0.021**	< 0.00019	< 0.0096 UJ	< 0.00019
MW-03	MW3-ROX-082823	8/28/2023	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.00020
MW-04	MW4-ROX-090623	9/6/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.00020
MW-05	MW5-ROX-083123	8/31/2023	< 0.0097	< 0.0097	< 0.0097	< 0.0097	**0.0042 J**	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.00019
MW-06A	MW6A-ROX-082923	8/29/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.00020
MW-06B	MW6B-ROX-083023	8/30/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.00020
	MW6B-ROX-083023-DUP	8/30/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020 H UJ	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.00020
MW-06C	MW6C-ROX-082923	8/29/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.00020
MW-06D	MW6D-ROX-082923	8/29/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.00020
MW-07	MW7-ROX-090623	9/6/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	**0.00011 J**	**0.0010**	**0.0015**	**0.00013 J**	**0.077**	< 0.00020
	MW7-ROX-090623-DUP	9/6/2023	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.00019	**0.00012 J**	**0.00080**	**0.0012**	**0.00014 J**	**0.083**	< 0.00019
MW-09	MW9-ROX-090523	9/5/2023	< 0.0097	**0.0020 J**	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.00019
MW-10	MW10-ROX-090523	9/5/2023	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0095	< 0.00019
MW-11	MW11-ROX-083023	8/30/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.00020
MW-12	MW12-ROX-083023	8/30/2023	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0095	< 0.00019
MW-13	MW13-ROX-083123	8/31/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	**0.0075 J**	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.00020
MW-14	MW14-ROX-090123	9/1/2023	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.00019
MW-16	MW16-ROX-082823	8/28/2023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.00020
MW-22	MW22-ROX-083023	8/30/2023	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.00019	**0.0059**	**0.0066**	< 0.00019	< 0.0095	< 0.00019
MW-23	MW23-ROX-083123	8/31/2023	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.00019
MW-24	MW24-ROX-082823	8/28/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.00020
MW-25	MW25-ROX-090623	9/6/2023	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0094	< 0.00019
MW-26	MW26-ROX-082923	8/29/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.00020
MW-27	MW27-ROX-090523	9/5/2023	< 0.0096	**0.0022 J**	< 0.0096	< 0.0096	< 0.0096	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0096	< 0.00019
MW-28	MW28-ROX-083023	8/30/2023	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.00019
P-54	P54-ROX-083023	8/30/2023	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.00020
P-56	P56-ROX-082923	8/29/2023	< 0.0095	< 0.0095	**0.00033 J**	< 0.0095	< 0.0095	< 0.00019	**0.00027**	**0.0073**	**0.0068**	**0.00052**	< 0.0095	< 0.00019

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APPENDIX E
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AUGUST/SEPTEMBER 2023

			SVOCs											
			Butyl benzyl phthalate	Dibenzo(a,h)acridine	Dibenzofuran	Diethyl phthalate	Di-n-butyl phthalate	Fluoranthene	Fluorene	1-Methylnaphthalene	2-Methylnaphthalene	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)			1.4 [2]		0.007 [3]	5.6 [1]	0.7 [1]	0.28 [1]	0.28 [1]	0.49 [3]	0.028 [1]	0.21 [3]	0.1 [1]	0.21 [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**											
P-57	P57-ROX-083123	8/31/2023	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.00019	0.00030	0.013	0.013	0.00022	< 0.0096	< 0.00019
P-58	P58-ROX-090623	9/6/2023	< 0.0094	< 0.0094	0.0015 J	< 0.0094	< 0.0094	< 0.00019	0.0010	0.067 J	0.05 J	0.00091	0.27 J	0.00019
	P58-ROX-090623-DUP	9/6/2023	< 0.0096	< 0.0096	0.0014 J	< 0.0096	< 0.0096	0.000046 J	0.00067	0.049 J	0.035 J	0.00065	0.42 J	0.00011 J
P-59	P59-ROX-090623	9/6/2023	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.0096	0.00013 J	0.00027	0.0083	0.011	0.00049	0.0028 J	0.00041
P-93A	P93A-ROX-082923	8/29/2023	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0095	< 0.00019
P-93B	P93B-ROX-090623	9/6/2023	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.00019	< 0.00019	< 0.00019	0.000075 J	< 0.00019	0.18	< 0.00019
P-93C	P93C-ROX-083123	8/31/2023	< 0.0096	< 0.0096	< 0.0096	0.00041 J	0.0075 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0096	< 0.00019
	P93C-ROX-083123-DUP	8/31/2023	< 0.0095	< 0.0095	< 0.0095	< 0.0095	0.0039 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0095	< 0.00019
P-93D	P93D-ROX-083023	8/30/2023	0.00040 J	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019 H UJ	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0095	< 0.00019
P-114R	P114R-ROX-083123	8/31/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00098	< 0.00098	< 0.00020	< 0.0098	< 0.00020
ROST-3-MW	ROST3MW-ROX-090123	9/1/2023	< 0.0099	< 0.0099	< 0.0099	0.00027 J	< 0.0099	< 0.00020	< 0.00020	0.00015 J	0.00020	0.00013 J	< 0.0099	< 0.00020
	ROST3MW-ROX-090123-DUP	9/1/2023	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.00020	0.00011 J	0.000090 J	< 0.0098	< 0.00020
ROST-4-PZ(C)	ROST4PZ(C)-ROX-083023	8/30/2023	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019	0.00055	0.015	0.0023	0.0014	< 0.0095	< 0.00019
ROST-4-PZ(E)	ROST4PZ(E)-ROX-083023	8/30/2023	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.0095	0.00013 J J	0.0010	0.012	0.0016	0.0036	< 0.0095	0.000052 J
ROST-4-PZ(G)	ROST4PZ(G)-ROX-082923	8/29/2023	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0094	< 0.00019
T-12	T12-ROX-083123	8/31/2023	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.00019	0.00042	0.018	0.026	0.00050	0.1	< 0.00019

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. P-74 was inaccessible during the August/September 2023 sampling event due to refinery construction.

LABORATORY QUALIFIERS

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

H = Analyzed or extracted out of holding time criteria

*- = Indicates LCS and/or LCSD is outside acceptance limit, low biased

*1 = LCS/LCSD RPD is outside contol limit

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

Indicates a current exceedance of screening criteria.

AECOM QUALIFIERS

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 August/September sampling event are not presented on the Analytical table.

Roxana Monthly Groundwater – August/September 2023 Data Review

Laboratory SDG: 400-242644-1

Data Reviewer: Adelina Gita

Peer Reviewer: Cheyana Cokley

Date Reviewed: 10/03/2023

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

Sample Identification	Sample Identification
TB-ROX-082823-8260-A	TB-ROX-082823-8011-A
MW24-ROX-082823-EB	MW24-ROX-082823
MW3-ROX-082823	MW16-ROX-082823

1.0 Data Package Completeness

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

Yes; however, on the chain of custody (COC) sample MW3-ROX-082823 was listed three (3) times. Professional judgement was used to assume that two of the three field sample identifications were meant for MS/MSD request. 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 laboratory case narrative indicated that several PAHs were detected in equipment blank MW24-ROX-082823-EB and method blank MB 400-639567/1-A. VOCs by 8011, and the SVOC LCS/LCSD RPD for benzenethiol, were outside evaluation criteria. The VOCs by 8011 surrogate recovery for 4-bromofluorobenzene was outside criteria in samples MW24-ROX-082823 and MW3-ROX-082823, and several quality control samples. 2-Chloroethyl vinyl ether, 1,2-dibromomethane and 1,2-dibromo-3-chloropropane MS/MSD recoveries were outside evaluation criteria in sample MW3-ROX-082823. The continuing calibration verification (CCV) for several VOCs and hexachlorocyclopentadiene 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?

Yes

Blank ID	Parameter	Analyte	Concentration /Amount
MW24-ROX-082823-EB	PAHs	Dibenz(a,h)anthracene	0.083 µg/L
MW24-ROX-082823-EB	PAHs	Fluoranthene	0.044 µg/L
MW24-ROX-082823-EB	PAHs	Indeno[1,2,3-cd]pyrene	0.077 µg/L
MB 400-639567/1-A	PAHs	Benzo[b]fluoranthene	0.138 µg/L
MB 400-639567/1-A	PAHs	Benzo[g,h,i]perylene	0.0856 µg/L
MB 400-639567/1-A	PAHs	Benzo[k]fluoranthene	0.187 µg/L
MB 400-639567/1-A	PAHs	Dibenz(a,h)anthracene	0.158 µg/L
MB 400-639567/1-A	PAHs	Fluoranthene	0.0528 µg/L
MB 400-639567/1-A	PAHs	Indeno[1,2,3-cd]pyrene	0.190 µg/L
MB 400-639567/1-A	PAHs	Benzo[a]pyrene	0.222 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
MW16-ROX-082823	PAHs	Benzo[g,h,i]perylene	-	**U**
MW24-ROX-082823	PAHs	Dibenz(a,h)anthracene	-	**U**
MW3-ROX-082823	PAHs	Dibenz(a,h)anthracene	-	**U**
MW16-ROX-082823	PAHs	Dibenz(a,h)anthracene	-	**U**
MW24-ROX-082823	PAHs	Fluoranthene	-	**U**
MW3-ROX-082823	PAHs	Fluoranthene	-	**U**
MW16-ROX-082823	PAHs	Fluoranthene	-	**U**
MW24-ROX-082823	PAHs	Indeno[1,2,3-cd]pyrene	-	**U**
MW3-ROX-082823	PAHs	Indeno[1,2,3-cd]pyrene	-	**U**
MW16-ROX-082823	PAHs	Indeno[1,2,3-cd]pyrene	-	**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 400-639567/13-A/14-A	SVOCs	Benzenethiol	35/17	**70**	10-120/30
LCS/LCSD 400-639353/2-A	VOCs by 8011	1,2-Dibromo-3-Chloropropane	**222/229**	3	60-140/30
LCS/LCSD 400-639353/2-A	VOCs by 8011	1,2-Dibromoethane	**198/215**	8	60-140/30

Analytical data reported as non-detect and associated with LCS/LCSD 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 (%)
MW24-ROX-082823-EB	VOCs by 8011	4-Bromofluorobenzene	**169**	51-149
MW24-ROX-082823	VOCs by 8011	4-Bromofluorobenzene	**162**	51-149
MW3-ROX-082823	VOCs by 8011	4-Bromofluorobenzene	**155**	51-149
MW3-ROX-082823 MSD	VOCs by 8011	4-Bromofluorobenzene	**156**	51-149
LCSD 400-639353/3-A	VOCs by 8011	4-Bromofluorobenzene	**164**	51-149
MB 400-639353/1-A	VOCs by 8011	4-Bromofluorobenzene	**150**	51-149

Analytical data reported as non-detect and associated with surrogate recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Equipment blanks, lab control sample duplicate, matrix spike duplicate and method blanks are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, sample MW3-ROX-082823 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
MW3-ROX-082823 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW3-ROX-082823 MS/MSD	VOCs by 8011	1,2-Dibromoethane	**199/222**	7	39-150/20
MW3-ROX-082823 MS/MSD	VOCs by 8011	1,2-Dibromo-3-Chloropropane	**324/246**	11	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 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
MW3-ROX-082823	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 VOCs and hexachlorocyclopentadiene was outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW24-ROX-082823	VOCs	Bromomethane	**UJ**
MW3-ROX-082823	VOCs	Bromomethane	**UJ**
MW16-ROX-082823	VOCs	Bromomethane	**UJ**
MW24-ROX-082823	VOCs	Chloroethane	**UJ**
MW3-ROX-082823	VOCs	Chloroethane	**UJ**
MW16-ROX-082823	VOCs	Chloroethane	**UJ**
MW24-ROX-082823	VOCs	Chloromethane	**UJ**
MW3-ROX-082823	VOCs	Chloromethane	**UJ**
MW16-ROX-082823	VOCs	Chloromethane	**UJ**
MW24-ROX-082823	VOCs	1,1-Dichloroethene	**UJ**
MW3-ROX-082823	VOCs	1,1-Dichloroethene	**UJ**
MW16-ROX-082823	VOCs	1,1-Dichloroethene	**UJ**
MW24-ROX-082823	VOCs	Methylene Chloride	**UJ**
MW3-ROX-082823	VOCs	Methylene Chloride	**UJ**
MW16-ROX-082823	VOCs	Methylene Chloride	**UJ**
MW24-ROX-082823	VOCs	Trichlorofluoromethane	**UJ**
MW3-ROX-082823	VOCs	Trichlorofluoromethane	**UJ**
MW16-ROX-082823	VOCs	Trichlorofluoromethane	**UJ**
MW24-ROX-082823	VOCs	Vinyl chloride	**UJ**
MW3-ROX-082823	VOCs	Vinyl chloride	**UJ**
MW16-ROX-082823	VOCs	Vinyl chloride	**UJ**
MW24-ROX-082823	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW3-ROX-082823	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW16-ROX-082823	SVOCs	Hexachlorocyclopentadiene	**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
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JOB DESCRIPTION

ROXANA MONTHLY GW

JOB NUMBER

400-242644-1

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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Job ID: 400-242644-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-242644-1

Receipt
The samples were received on 8/29/2023 9:40 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 400-639862 recovered outside acceptance criteria, low biased, for Bromomethane, Chloroethane, Chloromethane, 1,1-Dichloroethene, Methylene Chloride, Trichlorofluoromethane and Vinyl 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-082823-8260-A (400-242644-1), MW24-ROX-082823-EB (400-242644-3), MW24-ROX-082823 (400-242644-4), MW3-ROX-082823 (400-242644-5) and MW16-ROX-082823 (400-242644-6). 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 400-639862 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260D: The RPD for the matrix spike / matrix spike duplicate (MS/MSD) for 2-Chloroethyl vinyl ether was not calculable for analytical batch 400-639862 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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-639567 and analytical batch 400-639936 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-640035 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_SIM: The method blank for preparation batch 400-639567 and analytical batch 400-639844 contained Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenz(a,h)anthracene, Fluoranthene and Indeno[1,2,3-cd]pyrene 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_SIM: The method blank for preparation batch 400-639567 contained Benzo[a]pyrene above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

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 the upper control limit: MW24-ROX-082823-EB (400-242644-3), MW24-ROX-082823 (400-242644-4) and MW3-ROX-082823 (400-242644-5). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8011: The continuing calibration verification (CCV) associated with batch 400-639362 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

Job ID: 400-242644-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

analytes; therefore, the data have been reported.

Method 8011: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-639353 and analytical batch 400-639362 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8011: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-639353 and analytical batch 400-639362 were outside control limits for 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane due to high bias for this analyte on this day of analysis.

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: 400-242644-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-242644-1	TB-ROX-082823-8260-A	Water	08/28/23 00:00	08/29/23 09:40
400-242644-2	TB-ROX-082823-8011-A	Water	08/28/23 00:00	08/29/23 09:40
400-242644-3	MW24-ROX-082823-EB	Water	08/28/23 08:50	08/29/23 09:40
400-242644-4	MW24-ROX-082823	Water	08/28/23 10:25	08/29/23 09:40
400-242644-5	MW3-ROX-082823	Water	08/28/23 11:40	08/29/23 09:40
400-242644-6	MW16-ROX-082823	Water	08/28/23 11:40	08/29/23 09:40

Detection Summary

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

Job ID: 400-242644-1

Client Sample ID: TB-ROX-082823-8260-A — Lab Sample ID: 400-242644-1

No Detections.

Client Sample ID: TB-ROX-082823-8011-A — Lab Sample ID: 400-242644-2

No Detections.

Client Sample ID: MW24-ROX-082823-EB — Lab Sample ID: 400-242644-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dibenz(a,h)anthracene	0.083	J B	0.20	0.047	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.044	J B	0.20	0.033	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.077	J B	0.20	0.033	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW24-ROX-082823 — Lab Sample ID: 400-242644-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dibenz(a,h)anthracene	0.091	J B	0.20	0.047	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.048	J B	0.20	0.033	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.092	J B	0.20	0.033	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW3-ROX-082823 — Lab Sample ID: 400-242644-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.5		1.0	0.22	ug/L	1		8260D	Total/NA
Dibenz(a,h)anthracene	0.089	J B	0.20	0.047	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.046	J B	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.10	J B	0.20	0.034	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW16-ROX-082823 — Lab Sample ID: 400-242644-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	0.043	J B	0.20	0.027	ug/L	1		8270E SIM	Total/NA
Dibenz(a,h)anthracene	0.12	J B	0.20	0.049	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.049	J B	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.11	J B	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: 400-242644-1

Client Sample ID: TB-ROX-082823-8260-A
Date Collected: 08/28/23 00:00
Date Received: 08/29/23 09:40

Lab Sample ID: 400-242644-1
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			09/06/23 12:44	1
Acrolein	ND		20	3.3	ug/L			09/06/23 12:44	1
Acrylonitrile	ND		10	2.8	ug/L			09/06/23 12:44	1
Benzene	ND		1.0	0.50	ug/L			09/06/23 12:44	1
Bromobenzene	ND		1.0	0.54	ug/L			09/06/23 12:44	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/06/23 12:44	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/06/23 12:44	1
Bromoform	ND		5.0	0.25	ug/L			09/06/23 12:44	1
Bromomethane	ND		1.0	0.98	ug/L			09/06/23 12:44	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/06/23 12:44	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/06/23 12:44	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/06/23 12:44	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/06/23 12:44	1
Chloroethane	ND		1.0	0.76	ug/L			09/06/23 12:44	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/06/23 12:44	1
Chloroform	ND		1.0	0.90	ug/L			09/06/23 12:44	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/06/23 12:44	1
Chloromethane	ND		1.0	0.90	ug/L			09/06/23 12:44	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/06/23 12:44	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/06/23 12:44	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/06/23 12:44	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/06/23 12:44	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/06/23 12:44	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/06/23 12:44	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/06/23 12:44	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/06/23 12:44	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/06/23 12:44	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/06/23 12:44	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/06/23 12:44	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/06/23 12:44	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/06/23 12:44	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/06/23 12:44	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/06/23 12:44	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/06/23 12:44	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/06/23 12:44	1
2-Hexanone	ND		25	1.4	ug/L			09/06/23 12:44	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/06/23 12:44	1
Methylene bromide	ND		5.0	0.22	ug/L			09/06/23 12:44	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/06/23 12:44	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/06/23 12:44	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/06/23 12:44	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/06/23 12:44	1
Naphthalene	ND		5.0	3.0	ug/L			09/06/23 12:44	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/06/23 12:44	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/06/23 12:44	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/06/23 12:44	1
o-Xylene	ND		5.0	0.60	ug/L			09/06/23 12:44	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/06/23 12:44	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/06/23 12:44	1

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

Job ID: 400-242644-1

Client Sample ID: TB-ROX-082823-8260-A
Date Collected: 08/28/23 00:00
Date Received: 08/29/23 09:40

Lab Sample ID: 400-242644-1
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			09/06/23 12:44	1
Styrene	ND		1.0	1.0	ug/L			09/06/23 12:44	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/06/23 12:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/06/23 12:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/06/23 12:44	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/06/23 12:44	1
Toluene	ND		1.0	0.90	ug/L			09/06/23 12:44	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/06/23 12:44	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/06/23 12:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/06/23 12:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/06/23 12:44	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/06/23 12:44	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/06/23 12:44	1
Trichloroethene	ND		1.0	0.15	ug/L			09/06/23 12:44	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/06/23 12:44	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/06/23 12:44	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/06/23 12:44	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/06/23 12:44	1
Vinyl acetate	ND		25	0.93	ug/L			09/06/23 12:44	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/06/23 12:44	1
Xylenes, Total	ND		10	1.6	ug/L			09/06/23 12:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*09/06/23 12:44*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*09/06/23 12:44*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/06/23 12:44*	*1*

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

Job ID: 400-242644-1

Client Sample ID: TB-ROX-082823-8011-A
Date Collected: 08/28/23 00:00
Date Received: 08/29/23 09:40

Lab Sample ID: 400-242644-2
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-D bromo-3-Chloropropane	ND	*+	0.030	0.017	ug/L		08/31/23 15:18	08/31/23 19:19	1
1,2-D bromoethane	ND	*+	0.020	0.015	ug/L		08/31/23 15:18	08/31/23 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*148*		*51 - 149*	*08/31/23 15:18*	*08/31/23 19:19*	*1*

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

Job ID: 400-242644-1

Client Sample ID: MW24-ROX-082823-EB
Date Collected: 08/28/23 08:50
Date Received: 08/29/23 09:40

Lab Sample ID: 400-242644-3
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			09/06/23 18:37	1
Acrolein	ND		20	3.3	ug/L			09/06/23 18:37	1
Acrylonitrile	ND		10	2.8	ug/L			09/06/23 18:37	1
Benzene	ND		1.0	0.50	ug/L			09/06/23 18:37	1
Bromobenzene	ND		1.0	0.54	ug/L			09/06/23 18:37	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/06/23 18:37	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/06/23 18:37	1
Bromoform	ND		5.0	0.25	ug/L			09/06/23 18:37	1
Bromomethane	ND		1.0	0.98	ug/L			09/06/23 18:37	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/06/23 18:37	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/06/23 18:37	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/06/23 18:37	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/06/23 18:37	1
Chloroethane	ND		1.0	0.76	ug/L			09/06/23 18:37	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/06/23 18:37	1
Chloroform	ND		1.0	0.90	ug/L			09/06/23 18:37	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/06/23 18:37	1
Chloromethane	ND		1.0	0.90	ug/L			09/06/23 18:37	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/06/23 18:37	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/06/23 18:37	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/06/23 18:37	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/06/23 18:37	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/06/23 18:37	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/06/23 18:37	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/06/23 18:37	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/06/23 18:37	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/06/23 18:37	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/06/23 18:37	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/06/23 18:37	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/06/23 18:37	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/06/23 18:37	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/06/23 18:37	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/06/23 18:37	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/06/23 18:37	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/06/23 18:37	1
2-Hexanone	ND		25	1.4	ug/L			09/06/23 18:37	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/06/23 18:37	1
Methylene bromide	ND		5.0	0.22	ug/L			09/06/23 18:37	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/06/23 18:37	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/06/23 18:37	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/06/23 18:37	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/06/23 18:37	1
Naphthalene	ND		5.0	3.0	ug/L			09/06/23 18:37	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/06/23 18:37	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/06/23 18:37	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/06/23 18:37	1
o-Xylene	ND		5.0	0.60	ug/L			09/06/23 18:37	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/06/23 18:37	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/06/23 18:37	1

Client Sample ID: MW24-ROX-082823-EB
Date Collected: 08/28/23 08:50
Date Received: 08/29/23 09:40

Lab Sample ID: 400-242644-3
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			09/06/23 18:37	1
Styrene	ND		1.0	1.0	ug/L			09/06/23 18:37	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/06/23 18:37	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/06/23 18:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/06/23 18:37	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/06/23 18:37	1
Toluene	ND		1.0	0.90	ug/L			09/06/23 18:37	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/06/23 18:37	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/06/23 18:37	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/06/23 18:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/06/23 18:37	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/06/23 18:37	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/06/23 18:37	1
Trichloroethene	ND		1.0	0.15	ug/L			09/06/23 18:37	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/06/23 18:37	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/06/23 18:37	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/06/23 18:37	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/06/23 18:37	1
Vinyl acetate	ND		25	0.93	ug/L			09/06/23 18:37	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/06/23 18:37	1
Xylenes, Total	ND		10	1.6	ug/L			09/06/23 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*09/06/23 18:37*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*09/06/23 18:37*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*09/06/23 18:37*	*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		09/02/23 09:18	09/06/23 18:08	1
Acenaphthylene	ND		0.20	0.043	ug/L		09/02/23 09:18	09/06/23 18:08	1
Anthracene	ND		0.20	0.046	ug/L		09/02/23 09:18	09/06/23 18:08	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		09/02/23 09:18	09/06/23 18:08	1
Benzo[a]pyrene	ND		0.20	0.062	ug/L		09/02/23 09:18	09/06/23 18:08	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		09/02/23 09:18	09/06/23 18:08	1
Benzo[g,h,i]perylene	ND		0.20	0.026	ug/L		09/02/23 09:18	09/06/23 18:08	1
Benzo[k]fluoranthene	ND		0.20	0.060	ug/L		09/02/23 09:18	09/06/23 18:08	1
Chrysene	ND		0.20	0.032	ug/L		09/02/23 09:18	09/06/23 18:08	1
Dibenz(a,h)anthracene	**0.083**	**J B**	0.20	0.047	ug/L		09/02/23 09:18	09/06/23 18:08	1
Fluoranthene	**0.044**	**J B**	0.20	0.033	ug/L		09/02/23 09:18	09/06/23 18:08	1
Fluorene	ND		0.20	0.087	ug/L		09/02/23 09:18	09/06/23 18:08	1
Indeno[1,2,3-cd]pyrene	**0.077**	**J B**	0.20	0.033	ug/L		09/02/23 09:18	09/06/23 18:08	1
Phenanthrene	ND		0.20	0.088	ug/L		09/02/23 09:18	09/06/23 18:08	1
Pyrene	ND		0.20	0.038	ug/L		09/02/23 09:18	09/06/23 18:08	1
1-Methylnaphthalene	ND		0.20	0.078	ug/L		09/02/23 09:18	09/06/23 18:08	1
2-Methylnaphthalene	ND		0.20	0.064	ug/L		09/02/23 09:18	09/06/23 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*80*		*18 - 147*	*09/02/23 09:18*	*09/06/23 18:08*	*1*
2-Fluorobiphenyl	*75*		*15 - 128*	*09/02/23 09:18*	*09/06/23 18:08*	*1*

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

Job ID: 400-242644-1

Client Sample ID: MW24-ROX-082823-EB

Date Collected: 08/28/23 08:50
Date Received: 08/29/23 09:40

Lab Sample ID: 400-242644-3

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*	*09/02/23 09:18*	*09/06/23 18:08*	*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		09/02/23 09:18	09/06/23 18:00	1
Benzenethiol	ND	*1	9.8	1.7	ug/L		09/02/23 09:18	09/06/23 18:00	1
Benzoic acid	ND		29	7.1	ug/L		09/02/23 09:18	09/06/23 18:00	1
Benzyl alcohol	ND		9.8	2.0	ug/L		09/02/23 09:18	09/06/23 18:00	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		09/02/23 09:18	09/06/23 18:00	1
Bis(2-chloroethyl)ether	ND		9.8	2.6	ug/L		09/02/23 09:18	09/06/23 18:00	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		09/02/23 09:18	09/06/23 18:00	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		09/02/23 09:18	09/06/23 18:00	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		09/02/23 09:18	09/06/23 18:00	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		09/02/23 09:18	09/06/23 18:00	1
4-Chloroaniline	ND		9.8	3.3	ug/L		09/02/23 09:18	09/06/23 18:00	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		09/02/23 09:18	09/06/23 18:00	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		09/02/23 09:18	09/06/23 18:00	1
2-Chlorophenol	ND		9.8	2.1	ug/L		09/02/23 09:18	09/06/23 18:00	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		09/02/23 09:18	09/06/23 18:00	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		09/02/23 09:18	09/06/23 18:00	1
Dibenzofuran	ND		9.8	0.17	ug/L		09/02/23 09:18	09/06/23 18:00	1
3,3'-Dichlorobenzidine	ND		9.8	2.5	ug/L		09/02/23 09:18	09/06/23 18:00	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		09/02/23 09:18	09/06/23 18:00	1
Diethyl phthalate	ND		9.8	0.23	ug/L		09/02/23 09:18	09/06/23 18:00	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		09/02/23 09:18	09/06/23 18:00	1
Dimethyl phthalate	ND		9.8	0.17	ug/L		09/02/23 09:18	09/06/23 18:00	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		09/02/23 09:18	09/06/23 18:00	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		09/02/23 09:18	09/06/23 18:00	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/02/23 09:18	09/06/23 18:00	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		09/02/23 09:18	09/06/23 18:00	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		09/02/23 09:18	09/06/23 18:00	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		09/02/23 09:18	09/06/23 18:00	1
1,4-Dioxane	ND		9.8	0.98	ug/L		09/02/23 09:18	09/06/23 18:00	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		09/02/23 09:18	09/06/23 18:00	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		09/02/23 09:18	09/06/23 18:00	1
Hexachlorocyclopentadiene	ND		20	2.5	ug/L		09/02/23 09:18	09/07/23 09:45	1
Hexachloroethane	ND		9.8	4.1	ug/L		09/02/23 09:18	09/06/23 18:00	1
Indene	ND		9.8	0.98	ug/L		09/02/23 09:18	09/06/23 18:00	1
Isophorone	ND		9.8	0.14	ug/L		09/02/23 09:18	09/06/23 18:00	1
2-Methylphenol	ND		9.8	1.8	ug/L		09/02/23 09:18	09/06/23 18:00	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		09/02/23 09:18	09/06/23 18:00	1
2-Nitroaniline	ND		9.8	2.1	ug/L		09/02/23 09:18	09/06/23 18:00	1
3-Nitroaniline	ND		9.8	1.8	ug/L		09/02/23 09:18	09/06/23 18:00	1
4-Nitroaniline	ND		9.8	1.5	ug/L		09/02/23 09:18	09/06/23 18:00	1
Nitrobenzene	ND		9.8	0.13	ug/L		09/02/23 09:18	09/06/23 18:00	1
2-Nitrophenol	ND		9.8	5.1	ug/L		09/02/23 09:18	09/06/23 18:00	1
4-Nitrophenol	ND		9.8	2.0	ug/L		09/02/23 09:18	09/06/23 18:00	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		09/02/23 09:18	09/06/23 18:00	1

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

Job ID: 400-242644-1

Client Sample ID: MW24-ROX-082823-EB

Lab Sample ID: 400-242644-3

Date Collected: 08/28/23 08:50

Matrix: Water

Date Received: 08/29/23 09:40

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		09/02/23 09:18	09/06/23 18:00	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		09/02/23 09:18	09/06/23 18:00	1
Pentachlorophenol	ND		20	1.4	ug/L		09/02/23 09:18	09/06/23 18:00	1
Phenol	ND		9.8	2.5	ug/L		09/02/23 09:18	09/06/23 18:00	1
Pyridine	ND		9.8	3.1	ug/L		09/02/23 09:18	09/06/23 18:00	1
Quinoline	ND		9.8	4.4	ug/L		09/02/23 09:18	09/06/23 18:00	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		09/02/23 09:18	09/06/23 18:00	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		09/02/23 09:18	09/06/23 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*46 - 124*	*09/02/23 09:18*	*09/06/23 18:00*	*1*
2-Fluorophenol	*54*		*13 - 113*	*09/02/23 09:18*	*09/06/23 18:00*	*1*
Nitrobenzene-d5	*72*		*36 - 126*	*09/02/23 09:18*	*09/06/23 18:00*	*1*
Phenol-d5	*69*		*17 - 127*	*09/02/23 09:18*	*09/06/23 18:00*	*1*
Terphenyl-d14	*85*		*44 - 149*	*09/02/23 09:18*	*09/06/23 18:00*	*1*
2,4,6-Tribromophenol	*67*		*26 - 150*	*09/02/23 09:18*	*09/06/23 18:00*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND	*+	0.031	0.017	ug/L		08/31/23 15:18	08/31/23 19:40	1
1,2-D bromoethane	ND	*+	0.020	0.015	ug/L		08/31/23 15:18	08/31/23 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*169*	*S1+*	*51 - 149*	*08/31/23 15:18*	*08/31/23 19:40*	*1*

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

Job ID: 400-242644-1

Client Sample ID: MW24-ROX-082823
Date Collected: 08/28/23 10:25
Date Received: 08/29/23 09:40

Lab Sample ID: 400-242644-4
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			09/06/23 13:38	1
Acrolein	ND		20	3.3	ug/L			09/06/23 13:38	1
Acrylonitrile	ND		10	2.8	ug/L			09/06/23 13:38	1
Benzene	ND		1.0	0.50	ug/L			09/06/23 13:38	1
Bromobenzene	ND		1.0	0.54	ug/L			09/06/23 13:38	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/06/23 13:38	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/06/23 13:38	1
Bromoform	ND		5.0	0.25	ug/L			09/06/23 13:38	1
Bromomethane	ND		1.0	0.98	ug/L			09/06/23 13:38	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/06/23 13:38	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/06/23 13:38	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/06/23 13:38	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/06/23 13:38	1
Chloroethane	ND		1.0	0.76	ug/L			09/06/23 13:38	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/06/23 13:38	1
Chloroform	ND		1.0	0.90	ug/L			09/06/23 13:38	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/06/23 13:38	1
Chloromethane	ND		1.0	0.90	ug/L			09/06/23 13:38	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/06/23 13:38	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/06/23 13:38	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/06/23 13:38	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/06/23 13:38	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/06/23 13:38	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/06/23 13:38	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/06/23 13:38	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/06/23 13:38	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/06/23 13:38	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/06/23 13:38	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/06/23 13:38	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/06/23 13:38	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/06/23 13:38	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/06/23 13:38	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/06/23 13:38	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/06/23 13:38	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/06/23 13:38	1
2-Hexanone	ND		25	1.4	ug/L			09/06/23 13:38	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/06/23 13:38	1
Methylene bromide	ND		5.0	0.22	ug/L			09/06/23 13:38	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/06/23 13:38	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/06/23 13:38	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/06/23 13:38	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/06/23 13:38	1
Naphthalene	ND		5.0	3.0	ug/L			09/06/23 13:38	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/06/23 13:38	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/06/23 13:38	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/06/23 13:38	1
o-Xylene	ND		5.0	0.60	ug/L			09/06/23 13:38	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/06/23 13:38	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/06/23 13:38	1

Client Sample ID: MW24-ROX-082823
Date Collected: 08/28/23 10:25
Date Received: 08/29/23 09:40

Lab Sample ID: 400-242644-4
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			09/06/23 13:38	1
Styrene	ND		1.0	1.0	ug/L			09/06/23 13:38	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/06/23 13:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/06/23 13:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/06/23 13:38	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/06/23 13:38	1
Toluene	ND		1.0	0.90	ug/L			09/06/23 13:38	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/06/23 13:38	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/06/23 13:38	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/06/23 13:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/06/23 13:38	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/06/23 13:38	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/06/23 13:38	1
Trichloroethene	ND		1.0	0.15	ug/L			09/06/23 13:38	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/06/23 13:38	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/06/23 13:38	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/06/23 13:38	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/06/23 13:38	1
Vinyl acetate	ND		25	0.93	ug/L			09/06/23 13:38	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/06/23 13:38	1
Xylenes, Total	ND		10	1.6	ug/L			09/06/23 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*09/06/23 13:38*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*09/06/23 13:38*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*09/06/23 13:38*	*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	0.097	ug/L		09/02/23 09:18	09/06/23 18:29	1
Acenaphthylene	ND		0.20	0.043	ug/L		09/02/23 09:18	09/06/23 18:29	1
Anthracene	ND		0.20	0.046	ug/L		09/02/23 09:18	09/06/23 18:29	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		09/02/23 09:18	09/06/23 18:29	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		09/02/23 09:18	09/06/23 18:29	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		09/02/23 09:18	09/06/23 18:29	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		09/02/23 09:18	09/06/23 18:29	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		09/02/23 09:18	09/06/23 18:29	1
Chrysene	ND		0.20	0.032	ug/L		09/02/23 09:18	09/06/23 18:29	1
Dibenz(a,h)anthracene	**0.091**	**J B**	0.20	0.047	ug/L		09/02/23 09:18	09/06/23 18:29	1
Fluoranthene	**0.048**	**J B**	0.20	0.033	ug/L		09/02/23 09:18	09/06/23 18:29	1
Fluorene	ND		0.20	0.088	ug/L		09/02/23 09:18	09/06/23 18:29	1
Indeno[1,2,3-cd]pyrene	**0.092**	**J B**	0.20	0.033	ug/L		09/02/23 09:18	09/06/23 18:29	1
Phenanthrene	ND		0.20	0.089	ug/L		09/02/23 09:18	09/06/23 18:29	1
Pyrene	ND		0.20	0.038	ug/L		09/02/23 09:18	09/06/23 18:29	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		09/02/23 09:18	09/06/23 18:29	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		09/02/23 09:18	09/06/23 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*70*		*18 - 147*	*09/02/23 09:18*	*09/06/23 18:29*	*1*
2-Fluorobiphenyl	*75*		*15 - 128*	*09/02/23 09:18*	*09/06/23 18:29*	*1*

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

Job ID: 400-242644-1

Client Sample ID: MW24-ROX-082823
Date Collected: 08/28/23 10:25
Date Received: 08/29/23 09:40

Lab Sample ID: 400-242644-4
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*	*09/02/23 09:18*	*09/06/23 18:29*	*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		09/02/23 09:18	09/06/23 18:26	1
Benzenethiol	ND	*1	9.8	1.7	ug/L		09/02/23 09:18	09/06/23 18:26	1
Benzoic acid	ND		30	7.2	ug/L		09/02/23 09:18	09/06/23 18:26	1
Benzyl alcohol	ND		9.8	2.0	ug/L		09/02/23 09:18	09/06/23 18:26	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		09/02/23 09:18	09/06/23 18:26	1
Bis(2-chloroethyl)ether	ND		9.8	2.7	ug/L		09/02/23 09:18	09/06/23 18:26	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		09/02/23 09:18	09/06/23 18:26	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		09/02/23 09:18	09/06/23 18:26	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		09/02/23 09:18	09/06/23 18:26	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		09/02/23 09:18	09/06/23 18:26	1
4-Chloroaniline	ND		9.8	3.3	ug/L		09/02/23 09:18	09/06/23 18:26	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		09/02/23 09:18	09/06/23 18:26	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		09/02/23 09:18	09/06/23 18:26	1
2-Chlorophenol	ND		9.8	2.2	ug/L		09/02/23 09:18	09/06/23 18:26	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		09/02/23 09:18	09/06/23 18:26	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		09/02/23 09:18	09/06/23 18:26	1
Dibenzofuran	ND		9.8	0.17	ug/L		09/02/23 09:18	09/06/23 18:26	1
3,3'-Dichlorobenzidine	ND		9.8	2.6	ug/L		09/02/23 09:18	09/06/23 18:26	1
2,4-Dichlorophenol	ND		9.8	3.0	ug/L		09/02/23 09:18	09/06/23 18:26	1
Diethyl phthalate	ND		9.8	0.24	ug/L		09/02/23 09:18	09/06/23 18:26	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		09/02/23 09:18	09/06/23 18:26	1
Dimethyl phthalate	ND		9.8	0.17	ug/L		09/02/23 09:18	09/06/23 18:26	1
Di-n-butyl phthalate	ND		9.8	2.7	ug/L		09/02/23 09:18	09/06/23 18:26	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		09/02/23 09:18	09/06/23 18:26	1
2,4-Dinitrophenol	ND		30	3.3	ug/L		09/02/23 09:18	09/06/23 18:26	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		09/02/23 09:18	09/06/23 18:26	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		09/02/23 09:18	09/06/23 18:26	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		09/02/23 09:18	09/06/23 18:26	1
1,4-Dioxane	ND		9.8	0.98	ug/L		09/02/23 09:18	09/06/23 18:26	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		09/02/23 09:18	09/06/23 18:26	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		09/02/23 09:18	09/06/23 18:26	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/02/23 09:18	09/07/23 10:09	1
Hexachloroethane	ND		9.8	4.1	ug/L		09/02/23 09:18	09/06/23 18:26	1
Indene	ND		9.8	0.98	ug/L		09/02/23 09:18	09/06/23 18:26	1
Isophorone	ND		9.8	0.14	ug/L		09/02/23 09:18	09/06/23 18:26	1
2-Methylphenol	ND		9.8	1.8	ug/L		09/02/23 09:18	09/06/23 18:26	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		09/02/23 09:18	09/06/23 18:26	1
2-Nitroaniline	ND		9.8	2.2	ug/L		09/02/23 09:18	09/06/23 18:26	1
3-Nitroaniline	ND		9.8	1.8	ug/L		09/02/23 09:18	09/06/23 18:26	1
4-Nitroaniline	ND		9.8	1.5	ug/L		09/02/23 09:18	09/06/23 18:26	1
Nitrobenzene	ND		9.8	0.13	ug/L		09/02/23 09:18	09/06/23 18:26	1
2-Nitrophenol	ND		9.8	5.1	ug/L		09/02/23 09:18	09/06/23 18:26	1
4-Nitrophenol	ND		9.8	2.1	ug/L		09/02/23 09:18	09/06/23 18:26	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		09/02/23 09:18	09/06/23 18:26	1

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

Job ID: 400-242644-1

Client Sample ID: MW24-ROX-082823

Date Collected: 08/28/23 10:25
Date Received: 08/29/23 09:40

Lab Sample ID: 400-242644-4

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	3.2	ug/L		09/02/23 09:18	09/06/23 18:26	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		09/02/23 09:18	09/06/23 18:26	1
Pentachlorophenol	ND		20	1.4	ug/L		09/02/23 09:18	09/06/23 18:26	1
Phenol	ND		9.8	2.6	ug/L		09/02/23 09:18	09/06/23 18:26	1
Pyridine	ND		9.8	3.1	ug/L		09/02/23 09:18	09/06/23 18:26	1
Quinoline	ND		9.8	4.4	ug/L		09/02/23 09:18	09/06/23 18:26	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		09/02/23 09:18	09/06/23 18:26	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		09/02/23 09:18	09/06/23 18:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*46 - 124*	*09/02/23 09:18*	*09/06/23 18:26*	*1*
2-Fluorophenol	*24*		*13 - 113*	*09/02/23 09:18*	*09/06/23 18:26*	*1*
Nitrobenzene-d5	*71*		*36 - 126*	*09/02/23 09:18*	*09/06/23 18:26*	*1*
Phenol-d5	*35*		*17 - 127*	*09/02/23 09:18*	*09/06/23 18:26*	*1*
Terphenyl-d14	*76*		*44 - 149*	*09/02/23 09:18*	*09/06/23 18:26*	*1*
2,4,6-Tribromophenol	*29*		*26 - 150*	*09/02/23 09:18*	*09/06/23 18:26*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND	*+	0.030	0.017	ug/L		08/31/23 15:18	08/31/23 20:01	1
1,2-D bromoethane	ND	*+	0.020	0.015	ug/L		08/31/23 15:18	08/31/23 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*162*	*S1+*	*51 - 149*	*08/31/23 15:18*	*08/31/23 20:01*	*1*

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

Job ID: 400-242644-1

Client Sample ID: MW3-ROX-082823
Date Collected: 08/28/23 11:40
Date Received: 08/29/23 09:40

Lab Sample ID: 400-242644-5
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			09/06/23 14:05	1
Acrolein	ND		20	3.3	ug/L			09/06/23 14:05	1
Acrylonitrile	ND		10	2.8	ug/L			09/06/23 14:05	1
Benzene	ND		1.0	0.50	ug/L			09/06/23 14:05	1
Bromobenzene	ND		1.0	0.54	ug/L			09/06/23 14:05	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/06/23 14:05	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/06/23 14:05	1
Bromoform	ND		5.0	0.25	ug/L			09/06/23 14:05	1
Bromomethane	ND		1.0	0.98	ug/L			09/06/23 14:05	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/06/23 14:05	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/06/23 14:05	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/06/23 14:05	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/06/23 14:05	1
Chloroethane	ND		1.0	0.76	ug/L			09/06/23 14:05	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			09/06/23 14:05	1
Chloroform	ND		1.0	0.90	ug/L			09/06/23 14:05	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/06/23 14:05	1
Chloromethane	ND		1.0	0.90	ug/L			09/06/23 14:05	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/06/23 14:05	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/06/23 14:05	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/06/23 14:05	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/06/23 14:05	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/06/23 14:05	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/06/23 14:05	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/06/23 14:05	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/06/23 14:05	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/06/23 14:05	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/06/23 14:05	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/06/23 14:05	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/06/23 14:05	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/06/23 14:05	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/06/23 14:05	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/06/23 14:05	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/06/23 14:05	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/06/23 14:05	1
2-Hexanone	ND		25	1.4	ug/L			09/06/23 14:05	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/06/23 14:05	1
Methylene bromide	ND		5.0	0.22	ug/L			09/06/23 14:05	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/06/23 14:05	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/06/23 14:05	1
Methyl tert-butyl ether	**1.5**		1.0	0.22	ug/L			09/06/23 14:05	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/06/23 14:05	1
Naphthalene	ND		5.0	3.0	ug/L			09/06/23 14:05	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/06/23 14:05	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/06/23 14:05	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/06/23 14:05	1
o-Xylene	ND		5.0	0.60	ug/L			09/06/23 14:05	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/06/23 14:05	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/06/23 14:05	1

Client Sample ID: MW3-ROX-082823
Date Collected: 08/28/23 11:40
Date Received: 08/29/23 09:40

Lab Sample ID: 400-242644-5
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			09/06/23 14:05	1
Styrene	ND		1.0	1.0	ug/L			09/06/23 14:05	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/06/23 14:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/06/23 14:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/06/23 14:05	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/06/23 14:05	1
Toluene	ND		1.0	0.90	ug/L			09/06/23 14:05	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/06/23 14:05	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/06/23 14:05	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/06/23 14:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/06/23 14:05	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/06/23 14:05	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/06/23 14:05	1
Trichloroethene	ND		1.0	0.15	ug/L			09/06/23 14:05	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/06/23 14:05	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/06/23 14:05	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/06/23 14:05	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/06/23 14:05	1
Vinyl acetate	ND		25	0.93	ug/L			09/06/23 14:05	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/06/23 14:05	1
Xylenes, Total	ND		10	1.6	ug/L			09/06/23 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*09/06/23 14:05*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*09/06/23 14:05*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*09/06/23 14:05*	*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		09/02/23 09:18	09/06/23 17:48	1
Acenaphthylene	ND		0.20	0.043	ug/L		09/02/23 09:18	09/06/23 17:48	1
Anthracene	ND		0.20	0.046	ug/L		09/02/23 09:18	09/06/23 17:48	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		09/02/23 09:18	09/06/23 17:48	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		09/02/23 09:18	09/06/23 17:48	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		09/02/23 09:18	09/06/23 17:48	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		09/02/23 09:18	09/06/23 17:48	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		09/02/23 09:18	09/06/23 17:48	1
Chrysene	ND		0.20	0.033	ug/L		09/02/23 09:18	09/06/23 17:48	1
Dibenz(a,h)anthracene	**0.089**	**J B**	0.20	0.047	ug/L		09/02/23 09:18	09/06/23 17:48	1
Fluoranthene	**0.046**	**J B**	0.20	0.034	ug/L		09/02/23 09:18	09/06/23 17:48	1
Fluorene	ND		0.20	0.088	ug/L		09/02/23 09:18	09/06/23 17:48	1
Indeno[1,2,3-cd]pyrene	**0.10**	**J B**	0.20	0.034	ug/L		09/02/23 09:18	09/06/23 17:48	1
Phenanthrene	ND		0.20	0.089	ug/L		09/02/23 09:18	09/06/23 17:48	1
Pyrene	ND		0.20	0.039	ug/L		09/02/23 09:18	09/06/23 17:48	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		09/02/23 09:18	09/06/23 17:48	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		09/02/23 09:18	09/06/23 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*57*		*18 - 147*	*09/02/23 09:18*	*09/06/23 17:48*	*1*
2-Fluorobiphenyl	*67*		*15 - 128*	*09/02/23 09:18*	*09/06/23 17:48*	*1*

Client Sample ID: MW3-ROX-082823
Date Collected: 08/28/23 11:40
Date Received: 08/29/23 09:40

Lab Sample ID: 400-242644-5
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*	*09/02/23 09:18*	*09/06/23 17:48*	*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		09/02/23 09:18	09/06/23 19:18	1
Benzenethiol	ND	*1	9.9	1.7	ug/L		09/02/23 09:18	09/06/23 19:18	1
Benzoic acid	ND		30	7.2	ug/L		09/02/23 09:18	09/06/23 19:18	1
Benzyl alcohol	ND		9.9	2.0	ug/L		09/02/23 09:18	09/06/23 19:18	1
Bis(2-chloroethoxy)methane	ND		9.9	0.16	ug/L		09/02/23 09:18	09/06/23 19:18	1
Bis(2-chloroethyl)ether	ND		9.9	2.7	ug/L		09/02/23 09:18	09/06/23 19:18	1
bis (2-chloroisopropyl) ether	ND		9.9	0.16	ug/L		09/02/23 09:18	09/06/23 19:18	1
Bis(2-ethylhexyl) phthalate	ND		9.9	4.9	ug/L		09/02/23 09:18	09/06/23 19:18	1
4-Bromophenyl phenyl ether	ND		9.9	0.20	ug/L		09/02/23 09:18	09/06/23 19:18	1
Butyl benzyl phthalate	ND		9.9	0.19	ug/L		09/02/23 09:18	09/06/23 19:18	1
4-Chloroaniline	ND		9.9	3.4	ug/L		09/02/23 09:18	09/06/23 19:18	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		09/02/23 09:18	09/06/23 19:18	1
2-Chloronaphthalene	ND		9.9	0.14	ug/L		09/02/23 09:18	09/06/23 19:18	1
2-Chlorophenol	ND		9.9	2.2	ug/L		09/02/23 09:18	09/06/23 19:18	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		09/02/23 09:18	09/06/23 19:18	1
Dibenz[a,h]acridine	ND		9.9	0.99	ug/L		09/02/23 09:18	09/06/23 19:18	1
Dibenzofuran	ND		9.9	0.17	ug/L		09/02/23 09:18	09/06/23 19:18	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		09/02/23 09:18	09/06/23 19:18	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		09/02/23 09:18	09/06/23 19:18	1
Diethyl phthalate	ND		9.9	0.24	ug/L		09/02/23 09:18	09/06/23 19:18	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		09/02/23 09:18	09/06/23 19:18	1
Dimethyl phthalate	ND		9.9	0.17	ug/L		09/02/23 09:18	09/06/23 19:18	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		09/02/23 09:18	09/06/23 19:18	1
4,6-Dinitro-ortho-cresol	ND		9.9	1.6	ug/L		09/02/23 09:18	09/06/23 19:18	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		09/02/23 09:18	09/06/23 19:18	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		09/02/23 09:18	09/06/23 19:18	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		09/02/23 09:18	09/06/23 19:18	1
Di-n-octyl phthalate	ND		9.9	0.17	ug/L		09/02/23 09:18	09/06/23 19:18	1
1,4-Dioxane	ND		9.9	0.99	ug/L		09/02/23 09:18	09/06/23 19:18	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		09/02/23 09:18	09/06/23 19:18	1
Hexachlorobenzene	ND		9.9	0.17	ug/L		09/02/23 09:18	09/06/23 19:18	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/02/23 09:18	09/07/23 10:33	1
Hexachloroethane	ND		9.9	4.1	ug/L		09/02/23 09:18	09/06/23 19:18	1
Indene	ND		9.9	0.99	ug/L		09/02/23 09:18	09/06/23 19:18	1
Isophorone	ND		9.9	0.14	ug/L		09/02/23 09:18	09/06/23 19:18	1
2-Methylphenol	ND		9.9	1.8	ug/L		09/02/23 09:18	09/06/23 19:18	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		09/02/23 09:18	09/06/23 19:18	1
2-Nitroaniline	ND		9.9	2.2	ug/L		09/02/23 09:18	09/06/23 19:18	1
3-Nitroaniline	ND		9.9	1.8	ug/L		09/02/23 09:18	09/06/23 19:18	1
4-Nitroaniline	ND		9.9	1.5	ug/L		09/02/23 09:18	09/06/23 19:18	1
Nitrobenzene	ND		9.9	0.13	ug/L		09/02/23 09:18	09/06/23 19:18	1
2-Nitrophenol	ND		9.9	5.1	ug/L		09/02/23 09:18	09/06/23 19:18	1
4-Nitrophenol	ND		9.9	2.1	ug/L		09/02/23 09:18	09/06/23 19:18	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		09/02/23 09:18	09/06/23 19:18	1

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

Job ID: 400-242644-1

Client Sample ID: MW3-ROX-082823

Lab Sample ID: 400-242644-5

Date Collected: 08/28/23 11:40

Matrix: Water

Date Received: 08/29/23 09:40

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		09/02/23 09:18	09/06/23 19:18	1
N-Nitrosodiphenylamine	ND		9.9	0.18	ug/L		09/02/23 09:18	09/06/23 19:18	1
Pentachlorophenol	ND		20	1.4	ug/L		09/02/23 09:18	09/06/23 19:18	1
Phenol	ND		9.9	2.6	ug/L		09/02/23 09:18	09/06/23 19:18	1
Pyridine	ND		9.9	3.2	ug/L		09/02/23 09:18	09/06/23 19:18	1
Quinoline	ND		9.9	4.4	ug/L		09/02/23 09:18	09/06/23 19:18	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		09/02/23 09:18	09/06/23 19:18	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		09/02/23 09:18	09/06/23 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*46 - 124*	*09/02/23 09:18*	*09/06/23 19:18*	*1*
2-Fluorophenol	*47*		*13 - 113*	*09/02/23 09:18*	*09/06/23 19:18*	*1*
Nitrobenzene-d5	*73*		*36 - 126*	*09/02/23 09:18*	*09/06/23 19:18*	*1*
Phenol-d5	*64*		*17 - 127*	*09/02/23 09:18*	*09/06/23 19:18*	*1*
Terphenyl-d14	*74*		*44 - 149*	*09/02/23 09:18*	*09/06/23 19:18*	*1*
2,4,6-Tribromophenol	*77*		*26 - 150*	*09/02/23 09:18*	*09/06/23 19:18*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND	F1 *+	0.031	0.017	ug/L		08/31/23 15:18	08/31/23 20:23	1
1,2-D bromoethane	ND	F1 *+	0.021	0.015	ug/L		08/31/23 15:18	08/31/23 20:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*155*	*S1+*	*51 - 149*	*08/31/23 15:18*	*08/31/23 20:23*	*1*

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

Job ID: 400-242644-1

Client Sample ID: MW16-ROX-082823
Date Collected: 08/28/23 11:40
Date Received: 08/29/23 09:40

Lab Sample ID: 400-242644-6
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			09/06/23 19:04	1
Acrolein	ND		20	3.3	ug/L			09/06/23 19:04	1
Acrylonitrile	ND		10	2.8	ug/L			09/06/23 19:04	1
Benzene	ND		1.0	0.50	ug/L			09/06/23 19:04	1
Bromobenzene	ND		1.0	0.54	ug/L			09/06/23 19:04	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/06/23 19:04	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/06/23 19:04	1
Bromoform	ND		5.0	0.25	ug/L			09/06/23 19:04	1
Bromomethane	ND		1.0	0.98	ug/L			09/06/23 19:04	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/06/23 19:04	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/06/23 19:04	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/06/23 19:04	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/06/23 19:04	1
Chloroethane	ND		1.0	0.76	ug/L			09/06/23 19:04	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/06/23 19:04	1
Chloroform	ND		1.0	0.90	ug/L			09/06/23 19:04	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/06/23 19:04	1
Chloromethane	ND		1.0	0.90	ug/L			09/06/23 19:04	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/06/23 19:04	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/06/23 19:04	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/06/23 19:04	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/06/23 19:04	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/06/23 19:04	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/06/23 19:04	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/06/23 19:04	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/06/23 19:04	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/06/23 19:04	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/06/23 19:04	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/06/23 19:04	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/06/23 19:04	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/06/23 19:04	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/06/23 19:04	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/06/23 19:04	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/06/23 19:04	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/06/23 19:04	1
2-Hexanone	ND		25	1.4	ug/L			09/06/23 19:04	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/06/23 19:04	1
Methylene bromide	ND		5.0	0.22	ug/L			09/06/23 19:04	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/06/23 19:04	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/06/23 19:04	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/06/23 19:04	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/06/23 19:04	1
Naphthalene	ND		5.0	3.0	ug/L			09/06/23 19:04	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/06/23 19:04	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/06/23 19:04	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/06/23 19:04	1
o-Xylene	ND		5.0	0.60	ug/L			09/06/23 19:04	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/06/23 19:04	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/06/23 19:04	1

Client Sample ID: MW16-ROX-082823
Date Collected: 08/28/23 11:40
Date Received: 08/29/23 09:40

Lab Sample ID: 400-242644-6
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			09/06/23 19:04	1
Styrene	ND		1.0	1.0	ug/L			09/06/23 19:04	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/06/23 19:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/06/23 19:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/06/23 19:04	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/06/23 19:04	1
Toluene	ND		1.0	0.90	ug/L			09/06/23 19:04	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/06/23 19:04	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/06/23 19:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/06/23 19:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/06/23 19:04	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/06/23 19:04	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/06/23 19:04	1
Trichloroethene	ND		1.0	0.15	ug/L			09/06/23 19:04	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/06/23 19:04	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/06/23 19:04	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/06/23 19:04	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/06/23 19:04	1
Vinyl acetate	ND		25	0.93	ug/L			09/06/23 19:04	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/06/23 19:04	1
Xylenes, Total	ND		10	1.6	ug/L			09/06/23 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*09/06/23 19:04*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*09/06/23 19:04*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*09/06/23 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	ND		0.20	0.10	ug/L		09/02/23 09:18	09/06/23 18:50	1
Acenaphthylene	ND		0.20	0.044	ug/L		09/02/23 09:18	09/06/23 18:50	1
Anthracene	ND		0.20	0.047	ug/L		09/02/23 09:18	09/06/23 18:50	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		09/02/23 09:18	09/06/23 18:50	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		09/02/23 09:18	09/06/23 18:50	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		09/02/23 09:18	09/06/23 18:50	1
Benzo[g,h,i]perylene	**0.043**	**J B**	0.20	0.027	ug/L		09/02/23 09:18	09/06/23 18:50	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		09/02/23 09:18	09/06/23 18:50	1
Chrysene	ND		0.20	0.033	ug/L		09/02/23 09:18	09/06/23 18:50	1
Dibenz(a,h)anthracene	**0.12**	**J B**	0.20	0.049	ug/L		09/02/23 09:18	09/06/23 18:50	1
Fluoranthene	**0.049**	**J B**	0.20	0.034	ug/L		09/02/23 09:18	09/06/23 18:50	1
Fluorene	ND		0.20	0.090	ug/L		09/02/23 09:18	09/06/23 18:50	1
Indeno[1,2,3-cd]pyrene	**0.11**	**J B**	0.20	0.034	ug/L		09/02/23 09:18	09/06/23 18:50	1
Phenanthrene	ND		0.20	0.091	ug/L		09/02/23 09:18	09/06/23 18:50	1
Pyrene	ND		0.20	0.039	ug/L		09/02/23 09:18	09/06/23 18:50	1
1-Methylnaphthalene	ND		0.20	0.081	ug/L		09/02/23 09:18	09/06/23 18:50	1
2-Methylnaphthalene	ND		0.20	0.067	ug/L		09/02/23 09:18	09/06/23 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*76*		*18 - 147*	*09/02/23 09:18*	*09/06/23 18:50*	*1*
2-Fluorobiphenyl	*74*		*15 - 128*	*09/02/23 09:18*	*09/06/23 18:50*	*1*

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

Job ID: 400-242644-1

Client Sample ID: MW16-ROX-082823
Date Collected: 08/28/23 11:40
Date Received: 08/29/23 09:40

Lab Sample ID: 400-242644-6
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*	*09/02/23 09:18*	*09/06/23 18:50*	*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		09/02/23 09:18	09/06/23 18:52	1
Benzenethiol	ND	*1	10	1.7	ug/L		09/02/23 09:18	09/06/23 18:52	1
Benzoic acid	ND		30	7.4	ug/L		09/02/23 09:18	09/06/23 18:52	1
Benzyl alcohol	ND		10	2.0	ug/L		09/02/23 09:18	09/06/23 18:52	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		09/02/23 09:18	09/06/23 18:52	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		09/02/23 09:18	09/06/23 18:52	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		09/02/23 09:18	09/06/23 18:52	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		09/02/23 09:18	09/06/23 18:52	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		09/02/23 09:18	09/06/23 18:52	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		09/02/23 09:18	09/06/23 18:52	1
4-Chloroaniline	ND		10	3.4	ug/L		09/02/23 09:18	09/06/23 18:52	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		09/02/23 09:18	09/06/23 18:52	1
2-Chloronaphthalene	ND		10	0.14	ug/L		09/02/23 09:18	09/06/23 18:52	1
2-Chlorophenol	ND		10	2.2	ug/L		09/02/23 09:18	09/06/23 18:52	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		09/02/23 09:18	09/06/23 18:52	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		09/02/23 09:18	09/06/23 18:52	1
Dibenzofuran	ND		10	0.17	ug/L		09/02/23 09:18	09/06/23 18:52	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		09/02/23 09:18	09/06/23 18:52	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		09/02/23 09:18	09/06/23 18:52	1
Diethyl phthalate	ND		10	0.24	ug/L		09/02/23 09:18	09/06/23 18:52	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		09/02/23 09:18	09/06/23 18:52	1
Dimethyl phthalate	ND		10	0.17	ug/L		09/02/23 09:18	09/06/23 18:52	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		09/02/23 09:18	09/06/23 18:52	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		09/02/23 09:18	09/06/23 18:52	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		09/02/23 09:18	09/06/23 18:52	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		09/02/23 09:18	09/06/23 18:52	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		09/02/23 09:18	09/06/23 18:52	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		09/02/23 09:18	09/06/23 18:52	1
1,4-Dioxane	ND		10	1.0	ug/L		09/02/23 09:18	09/06/23 18:52	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		09/02/23 09:18	09/06/23 18:52	1
Hexachlorobenzene	ND		10	0.17	ug/L		09/02/23 09:18	09/06/23 18:52	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/02/23 09:18	09/07/23 10:58	1
Hexachloroethane	ND		10	4.2	ug/L		09/02/23 09:18	09/06/23 18:52	1
Indene	ND		10	1.0	ug/L		09/02/23 09:18	09/06/23 18:52	1
Isophorone	ND		10	0.14	ug/L		09/02/23 09:18	09/06/23 18:52	1
2-Methylphenol	ND		10	1.8	ug/L		09/02/23 09:18	09/06/23 18:52	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		09/02/23 09:18	09/06/23 18:52	1
2-Nitroaniline	ND		10	2.2	ug/L		09/02/23 09:18	09/06/23 18:52	1
3-Nitroaniline	ND		10	1.8	ug/L		09/02/23 09:18	09/06/23 18:52	1
4-Nitroaniline	ND		10	1.5	ug/L		09/02/23 09:18	09/06/23 18:52	1
Nitrobenzene	ND		10	0.13	ug/L		09/02/23 09:18	09/06/23 18:52	1
2-Nitrophenol	ND		10	5.3	ug/L		09/02/23 09:18	09/06/23 18:52	1
4-Nitrophenol	ND		10	2.1	ug/L		09/02/23 09:18	09/06/23 18:52	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		09/02/23 09:18	09/06/23 18:52	1

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

Job ID: 400-242644-1

Client Sample ID: MW16-ROX-082823
Date Collected: 08/28/23 11:40
Date Received: 08/29/23 09:40

Lab Sample ID: 400-242644-6
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	3.3	ug/L		09/02/23 09:18	09/06/23 18:52	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		09/02/23 09:18	09/06/23 18:52	1
Pentachlorophenol	ND		20	1.4	ug/L		09/02/23 09:18	09/06/23 18:52	1
Phenol	ND		10	2.6	ug/L		09/02/23 09:18	09/06/23 18:52	1
Pyridine	ND		10	3.2	ug/L		09/02/23 09:18	09/06/23 18:52	1
Quinoline	ND		10	4.5	ug/L		09/02/23 09:18	09/06/23 18:52	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		09/02/23 09:18	09/06/23 18:52	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		09/02/23 09:18	09/06/23 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*46 - 124*	*09/02/23 09:18*	*09/06/23 18:52*	*1*
2-Fluorophenol	*51*		*13 - 113*	*09/02/23 09:18*	*09/06/23 18:52*	*1*
Nitrobenzene-d5	*72*		*36 - 126*	*09/02/23 09:18*	*09/06/23 18:52*	*1*
Phenol-d5	*69*		*17 - 127*	*09/02/23 09:18*	*09/06/23 18:52*	*1*
Terphenyl-d14	*82*		*44 - 149*	*09/02/23 09:18*	*09/06/23 18:52*	*1*
2,4,6-Tribromophenol	*65*		*26 - 150*	*09/02/23 09:18*	*09/06/23 18:52*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND	*+	0.031	0.017	ug/L		08/31/23 15:18	08/31/23 21:27	1
1,2-D bromoethane	ND	*+	0.020	0.015	ug/L		08/31/23 15:18	08/31/23 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*149*		*51 - 149*	*08/31/23 15:18*	*08/31/23 21:27*	*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.
B	Compound was found in the blank and sample.
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
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
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: 400-242644-1

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)
400-242644-1	TB-ROX-082823-8260-A	103	108	101
400-242644-3	MW24-ROX-082823-EB	101	108	99
400-242644-4	MW24-ROX-082823	102	106	99
400-242644-5	MW3-ROX-082823	104	107	100
400-242644-5 MS	MW3-ROX-082823	104	106	101
400-242644-5 MSD	MW3-ROX-082823	103	105	101
400-242644-6	MW16-ROX-082823	102	109	100
LCS 400-639862/1002	Lab Control Sample	105	104	102
MB 400-639862/50	Method Blank	102	107	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)
400-242644-3	MW24-ROX-082823-EB	81	54	72	69	85	67
400-242644-4	MW24-ROX-082823	79	24	71	35	76	29
400-242644-5	MW3-ROX-082823	83	47	73	64	74	77
400-242644-5 MS	MW3-ROX-082823	86	55	86	73	80	87
400-242644-5 MSD	MW3-ROX-082823	81	59	81	73	81	86
400-242644-6	MW16-ROX-082823	81	51	72	69	82	65
LCS 400-639567/2-A	Lab Control Sample	77	53	79	65	78	80
LCSD 400-639567/14-A	Lab Control Sample Dup	84	65	76	74	93	68
MB 400-639567/1-A	Method Blank	92	38	81	63	94	76

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)
400-242644-3	MW24-ROX-082823-EB	80	75	73
400-242644-4	MW24-ROX-082823	70	75	68
400-242644-5	MW3-ROX-082823	57	67	68
400-242644-5 MS	MW3-ROX-082823	73	85	86
400-242644-5 MSD	MW3-ROX-082823	73	80	82
400-242644-6	MW16-ROX-082823	76	74	70

Surrogate Summary

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

Job ID: 400-242644-1

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)
LCS 400-639567/11-A	Lab Control Sample	83	80	77
LCSD 400-639567/12-A	Lab Control Sample Dup	82	75	72
MB 400-639567/1-A	Method Blank	81	73	70

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)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-242644-2	TB-ROX-082823-8011-A	148
400-242644-3	MW24-ROX-082823-EB	169 S1+
400-242644-4	MW24-ROX-082823	162 S1+
400-242644-5	MW3-ROX-082823	155 S1+
400-242644-5 MS	MW3-ROX-082823	146
400-242644-5 MSD	MW3-ROX-082823	156 S1+
400-242644-6	MW16-ROX-082823	149
LCS 400-639353/2-A	Lab Control Sample	149
LCSD 400-639353/3-A	Lab Control Sample Dup	164 S1+
MB 400-639353/1-A	Method Blank	150 S1+

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-242644-1

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: 400-242644-1

Client Sample ID: TB-ROX-082823-8260-A
Lab Sample ID: 400-242644-1
Date Collected: 08/28/23 00:00
Matrix: Water
Date Received: 08/29/23 09:40

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	639862	09/06/23 12:44	CH	EET PEN

Client Sample ID: TB-ROX-082823-8011-A
Lab Sample ID: 400-242644-2
Date Collected: 08/28/23 00:00
Matrix: Water
Date Received: 08/29/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.6 mL	35 mL	639353	08/31/23 15:18	PG	EET PEN
Total/NA	Analysis	8011		1			639362	08/31/23 19:19	PG	EET PEN

Client Sample ID: MW24-ROX-082823-EB
Lab Sample ID: 400-242644-3
Date Collected: 08/28/23 08:50
Matrix: Water
Date Received: 08/29/23 09:40

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	639862	09/06/23 18:37	CH	EET PEN
Total/NA	Prep	3520C			256.4 mL	1 mL	639567	09/02/23 09:18	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640035	09/07/23 09:45	VC1	EET PEN
Total/NA	Prep	3520C			256.4 mL	1 mL	639567	09/02/23 09:18	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	639936	09/06/23 18:00	VC1	EET PEN
Total/NA	Prep	3520C			256.4 mL	1 mL	639567	09/02/23 09:18	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	639844	09/06/23 18:08	TH	EET PEN
Total/NA	Prep	8011			34.3 mL	35 mL	639353	08/31/23 15:18	PG	EET PEN
Total/NA	Analysis	8011		1			639362	08/31/23 19:40	PG	EET PEN

Client Sample ID: MW24-ROX-082823
Lab Sample ID: 400-242644-4
Date Collected: 08/28/23 10:25
Matrix: Water
Date Received: 08/29/23 09:40

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	639862	09/06/23 13:38	CH	EET PEN
Total/NA	Prep	3520C			254 mL	1 mL	639567	09/02/23 09:18	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640035	09/07/23 10:09	VC1	EET PEN
Total/NA	Prep	3520C			254 mL	1 mL	639567	09/02/23 09:18	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	639936	09/06/23 18:26	VC1	EET PEN
Total/NA	Prep	3520C			254 mL	1 mL	639567	09/02/23 09:18	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	639844	09/06/23 18:29	TH	EET PEN
Total/NA	Prep	8011			35 mL	35 mL	639353	08/31/23 15:18	PG	EET PEN
Total/NA	Analysis	8011		1			639362	08/31/23 20:01	PG	EET PEN

Client Sample ID: MW3-ROX-082823

Lab Sample ID: 400-242644-5

Date Collected: 08/28/23 11:40

Matrix: Water

Date Received: 08/29/23 09:40

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	639862	09/06/23 14:05	CH	EET PEN
Total/NA	Prep	3520C			253.2 mL	1 mL	639567	09/02/23 09:18	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640035	09/07/23 10:33	VC1	EET PEN
Total/NA	Prep	3520C			253.2 mL	1 mL	639567	09/02/23 09:18	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	639936	09/06/23 19:18	VC1	EET PEN
Total/NA	Prep	3520C			253.2 mL	1 mL	639567	09/02/23 09:18	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	639844	09/06/23 17:48	TH	EET PEN
Total/NA	Prep	8011			34.1 mL	35 mL	639353	08/31/23 15:18	PG	EET PEN
Total/NA	Analysis	8011		1			639362	08/31/23 20:23	PG	EET PEN

Client Sample ID: MW16-ROX-082823

Lab Sample ID: 400-242644-6

Date Collected: 08/28/23 11:40

Matrix: Water

Date Received: 08/29/23 09:40

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	639862	09/06/23 19:04	CH	EET PEN
Total/NA	Prep	3520C			247.4 mL	1 mL	639567	09/02/23 09:18	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640035	09/07/23 10:58	VC1	EET PEN
Total/NA	Prep	3520C			247.4 mL	1 mL	639567	09/02/23 09:18	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	639936	09/06/23 18:52	VC1	EET PEN
Total/NA	Prep	3520C			247.4 mL	1 mL	639567	09/02/23 09:18	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	639844	09/06/23 18:50	TH	EET PEN
Total/NA	Prep	8011			34.3 mL	35 mL	639353	08/31/23 15:18	PG	EET PEN
Total/NA	Analysis	8011		1			639362	08/31/23 21:27	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-639353/1-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	639353	08/31/23 14:48	PG	EET PEN
Total/NA	Analysis	8011		1			639362	08/31/23 17:10	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-639567/1-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	639567	09/02/23 09:17	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640035	09/07/23 11:22	VC1	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	639567	09/02/23 09:17	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	639936	09/06/23 19:44	VC1	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	639567	09/02/23 09:17	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	639844	09/06/23 16:04	TH	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-639862/50

Date Collected: N/A
Matrix: Water
Date Received: 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	639862	09/06/23 11:50	CH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-639353/2-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	639353	08/31/23 14:48	PG	EET PEN
Total/NA	Analysis	8011		1			639362	08/31/23 17:32	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-639567/11-A

Date Collected: N/A
Matrix: Water
Date Received: N/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	639567	09/02/23 09:18	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	639844	09/06/23 16:25	TH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-639567/2-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	639567	09/02/23 09:17	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	639936	09/06/23 20:10	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-639862/1002

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	639862	09/06/23 10:46	CH	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-639353/3-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	639353	08/31/23 14:48	PG	EET PEN
Total/NA	Analysis	8011		1			639362	08/31/23 17:53	PG	EET PEN

Lab Chronicle

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

Job ID: 400-242644-1

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-639567/12-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	639567	09/02/23 09:18	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	639844	09/06/23 16:45	TH	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-639567/14-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	639567	09/02/23 09:18	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	639936	09/06/23 21:54	VC1	EET PEN

Client Sample ID: MW3-ROX-082823
Lab Sample ID: 400-242644-5 MS
Date Collected: 08/28/23 11:40
Matrix: Water
Date Received: 08/29/23 09:40

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	639862	09/06/23 15:54	CH	EET PEN
Total/NA	Prep	3520C			251.4 mL	1 mL	639567	09/02/23 09:17	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	639936	09/06/23 20:36	VC1	EET PEN
Total/NA	Prep	3520C			251.4 mL	1 mL	639567	09/02/23 09:17	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	639844	09/06/23 17:06	TH	EET PEN
Total/NA	Prep	8011			33.7 mL	35 mL	639353	08/31/23 15:18	PG	EET PEN
Total/NA	Analysis	8011		1			639362	08/31/23 20:44	PG	EET PEN

Client Sample ID: MW3-ROX-082823
Lab Sample ID: 400-242644-5 MSD
Date Collected: 08/28/23 11:40
Matrix: Water
Date Received: 08/29/23 09:40

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	639862	09/06/23 16:21	CH	EET PEN
Total/NA	Prep	3520C			253.2 mL	1 mL	639567	09/02/23 09:18	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	639936	09/06/23 21:02	VC1	EET PEN
Total/NA	Prep	3520C			253.2 mL	1 mL	639567	09/02/23 09:18	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	639844	09/06/23 17:27	TH	EET PEN
Total/NA	Prep	8011			33.5 mL	35 mL	639353	08/31/23 15:18	PG	EET PEN
Total/NA	Analysis	8011		1			639362	08/31/23 21:06	PG	EET PEN

Laboratory References:
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 639862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242644-1	TB-ROX-082823-8260-A	Total/NA	Water	8260D	
400-242644-3	MW24-ROX-082823-EB	Total/NA	Water	8260D	
400-242644-4	MW24-ROX-082823	Total/NA	Water	8260D	
400-242644-5	MW3-ROX-082823	Total/NA	Water	8260D	
400-242644-6	MW16-ROX-082823	Total/NA	Water	8260D	
MB 400-639862/50	Method Blank	Total/NA	Water	8260D	
LCS 400-639862/1002	Lab Control Sample	Total/NA	Water	8260D	
400-242644-5 MS	MW3-ROX-082823	Total/NA	Water	8260D	
400-242644-5 MSD	MW3-ROX-082823	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 639567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242644-3	MW24-ROX-082823-EB	Total/NA	Water	3520C	
400-242644-4	MW24-ROX-082823	Total/NA	Water	3520C	
400-242644-5	MW3-ROX-082823	Total/NA	Water	3520C	
400-242644-6	MW16-ROX-082823	Total/NA	Water	3520C	
MB 400-639567/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-639567/11-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-639567/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-639567/12-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-639567/14-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-242644-5 MS	MW3-ROX-082823	Total/NA	Water	3520C	
400-242644-5 MSD	MW3-ROX-082823	Total/NA	Water	3520C	

Analysis Batch: 639844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242644-3	MW24-ROX-082823-EB	Total/NA	Water	8270E SIM	639567
400-242644-4	MW24-ROX-082823	Total/NA	Water	8270E SIM	639567
400-242644-5	MW3-ROX-082823	Total/NA	Water	8270E SIM	639567
400-242644-6	MW16-ROX-082823	Total/NA	Water	8270E SIM	639567
MB 400-639567/1-A	Method Blank	Total/NA	Water	8270E SIM	639567
LCS 400-639567/11-A	Lab Control Sample	Total/NA	Water	8270E SIM	639567
LCSD 400-639567/12-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	639567
400-242644-5 MS	MW3-ROX-082823	Total/NA	Water	8270E SIM	639567
400-242644-5 MSD	MW3-ROX-082823	Total/NA	Water	8270E SIM	639567

Analysis Batch: 639936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242644-3	MW24-ROX-082823-EB	Total/NA	Water	8270E	639567
400-242644-4	MW24-ROX-082823	Total/NA	Water	8270E	639567
400-242644-5	MW3-ROX-082823	Total/NA	Water	8270E	639567
400-242644-6	MW16-ROX-082823	Total/NA	Water	8270E	639567
MB 400-639567/1-A	Method Blank	Total/NA	Water	8270E	639567
LCS 400-639567/2-A	Lab Control Sample	Total/NA	Water	8270E	639567
LCSD 400-639567/14-A	Lab Control Sample Dup	Total/NA	Water	8270E	639567
400-242644-5 MS	MW3-ROX-082823	Total/NA	Water	8270E	639567
400-242644-5 MSD	MW3-ROX-082823	Total/NA	Water	8270E	639567

GC/MS Semi VOA

Analysis Batch: 640035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242644-3	MW24-ROX-082823-EB	Total/NA	Water	8270E	639567
400-242644-4	MW24-ROX-082823	Total/NA	Water	8270E	639567
400-242644-5	MW3-ROX-082823	Total/NA	Water	8270E	639567
400-242644-6	MW16-ROX-082823	Total/NA	Water	8270E	639567
MB 400-639567/1-A	Method Blank	Total/NA	Water	8270E	639567

GC Semi VOA

Prep Batch: 639353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242644-2	TB-ROX-082823-8011-A	Total/NA	Water	8011	
400-242644-3	MW24-ROX-082823-EB	Total/NA	Water	8011	
400-242644-4	MW24-ROX-082823	Total/NA	Water	8011	
400-242644-5	MW3-ROX-082823	Total/NA	Water	8011	
400-242644-6	MW16-ROX-082823	Total/NA	Water	8011	
MB 400-639353/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-639353/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-639353/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-242644-5 MS	MW3-ROX-082823	Total/NA	Water	8011	
400-242644-5 MSD	MW3-ROX-082823	Total/NA	Water	8011	

Analysis Batch: 639362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242644-2	TB-ROX-082823-8011-A	Total/NA	Water	8011	639353
400-242644-3	MW24-ROX-082823-EB	Total/NA	Water	8011	639353
400-242644-4	MW24-ROX-082823	Total/NA	Water	8011	639353
400-242644-5	MW3-ROX-082823	Total/NA	Water	8011	639353
400-242644-6	MW16-ROX-082823	Total/NA	Water	8011	639353
MB 400-639353/1-A	Method Blank	Total/NA	Water	8011	639353
LCS 400-639353/2-A	Lab Control Sample	Total/NA	Water	8011	639353
LCSD 400-639353/3-A	Lab Control Sample Dup	Total/NA	Water	8011	639353
400-242644-5 MS	MW3-ROX-082823	Total/NA	Water	8011	639353
400-242644-5 MSD	MW3-ROX-082823	Total/NA	Water	8011	639353

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

Job ID: 400-242644-1

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

Lab Sample ID: MB 400-639862/50
Matrix: Water
Analysis Batch: 639862

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			09/06/23 11:50	1
Acrolein	ND		20	3.3	ug/L			09/06/23 11:50	1
Acrylonitrile	ND		10	2.8	ug/L			09/06/23 11:50	1
Benzene	ND		1.0	0.50	ug/L			09/06/23 11:50	1
Bromobenzene	ND		1.0	0.54	ug/L			09/06/23 11:50	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/06/23 11:50	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/06/23 11:50	1
Bromoform	ND		5.0	0.25	ug/L			09/06/23 11:50	1
Bromomethane	ND		1.0	0.98	ug/L			09/06/23 11:50	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/06/23 11:50	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/06/23 11:50	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/06/23 11:50	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/06/23 11:50	1
Chloroethane	ND		1.0	0.76	ug/L			09/06/23 11:50	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/06/23 11:50	1
Chloroform	ND		1.0	0.90	ug/L			09/06/23 11:50	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/06/23 11:50	1
Chloromethane	ND		1.0	0.90	ug/L			09/06/23 11:50	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/06/23 11:50	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/06/23 11:50	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/06/23 11:50	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/06/23 11:50	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/06/23 11:50	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/06/23 11:50	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/06/23 11:50	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/06/23 11:50	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/06/23 11:50	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/06/23 11:50	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/06/23 11:50	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/06/23 11:50	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/06/23 11:50	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/06/23 11:50	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/06/23 11:50	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/06/23 11:50	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/06/23 11:50	1
2-Hexanone	ND		25	1.4	ug/L			09/06/23 11:50	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/06/23 11:50	1
Methylene bromide	ND		5.0	0.22	ug/L			09/06/23 11:50	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/06/23 11:50	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/06/23 11:50	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/06/23 11:50	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/06/23 11:50	1
Naphthalene	ND		5.0	3.0	ug/L			09/06/23 11:50	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/06/23 11:50	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/06/23 11:50	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/06/23 11:50	1
o-Xylene	ND		5.0	0.60	ug/L			09/06/23 11:50	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/06/23 11:50	1

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

Lab Sample ID: MB 400-639862/50
Matrix: Water
Analysis Batch: 639862

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			09/06/23 11:50	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			09/06/23 11:50	1
Styrene	ND		1.0	1.0	ug/L			09/06/23 11:50	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/06/23 11:50	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/06/23 11:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/06/23 11:50	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/06/23 11:50	1
Toluene	ND		1.0	0.90	ug/L			09/06/23 11:50	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/06/23 11:50	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/06/23 11:50	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/06/23 11:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/06/23 11:50	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/06/23 11:50	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/06/23 11:50	1
Trichloroethene	ND		1.0	0.15	ug/L			09/06/23 11:50	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/06/23 11:50	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/06/23 11:50	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/06/23 11:50	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/06/23 11:50	1
Vinyl acetate	ND		25	0.93	ug/L			09/06/23 11:50	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/06/23 11:50	1
Xylenes, Total	ND		10	1.6	ug/L			09/06/23 11:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*09/06/23 11:50*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*09/06/23 11:50*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*09/06/23 11:50*	*1*

Lab Sample ID: LCS 400-639862/1002
Matrix: Water
Analysis Batch: 639862

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	170		ug/L		85	43 - 160
Acrolein	500	479		ug/L		96	38 - 160
Acrylonitrile	500	431		ug/L		86	64 - 142
Benzene	50.0	42.5		ug/L		85	70 - 130
Bromobenzene	50.0	43.5		ug/L		87	70 - 132
Bromochloromethane	50.0	41.9		ug/L		84	70 - 130
Bromodichloromethane	50.0	44.5		ug/L		89	67 - 133
Bromoform	50.0	44.7		ug/L		89	57 - 140
Bromomethane	50.0	25.2		ug/L		50	10 - 160
2-Butanone (MEK)	200	203		ug/L		101	61 - 145
Carbon disulfide	50.0	30.8		ug/L		62	61 - 137
Carbon tetrachloride	50.0	44.5		ug/L		89	61 - 137
Chlorobenzene	50.0	42.8		ug/L		86	70 - 130
Chloroethane	50.0	35.7		ug/L		71	55 - 141
2-Chloroethyl vinyl ether	50.0	47.9		ug/L		96	10 - 160

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

Lab Sample ID: LCS 400-639862/1002
Matrix: Water
Analysis Batch: 639862

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	44.2		ug/L		88	69 - 130
1-Chlorohexane	50.0	43.9		ug/L		88	69 - 130
Chloromethane	50.0	32.8		ug/L		66	58 - 137
cis-1,2-Dichloroethene	50.0	45.5		ug/L		91	68 - 130
cis-1,3-Dichloropropene	50.0	41.0		ug/L		82	69 - 132
Dibromochloromethane	50.0	44.2		ug/L		88	67 - 135
1,2-Dichlorobenzene	50.0	41.8		ug/L		84	67 - 130
1,3-Dichlorobenzene	50.0	42.3		ug/L		85	70 - 130
1,4-Dichlorobenzene	50.0	41.8		ug/L		84	70 - 130
Dichlorodifluoromethane	50.0	41.3		ug/L		83	41 - 146
1,1-Dichloroethane	50.0	44.0		ug/L		88	70 - 130
1,2-Dichloroethane	50.0	46.6		ug/L		93	69 - 130
1,1-Dichloroethene	50.0	32.7		ug/L		65	63 - 134
1,2-Dichloropropane	50.0	44.6		ug/L		89	70 - 130
1,3-Dichloropropane	50.0	44.3		ug/L		89	70 - 130
2,2-Dichloropropane	50.0	45.2		ug/L		90	52 - 135
1,1-Dichloropropene	50.0	43.3		ug/L		87	70 - 130
Ethylbenzene	50.0	42.9		ug/L		86	70 - 130
Ethyl methacrylate	50.0	45.1		ug/L		90	68 - 130
Hexachlorobutadiene	50.0	44.3		ug/L		89	53 - 140
2-Hexanone	200	199		ug/L		99	65 - 137
Isopropy benzene	50.0	42.6		ug/L		85	70 - 130
Methylene bromide	50.0	45.1		ug/L		90	70 - 130
Methylene Chloride	50.0	39.6		ug/L		79	66 - 135
4-Methyl-2-pentanone (MIBK)	200	172		ug/L		86	69 - 138
Methyl tert-butyl ether	50.0	44.0		ug/L		88	66 - 130
m-Xylene & p-Xylene	50.0	42.4		ug/L		85	70 - 130
Naphthalene	50.0	43.2		ug/L		86	47 - 149
n-Butylbenzene	50.0	40.9		ug/L		82	67 - 130
N-Propylbenzene	50.0	42.8		ug/L		86	70 - 130
o-Chlorotoluene	50.0	42.0		ug/L		84	70 - 130
o-Xylene	50.0	41.2		ug/L		82	70 - 130
p-Chlorotoluene	50.0	43.2		ug/L		86	70 - 130
p-Isopropyltoluene	50.0	41.7		ug/L		83	65 - 130
sec-Butylbenzene	50.0	42.7		ug/L		85	66 - 130
Styrene	50.0	41.2		ug/L		82	70 - 130
tert-Butylbenzene	50.0	43.0		ug/L		86	64 - 139
1,1,1,2-Tetrachloroethane	50.0	44.5		ug/L		89	67 - 131
1,1,2,2-Tetrachloroethane	50.0	43.7		ug/L		87	70 - 131
Tetrachloroethene	50.0	43.7		ug/L		87	65 - 130
Toluene	50.0	42.2		ug/L		84	70 - 130
trans-1,2-Dichloroethene	50.0	42.7		ug/L		85	70 - 130
trans-1,3-Dichloropropene	50.0	45.7		ug/L		91	63 - 130
1,2,3-Trichlorobenzene	50.0	41.7		ug/L		83	60 - 138
1,2,4-Trichlorobenzene	50.0	42.4		ug/L		85	60 - 140
1,1,1-Trichloroethane	50.0	45.5		ug/L		91	68 - 130
1,1,2-Trichloroethane	50.0	45.0		ug/L		90	70 - 130
Trichloroethene	50.0	43.3		ug/L		87	70 - 130
Trichlorofluoromethane	50.0	39.4		ug/L		79	65 - 138

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

Lab Sample ID: LCS 400-639862/1002
Matrix: Water
Analysis Batch: 639862

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane			50.0	46.3		ug/L		93	70 - 130		
1,2,4-Trimethy benzene			50.0	41.4		ug/L		83	70 - 130		
1,3,5-Trimethy benzene			50.0	41.8		ug/L		84	69 - 130		
Vinyl acetate			100	99.0		ug/L		99	26 - 160		
Vinyl chloride			50.0	37.4		ug/L		75	59 - 136		
Xylenes, Total			100	83.6		ug/L		84	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*72 - 130*
Dibromofluoromethane	*104*		*75 - 126*
Toluene-d8 (Surr)	*102*		*64 - 132*

Lab Sample ID: 400-242644-5 MS
Matrix: Water
Analysis Batch: 639862

Client Sample ID: MW3-ROX-082823
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Acetone	ND		200	123		ug/L		62	43 - 150		
Acrolein	ND		500	474		ug/L		95	38 - 150		
Acrylonitrile	ND		500	458		ug/L		92	62 - 149		
Benzene	ND		50.0	44.9		ug/L		90	56 - 142		
Bromobenzene	ND		50.0	42.1		ug/L		84	59 - 136		
Bromochloromethane	ND		50.0	44.9		ug/L		90	64 - 140		
Bromodichloromethane	ND		50.0	47.0		ug/L		94	59 - 143		
Bromoform	ND		50.0	46.2		ug/L		92	50 - 140		
Bromomethane	ND		50.0	27.1		ug/L		54	10 - 150		
2-Butanone (MEK)	ND		200	181		ug/L		90	55 - 150		
Carbon disulfide	ND		50.0	32.5		ug/L		65	48 - 150		
Carbon tetrachloride	ND		50.0	46.4		ug/L		93	55 - 145		
Chlorobenzene	ND		50.0	42.4		ug/L		85	64 - 130		
Chloroethane	ND		50.0	39.1		ug/L		78	50 - 150		
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150		
Chloroform	ND		50.0	46.6		ug/L		93	60 - 141		
1-Chlorohexane	ND		50.0	41.3		ug/L		83	56 - 136		
Chloromethane	ND		50.0	30.5		ug/L		61	49 - 148		
cis-1,2-Dichloroethene	ND		50.0	46.5		ug/L		93	59 - 143		
cis-1,3-Dichloropropene	ND		50.0	41.8		ug/L		84	57 - 140		
Dibromochloromethane	ND		50.0	45.7		ug/L		91	56 - 143		
1,2-Dichlorobenzene	ND		50.0	39.7		ug/L		79	52 - 137		
1,3-Dichlorobenzene	ND		50.0	38.6		ug/L		77	54 - 135		
1,4-Dichlorobenzene	ND		50.0	38.3		ug/L		77	53 - 135		
Dichlorodifluoromethane	ND		50.0	36.9		ug/L		74	16 - 150		
1,1-Dichloroethane	ND		50.0	45.8		ug/L		92	61 - 144		
1,2-Dichloroethane	ND		50.0	50.2		ug/L		100	60 - 141		
1,1-Dichloroethene	ND		50.0	35.7		ug/L		71	54 - 147		
1,2-Dichloropropane	ND		50.0	46.6		ug/L		93	66 - 137		
1,3-Dichloropropane	ND		50.0	46.4		ug/L		93	66 - 133		
2,2-Dichloropropane	ND		50.0	46.1		ug/L		92	42 - 144		

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

Lab Sample ID: 400-242644-5 MS
Matrix: Water
Analysis Batch: 639862

Client Sample ID: MW3-ROX-082823
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	44.3		ug/L		89	65 - 136
Ethylbenzene	ND		50.0	41.2		ug/L		82	58 - 131
Ethyl methacrylate	ND		50.0	47.8		ug/L		96	64 - 130
Hexachlorobutadiene	ND		50.0	34.4		ug/L		69	31 - 149
2-Hexanone	ND		200	177		ug/L		89	65 - 140
Isopropy benzene	ND		50.0	40.2		ug/L		80	56 - 133
Methylene bromide	ND		50.0	48.3		ug/L		97	63 - 138
Methylene Chloride	ND		50.0	41.8		ug/L		84	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	179		ug/L		89	63 - 146
Methyl tert-butyl ether	1.5		50.0	47.5		ug/L		92	59 - 137
m-Xylene & p-Xylene	ND		50.0	40.4		ug/L		81	57 - 130
Naphthalene	ND		50.0	42.5		ug/L		85	25 - 150
n-Butylbenzene	ND		50.0	33.0		ug/L		66	41 - 142
N-Propylbenzene	ND		50.0	38.3		ug/L		77	51 - 138
o-Chlorotoluene	ND		50.0	37.7		ug/L		75	53 - 134
o-Xylene	ND		50.0	39.7		ug/L		79	61 - 130
p-Chlorotoluene	ND		50.0	38.8		ug/L		78	54 - 133
p-Isopropyltoluene	ND		50.0	35.5		ug/L		71	48 - 139
sec-Butylbenzene	ND		50.0	37.0		ug/L		74	50 - 138
Styrene	ND		50.0	39.9		ug/L		80	58 - 131
tert-Butylbenzene	ND		50.0	38.6		ug/L		77	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	45.9		ug/L		92	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	45.4		ug/L		91	66 - 135
Tetrachloroethene	ND		50.0	42.2		ug/L		84	52 - 133
Toluene	ND		50.0	42.7		ug/L		85	65 - 130
trans-1,2-Dichloroethene	ND		50.0	44.2		ug/L		88	61 - 143
trans-1,3-Dichloropropene	ND		50.0	46.7		ug/L		93	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	39.4		ug/L		79	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	38.2		ug/L		76	39 - 148
1,1,1-Trichloroethane	ND		50.0	46.8		ug/L		94	57 - 142
1,1,2-Trichloroethane	ND		50.0	46.8		ug/L		94	66 - 131
Trichloroethene	ND		50.0	44.7		ug/L		89	64 - 136
Trichlorofluoromethane	ND		50.0	42.4		ug/L		85	54 - 150
1,2,3-Trichloropropane	ND		50.0	47.9		ug/L		96	65 - 133
1,2,4-Trimethy benzene	ND		50.0	36.9		ug/L		74	50 - 139
1,3,5-Trimethy benzene	ND		50.0	37.6		ug/L		75	52 - 135
Vinyl acetate	ND		100	98.7		ug/L		99	26 - 150
Vinyl chloride	ND		50.0	36.5		ug/L		73	46 - 150
Xylenes, Total	ND		100	80.1		ug/L		80	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*72 - 130*
Dibromofluoromethane	*106*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

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

Lab Sample ID: 400-242644-5 MSD
Matrix: Water
Analysis Batch: 639862

Client Sample ID: MW3-ROX-082823
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	116		ug/L		58	43 - 150	6	30
Acrolein	ND		500	452		ug/L		90	38 - 150	5	31
Acrylonitrile	ND		500	463		ug/L		93	62 - 149	1	30
Benzene	ND		50.0	43.2		ug/L		86	56 - 142	4	30
Bromobenzene	ND		50.0	41.1		ug/L		82	59 - 136	2	30
Bromochloromethane	ND		50.0	43.0		ug/L		86	64 - 140	4	30
Bromodichloromethane	ND		50.0	45.1		ug/L		90	59 - 143	4	30
Bromoform	ND		50.0	44.4		ug/L		89	50 - 140	4	30
Bromomethane	ND		50.0	25.1		ug/L		50	10 - 150	8	50
2-Butanone (MEK)	ND		200	184		ug/L		92	55 - 150	1	30
Carbon disulfide	ND		50.0	31.7		ug/L		63	48 - 150	3	30
Carbon tetrachloride	ND		50.0	44.8		ug/L		90	55 - 145	4	30
Chlorobenzene	ND		50.0	41.2		ug/L		82	64 - 130	3	30
Chloroethane	ND		50.0	36.6		ug/L		73	50 - 150	7	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	45.0		ug/L		90	60 - 141	3	30
1-Chlorohexane	ND		50.0	40.7		ug/L		81	56 - 136	2	30
Chloromethane	ND		50.0	29.1		ug/L		58	49 - 148	5	31
cis-1,2-Dichloroethene	ND		50.0	45.1		ug/L		90	59 - 143	3	30
cis-1,3-Dichloropropene	ND		50.0	40.5		ug/L		81	57 - 140	3	30
Dibromochloromethane	ND		50.0	43.8		ug/L		88	56 - 143	4	30
1,2-Dichlorobenzene	ND		50.0	39.3		ug/L		79	52 - 137	1	30
1,3-Dichlorobenzene	ND		50.0	39.2		ug/L		78	54 - 135	2	30
1,4-Dichlorobenzene	ND		50.0	39.1		ug/L		78	53 - 135	2	30
Dichlorodifluoromethane	ND		50.0	37.7		ug/L		75	16 - 150	2	31
1,1-Dichloroethane	ND		50.0	44.6		ug/L		89	61 - 144	3	30
1,2-Dichloroethane	ND		50.0	48.1		ug/L		96	60 - 141	4	30
1,1-Dichloroethene	ND		50.0	34.1		ug/L		68	54 - 147	5	30
1,2-Dichloropropane	ND		50.0	45.1		ug/L		90	66 - 137	3	30
1,3-Dichloropropane	ND		50.0	44.1		ug/L		88	66 - 133	5	30
2,2-Dichloropropane	ND		50.0	44.7		ug/L		89	42 - 144	3	31
1,1-Dichloropropene	ND		50.0	42.6		ug/L		85	65 - 136	4	30
Ethylbenzene	ND		50.0	40.6		ug/L		81	58 - 131	1	30
Ethyl methacrylate	ND		50.0	47.0		ug/L		94	64 - 130	2	30
Hexachlorobutadiene	ND		50.0	40.7		ug/L		81	31 - 149	17	36
2-Hexanone	ND		200	180		ug/L		90	65 - 140	1	30
Isopropy benzene	ND		50.0	40.1		ug/L		80	56 - 133	0	30
Methylene bromide	ND		50.0	47.0		ug/L		94	63 - 138	3	30
Methylene Chloride	ND		50.0	40.4		ug/L		81	60 - 146	3	32
4-Methyl-2-pentanone (MIBK)	ND		200	181		ug/L		91	63 - 146	1	30
Methyl tert-butyl ether	1.5		50.0	46.9		ug/L		91	59 - 137	1	30
m-Xylene & p-Xylene	ND		50.0	40.1		ug/L		80	57 - 130	1	30
Naphthalene	ND		50.0	43.9		ug/L		88	25 - 150	3	30
n-Butylbenzene	ND		50.0	35.9		ug/L		72	41 - 142	8	31
N-Propylbenzene	ND		50.0	38.7		ug/L		77	51 - 138	1	30
o-Chlorotoluene	ND		50.0	37.4		ug/L		75	53 - 134	1	30
o-Xylene	ND		50.0	39.1		ug/L		78	61 - 130	2	30
p-Chlorotoluene	ND		50.0	39.2		ug/L		78	54 - 133	1	30

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

Lab Sample ID: 400-242644-5 MSD
Matrix: Water
Analysis Batch: 639862

Client Sample ID: MW3-ROX-082823
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	38.1		ug/L		76	48 - 139	7	30
sec-Butylbenzene	ND		50.0	38.9		ug/L		78	50 - 138	5	30
Styrene	ND		50.0	39.1		ug/L		78	58 - 131	2	30
tert-Butylbenzene	ND		50.0	39.3		ug/L		79	54 - 146	2	30
1,1,1,2-Tetrachloroethane	ND		50.0	43.0		ug/L		86	59 - 137	7	30
1,1,2,2-Tetrachloroethane	ND		50.0	44.2		ug/L		88	66 - 135	3	30
Tetrachloroethene	ND		50.0	40.7		ug/L		81	52 - 133	4	30
Toluene	ND		50.0	40.8		ug/L		82	65 - 130	5	30
trans-1,2-Dichloroethene	ND		50.0	43.1		ug/L		86	61 - 143	3	30
trans-1,3-Dichloropropene	ND		50.0	44.6		ug/L		89	53 - 133	5	30
1,2,3-Trichlorobenzene	ND		50.0	42.0		ug/L		84	43 - 145	6	30
1,2,4-Trichlorobenzene	ND		50.0	40.4		ug/L		81	39 - 148	5	30
1,1,1-Trichloroethane	ND		50.0	45.1		ug/L		90	57 - 142	4	30
1,1,2-Trichloroethane	ND		50.0	44.6		ug/L		89	66 - 131	5	30
Trichloroethene	ND		50.0	43.2		ug/L		86	64 - 136	3	30
Trichlorofluoromethane	ND		50.0	38.6		ug/L		77	54 - 150	9	30
1,2,3-Trichloropropane	ND		50.0	46.3		ug/L		93	65 - 133	3	30
1,2,4-Trimethy benzene	ND		50.0	37.5		ug/L		75	50 - 139	1	30
1,3,5-Trimethy benzene	ND		50.0	37.8		ug/L		76	52 - 135	1	30
Vinyl acetate	ND		100	95.2		ug/L		95	26 - 150	4	33
Vinyl chloride	ND		50.0	35.8		ug/L		72	46 - 150	2	30
Xylenes, Total	ND		100	79.2		ug/L		79	59 - 130	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*72 - 130*
Dibromofluoromethane	*105*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

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

Lab Sample ID: MB 400-639567/1-A
Matrix: Water
Analysis Batch: 639936

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 639567

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		09/02/23 09:17	09/06/23 19:44	1
Benzenethiol	ND		10	1.7	ug/L		09/02/23 09:17	09/06/23 19:44	1
Benzoic acid	ND		30	7.3	ug/L		09/02/23 09:17	09/06/23 19:44	1
Benzyl alcohol	ND		10	2.0	ug/L		09/02/23 09:17	09/06/23 19:44	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		09/02/23 09:17	09/06/23 19:44	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		09/02/23 09:17	09/06/23 19:44	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		09/02/23 09:17	09/06/23 19:44	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		09/02/23 09:17	09/06/23 19:44	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		09/02/23 09:17	09/06/23 19:44	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		09/02/23 09:17	09/06/23 19:44	1
4-Chloroaniline	ND		10	3.4	ug/L		09/02/23 09:17	09/06/23 19:44	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		09/02/23 09:17	09/06/23 19:44	1
2-Chloronaphthalene	ND		10	0.14	ug/L		09/02/23 09:17	09/06/23 19:44	1
2-Chlorophenol	ND		10	2.2	ug/L		09/02/23 09:17	09/06/23 19:44	1

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

Lab Sample ID: MB 400-639567/1-A
Matrix: Water
Analysis Batch: 639936

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 639567

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		09/02/23 09:17	09/06/23 19:44	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		09/02/23 09:17	09/06/23 19:44	1
Dibenzofuran	ND		10	0.17	ug/L		09/02/23 09:17	09/06/23 19:44	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		09/02/23 09:17	09/06/23 19:44	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		09/02/23 09:17	09/06/23 19:44	1
Diethyl phthalate	ND		10	0.24	ug/L		09/02/23 09:17	09/06/23 19:44	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		09/02/23 09:17	09/06/23 19:44	1
Dimethyl phthalate	ND		10	0.17	ug/L		09/02/23 09:17	09/06/23 19:44	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		09/02/23 09:17	09/06/23 19:44	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		09/02/23 09:17	09/06/23 19:44	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		09/02/23 09:17	09/06/23 19:44	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		09/02/23 09:17	09/06/23 19:44	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		09/02/23 09:17	09/06/23 19:44	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		09/02/23 09:17	09/06/23 19:44	1
1,4-Dioxane	ND		10	1.0	ug/L		09/02/23 09:17	09/06/23 19:44	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		09/02/23 09:17	09/06/23 19:44	1
Hexachlorobenzene	ND		10	0.17	ug/L		09/02/23 09:17	09/06/23 19:44	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/02/23 09:17	09/06/23 19:44	1
Hexachloroethane	ND		10	4.2	ug/L		09/02/23 09:17	09/06/23 19:44	1
Indene	ND		10	1.0	ug/L		09/02/23 09:17	09/06/23 19:44	1
Isophorone	ND		10	0.14	ug/L		09/02/23 09:17	09/06/23 19:44	1
2-Methylphenol	ND		10	1.8	ug/L		09/02/23 09:17	09/06/23 19:44	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		09/02/23 09:17	09/06/23 19:44	1
2-Nitroaniline	ND		10	2.2	ug/L		09/02/23 09:17	09/06/23 19:44	1
3-Nitroaniline	ND		10	1.8	ug/L		09/02/23 09:17	09/06/23 19:44	1
4-Nitroaniline	ND		10	1.5	ug/L		09/02/23 09:17	09/06/23 19:44	1
Nitrobenzene	ND		10	0.13	ug/L		09/02/23 09:17	09/06/23 19:44	1
2-Nitrophenol	ND		10	5.2	ug/L		09/02/23 09:17	09/06/23 19:44	1
4-Nitrophenol	ND		10	2.1	ug/L		09/02/23 09:17	09/06/23 19:44	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		09/02/23 09:17	09/06/23 19:44	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		09/02/23 09:17	09/06/23 19:44	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		09/02/23 09:17	09/06/23 19:44	1
Pentachlorophenol	ND		20	1.4	ug/L		09/02/23 09:17	09/06/23 19:44	1
Phenol	ND		10	2.6	ug/L		09/02/23 09:17	09/06/23 19:44	1
Pyridine	ND		10	3.2	ug/L		09/02/23 09:17	09/06/23 19:44	1
Quinoline	ND		10	4.5	ug/L		09/02/23 09:17	09/06/23 19:44	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		09/02/23 09:17	09/06/23 19:44	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		09/02/23 09:17	09/06/23 19:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*92*		*46 - 124*	*09/02/23 09:17*	*09/06/23 19:44*	*1*
2-Fluorophenol	*38*		*13 - 113*	*09/02/23 09:17*	*09/06/23 19:44*	*1*
Nitrobenzene-d5	*81*		*36 - 126*	*09/02/23 09:17*	*09/06/23 19:44*	*1*
Phenol-d5	*63*		*17 - 127*	*09/02/23 09:17*	*09/06/23 19:44*	*1*
Terphenyl-d14	*94*		*44 - 149*	*09/02/23 09:17*	*09/06/23 19:44*	*1*
2,4,6-Tribromophenol	*76*		*26 - 150*	*09/02/23 09:17*	*09/06/23 19:44*	*1*

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

Lab Sample ID: MB 400-639567/1-A
Matrix: Water
Analysis Batch: 640035

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 639567

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/02/23 09:17	09/07/23 11:22	1

Lab Sample ID: LCS 400-639567/2-A
Matrix: Water
Analysis Batch: 639936

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 639567

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	75.9		ug/L		63	21 - 120
Benzoic acid	522	272		ug/L		52	10 - 144
Benzyl alcohol	120	82.9		ug/L		69	28 - 120
Bis(2-chloroethoxy)methane	120	82.6		ug/L		69	47 - 120
Bis(2-chloroethyl)ether	120	82.6		ug/L		69	44 - 120
bis (2-chloroisopropyl) ether	120	71.9		ug/L		60	33 - 121
Bis(2-ethylhexyl) phthalate	120	93.4		ug/L		78	52 - 147
4-Bromophenyl phenyl ether	120	87.0		ug/L		72	54 - 122
Butyl benzyl phthalate	120	93.8		ug/L		78	54 - 133
4-Chloroaniline	120	75.4		ug/L		63	26 - 120
4-Chloro-3-methylphenol	120	91.3		ug/L		76	48 - 131
2-Chloronaphthalene	120	85.1		ug/L		71	52 - 121
2-Chlorophenol	120	70.9		ug/L		59	40 - 120
4-Chlorophenyl phenyl ether	120	87.8		ug/L		73	56 - 125
Dibenz[a,h]acridine	120	116		ug/L		97	31 - 150
Dibenzofuran	120	86.5		ug/L		72	56 - 122
3,3'-Dichlorobenzidine	160	104		ug/L		65	36 - 132
2,4-Dichlorophenol	120	80.8		ug/L		67	49 - 120
Diethyl phthalate	120	92.0		ug/L		77	50 - 137
2,4-Dimethylphenol	120	90.4		ug/L		75	48 - 120
Dimethyl phthalate	120	88.3		ug/L		74	57 - 124
Di-n-butyl phthalate	120	93.7		ug/L		78	58 - 126
4,6-Dinitro-ortho-cresol	240	179		ug/L		75	23 - 148
2,4-Dinitrophenol	240	149		ug/L		62	10 - 150
2,4-Dinitrotoluene	120	94.5		ug/L		79	54 - 142
2,6-Dinitrotoluene	120	89.4		ug/L		74	55 - 130
Di-n-octyl phthalate	120	96.7		ug/L		81	57 - 138
1,4-Dioxane	120	67.7		ug/L		56	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	82.7		ug/L		69	45 - 124
Hexachlorobenzene	120	87.4		ug/L		73	52 - 129
Hexachlorocyclopentadiene	120	54.3		ug/L		45	10 - 134
Hexachloroethane	120	78.8		ug/L		66	20 - 120
Indene	120	91.8		ug/L		77	49 - 120
Isophorone	120	82.9		ug/L		69	48 - 120
2-Methylphenol	120	80.2		ug/L		67	46 - 124
3 & 4 Methylphenol	120	77.5		ug/L		65	45 - 120
2-Nitroaniline	120	81.1		ug/L		68	51 - 145
3-Nitroaniline	120	73.5		ug/L		61	37 - 127
4-Nitroaniline	120	83.8		ug/L		70	36 - 137
Nitrobenzene	120	82.1		ug/L		68	45 - 120
2-Nitrophenol	120	81.4		ug/L		68	40 - 124

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

Lab Sample ID: LCS 400-639567/2-A
Matrix: Water
Analysis Batch: 639936

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 639567

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Nitrophenol	240	153		ug/L		64	23 - 146
N-Nitrosodimethylamine	120	76.9		ug/L		64	29 - 137
N-Nitrosodi-n-propylamine	120	84.1		ug/L		70	45 - 120
N-Nitrosodiphenylamine	119	86.5		ug/L		73	54 - 120
Pentachlorophenol	240	183		ug/L		76	31 - 130
Phenol	120	72.5		ug/L		60	11 - 120
Pyridine	240	125		ug/L		52	16 - 120
Quinoline	120	102		ug/L		85	49 - 130
2,4,5-Trichlorophenol	120	85.0		ug/L		71	51 - 136
2,4,6-Trichlorophenol	120	84.6		ug/L		71	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*77*		*46 - 124*
2-Fluorophenol	*53*		*13 - 113*
Nitrobenzene-d5	*79*		*36 - 126*
Phenol-d5	*65*		*17 - 127*
Terphenyl-d14	*78*		*44 - 149*
2,4,6-Tribromophenol	*80*		*26 - 150*

Lab Sample ID: LCSD 400-639567/14-A
Matrix: Water
Analysis Batch: 639936

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 639567

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol	120	20.1	*1	ug/L		17	10 - 120	70	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*46 - 124*
2-Fluorophenol	*65*		*13 - 113*
Nitrobenzene-d5	*76*		*36 - 126*
Phenol-d5	*74*		*17 - 127*
Terphenyl-d14	*93*		*44 - 149*
2,4,6-Tribromophenol	*68*		*26 - 150*

Lab Sample ID: 400-242644-5 MS
Matrix: Water
Analysis Batch: 639936

Client Sample ID: MW3-ROX-082823
Prep Type: Total/NA
Prep Batch: 639567

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	ND		119	88.4		ug/L		74	10 - 120
Benzoic acid	ND		259	220		ug/L		85	10 - 149
Benzyl alcohol	ND		119	92.4		ug/L		77	33 - 120
Bis(2-chloroethoxy)methane	ND		119	90.7		ug/L		76	26 - 120
Bis(2-chloroethyl)ether	ND		119	92.7		ug/L		78	42 - 120
bis (2-chloroisopropyl) ether	ND		119	75.7		ug/L		63	28 - 120
Bis(2-ethylhexyl) phthalate	ND		119	97.5		ug/L		82	39 - 120
4-Bromophenyl phenyl ether	ND		119	92.3		ug/L		77	40 - 120
Butyl benzyl phthalate	ND		119	99.9		ug/L		84	45 - 120

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

Lab Sample ID: 400-242644-5 MS
Matrix: Water
Analysis Batch: 639936

Client Sample ID: MW3-ROX-082823
Prep Type: Total/NA
Prep Batch: 639567

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
4-Chloroaniline	ND		119	80.3		ug/L		67	10 - 120
4-Chloro-3-methylphenol	ND		119	99.2		ug/L		83	34 - 120
2-Chloronaphthalene	ND		119	94.6		ug/L		79	39 - 120
2-Chlorophenol	ND		119	79.8		ug/L		67	25 - 120
4-Chlorophenyl phenyl ether	ND		119	94.5		ug/L		79	44 - 120
Dibenz[a,h]acridine	ND		119	114		ug/L		96	50 - 150
Dibenzofuran	ND		119	94.8		ug/L		79	25 - 130
3,3'-Dichlorobenzidine	ND		159	86.7		ug/L		54	10 - 120
2,4-Dichlorophenol	ND		119	92.3		ug/L		77	31 - 120
Diethyl phthalate	ND		119	98.6		ug/L		83	46 - 120
2,4-Dimethylphenol	ND		119	101		ug/L		85	21 - 120
Dimethyl phthalate	ND		119	95.6		ug/L		80	38 - 120
Di-n-butyl phthalate	ND		119	97.7		ug/L		82	49 - 120
4,6-Dinitro-ortho-cresol	ND		239	218		ug/L		91	25 - 120
2,4-Dinitrophenol	ND		239	206		ug/L		86	15 - 140
2,4-Dinitrotoluene	ND		119	102		ug/L		86	53 - 120
2,6-Dinitrotoluene	ND		119	98.1		ug/L		82	43 - 120
Di-n-octyl phthalate	ND		119	98.3		ug/L		82	35 - 121
1,4-Dioxane	ND		119	66.6		ug/L		56	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		119	90.7		ug/L		76	50 - 150
Hexachlorobenzene	ND		119	93.9		ug/L		79	38 - 122
Hexachlorocyclopentadiene	ND		119	62.2		ug/L		52	10 - 120
Hexachloroethane	ND		119	83.3		ug/L		70	10 - 150
Indene	ND		59.7	51.2		ug/L		86	50 - 150
Isophorone	ND		119	90.2		ug/L		76	42 - 120
2-Methylphenol	ND		119	90.0		ug/L		75	28 - 120
3 & 4 Methylphenol	ND		119	87.7		ug/L		74	31 - 120
2-Nitroaniline	ND		119	89.1		ug/L		75	45 - 120
3-Nitroaniline	ND		119	77.8		ug/L		65	10 - 130
4-Nitroaniline	ND		119	90.4		ug/L		76	10 - 132
Nitrobenzene	ND		119	90.2		ug/L		76	39 - 120
2-Nitrophenol	ND		119	92.9		ug/L		78	33 - 120
4-Nitrophenol	ND		239	193		ug/L		81	10 - 120
N-Nitrosodimethylamine	ND		119	82.8		ug/L		69	10 - 139
N-Nitrosodi-n-propylamine	ND		119	92.4		ug/L		77	37 - 124
N-Nitrosodiphenylamine	ND		118	94.3		ug/L		80	10 - 150
Pentachlorophenol	ND		239	221		ug/L		92	29 - 130
Phenol	ND		119	81.9		ug/L		69	10 - 150
Pyridine	ND		239	139		ug/L		58	10 - 120
Quinoline	ND		119	108		ug/L		91	51 - 120
2,4,5-Trichlorophenol	ND		119	96.5		ug/L		81	34 - 120
2,4,6-Trichlorophenol	ND		119	95.8		ug/L		80	33 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*86*		*46 - 124*
2-Fluorophenol	*55*		*13 - 113*
Nitrobenzene-d5	*86*		*36 - 126*

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

Lab Sample ID: 400-242644-5 MS
Matrix: Water
Analysis Batch: 639936

Client Sample ID: MW3-ROX-082823
Prep Type: Total/NA
Prep Batch: 639567

Surrogate	MS %Recovery	MS Qualifier	Limits
Phenol-d5	*73*		*17 - 127*
Terphenyl-d14	*80*		*44 - 149*
2,4,6-Tribromophenol	*87*		*26 - 150*

Lab Sample ID: 400-242644-5 MSD
Matrix: Water
Analysis Batch: 639936

Client Sample ID: MW3-ROX-082823
Prep Type: Total/NA
Prep Batch: 639567

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	ND		118	82.3		ug/L		69	10 - 120	7	63
Benzoic acid	ND		257	211		ug/L		82	10 - 149	4	49
Benzyl alcohol	ND		118	87.1		ug/L		74	33 - 120	6	37
Bis(2-chloroethoxy)methane	ND		118	85.1		ug/L		72	26 - 120	6	70
Bis(2-chloroethyl)ether	ND		118	87.4		ug/L		74	42 - 120	6	42
bis (2-chloroisopropyl) ether	ND		118	71.5		ug/L		60	28 - 120	6	41
Bis(2-ethylhexyl) phthalate	ND		118	95.8		ug/L		81	39 - 120	2	35
4-Bromophenyl phenyl ether	ND		118	89.2		ug/L		75	40 - 120	3	30
Butyl benzyl phthalate	ND		118	97.6		ug/L		82	45 - 120	2	32
4-Chloroaniline	ND		118	75.6		ug/L		64	10 - 120	6	94
4-Chloro-3-methylphenol	ND		118	95.0		ug/L		80	34 - 120	4	40
2-Chloronaphthalene	ND		118	88.0		ug/L		74	39 - 120	7	29
2-Chlorophenol	ND		118	79.3		ug/L		67	25 - 120	1	42
4-Chlorophenyl phenyl ether	ND		118	91.6		ug/L		77	44 - 120	3	27
Dibenz[a,h]acridine	ND		118	114		ug/L		96	50 - 150	0	40
Dibenzofuran	ND		118	90.3		ug/L		76	25 - 130	5	29
3,3'-Dichlorobenzidine	ND		158	79.9		ug/L		51	10 - 120	8	58
2,4-Dichlorophenol	ND		118	89.5		ug/L		76	31 - 120	3	43
Diethyl phthalate	ND		118	95.3		ug/L		80	46 - 120	3	40
2,4-Dimethylphenol	ND		118	95.4		ug/L		81	21 - 120	5	47
Dimethyl phthalate	ND		118	91.5		ug/L		77	38 - 120	4	36
Di-n-butyl phthalate	ND		118	94.6		ug/L		80	49 - 120	3	32
4,6-Dinitro-ortho-cresol	ND		237	210		ug/L		89	25 - 120	4	42
2,4-Dinitrophenol	ND		237	201		ug/L		85	15 - 140	2	36
2,4-Dinitrotoluene	ND		118	97.3		ug/L		82	53 - 120	5	28
2,6-Dinitrotoluene	ND		118	94.1		ug/L		79	43 - 120	4	28
Di-n-octyl phthalate	ND		118	96.0		ug/L		81	35 - 121	2	35
1,4-Dioxane	ND		118	62.5		ug/L		53	50 - 150	6	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		118	85.7		ug/L		72	50 - 150	6	40
Hexachlorobenzene	ND		118	91.0		ug/L		77	38 - 122	3	33
Hexachlorocyclopentadiene	ND		118	60.7		ug/L		51	10 - 120	2	50
Hexachloroethane	ND		118	78.2		ug/L		66	10 - 150	6	41
Indene	ND		59.2	46.7		ug/L		79	50 - 150	9	40
Isophorone	ND		118	85.3		ug/L		72	42 - 120	6	33
2-Methylphenol	ND		118	87.3		ug/L		74	28 - 120	3	47
3 & 4 Methylphenol	ND		118	85.6		ug/L		72	31 - 120	2	47
2-Nitroaniline	ND		118	84.4		ug/L		71	45 - 120	5	33
3-Nitroaniline	ND		118	74.9		ug/L		63	10 - 130	4	39
4-Nitroaniline	ND		118	89.4		ug/L		75	10 - 132	1	50

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

Lab Sample ID: 400-242644-5 MSD
Matrix: Water
Analysis Batch: 639936

Client Sample ID: MW3-ROX-082823
Prep Type: Total/NA
Prep Batch: 639567

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrobenzene	ND		118	85.4		ug/L		72	39 - 120	5	35
2-Nitrophenol	ND		118	91.2		ug/L		77	33 - 120	2	43
4-Nitrophenol	ND		237	191		ug/L		81	10 - 120	1	82
N-Nitrosodimethylamine	ND		118	77.7		ug/L		66	10 - 139	6	62
N-Nitrosodi-n-propylamine	ND		118	86.8		ug/L		73	37 - 124	6	36
N-Nitrosodiphenylamine	ND		118	89.6		ug/L		76	10 - 150	5	34
Pentachlorophenol	ND		237	215		ug/L		91	29 - 130	3	42
Phenol	ND		118	80.0		ug/L		67	10 - 150	2	52
Pyridine	ND		237	135		ug/L		57	10 - 120	3	55
Quinoline	ND		118	99.7		ug/L		84	51 - 120	8	40
2,4,5-Trichlorophenol	ND		118	93.1		ug/L		79	34 - 120	4	42
2,4,6-Trichlorophenol	ND		118	91.7		ug/L		77	33 - 120	4	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*81*		*46 - 124*
2-Fluorophenol	*59*		*13 - 113*
Nitrobenzene-d5	*81*		*36 - 126*
Phenol-d5	*73*		*17 - 127*
Terphenyl-d14	*81*		*44 - 149*
2,4,6-Tribromophenol	*86*		*26 - 150*

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

Lab Sample ID: MB 400-639567/1-A
Matrix: Water
Analysis Batch: 639844

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 639567

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		09/02/23 09:17	09/06/23 16:04	1
Acenaphthylene	ND		0.20	0.044	ug/L		09/02/23 09:17	09/06/23 16:04	1
Anthracene	ND		0.20	0.047	ug/L		09/02/23 09:17	09/06/23 16:04	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		09/02/23 09:17	09/06/23 16:04	1
Benzo[a]pyrene	0.222		0.20	0.064	ug/L		09/02/23 09:17	09/06/23 16:04	1
Benzo[b]fluoranthene	0.138	J	0.20	0.037	ug/L		09/02/23 09:17	09/06/23 16:04	1
Benzo[g,h,i]perylene	0.0856	J	0.20	0.027	ug/L		09/02/23 09:17	09/06/23 16:04	1
Benzo[k]fluoranthene	0.187	J	0.20	0.062	ug/L		09/02/23 09:17	09/06/23 16:04	1
Chrysene	ND		0.20	0.033	ug/L		09/02/23 09:17	09/06/23 16:04	1
Dibenz(a,h)anthracene	0.158	J	0.20	0.048	ug/L		09/02/23 09:17	09/06/23 16:04	1
Fluoranthene	0.0528	J	0.20	0.034	ug/L		09/02/23 09:17	09/06/23 16:04	1
Fluorene	ND		0.20	0.089	ug/L		09/02/23 09:17	09/06/23 16:04	1
Indeno[1,2,3-cd]pyrene	0.190	J	0.20	0.034	ug/L		09/02/23 09:17	09/06/23 16:04	1
Phenanthrene	ND		0.20	0.090	ug/L		09/02/23 09:17	09/06/23 16:04	1
Pyrene	ND		0.20	0.039	ug/L		09/02/23 09:17	09/06/23 16:04	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		09/02/23 09:17	09/06/23 16:04	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		09/02/23 09:17	09/06/23 16:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*18 - 147*	*09/02/23 09:17*	*09/06/23 16:04*	*1*

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

Lab Sample ID: MB 400-639567/1-A
Matrix: Water
Analysis Batch: 639844

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 639567

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	73		15 - 128	09/02/23 09:17	09/06/23 16:04	1
Nitrobenzene-d5	70		10 - 144	09/02/23 09:17	09/06/23 16:04	1

Lab Sample ID: LCS 400-639567/11-A
Matrix: Water
Analysis Batch: 639844

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 639567

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	2.00	1.75		ug/L		87	40 - 140
Acenaphthylene	2.00	1.76		ug/L		88	40 - 140
Anthracene	2.00	1.86		ug/L		93	40 - 140
Benzo[a]anthracene	2.00	1.67		ug/L		84	40 - 140
Benzo[a]pyrene	2.00	1.89		ug/L		94	40 - 140
Benzo[b]fluoranthene	2.00	1.74		ug/L		87	40 - 140
Benzo[g,h,i]perylene	2.00	1.96		ug/L		98	40 - 140
Benzo[k]fluoranthene	2.00	1.79		ug/L		89	40 - 140
Chrysene	2.00	1.75		ug/L		87	40 - 140
Dibenz(a,h)anthracene	2.00	2.11		ug/L		105	40 - 140
Fluoranthene	2.00	2.05		ug/L		102	40 - 140
Fluorene	2.00	1.92		ug/L		96	40 - 140
Indeno[1,2,3-cd]pyrene	2.00	2.04		ug/L		102	40 - 140
Phenanthrene	2.00	1.79		ug/L		89	40 - 140
Pyrene	2.00	1.43		ug/L		72	40 - 140
1-Methylnaphthalene	2.00	1.75		ug/L		87	40 - 140
2-Methylnaphthalene	2.00	1.71		ug/L		85	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	83		18 - 147
2-Fluorobiphenyl	80		15 - 128
Nitrobenzene-d5	77		10 - 144

Lab Sample ID: LCSD 400-639567/12-A
Matrix: Water
Analysis Batch: 639844

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 639567

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	2.00	1.62		ug/L		81	40 - 140	7	40
Acenaphthylene	2.00	1.70		ug/L		85	40 - 140	4	40
Anthracene	2.00	1.71		ug/L		85	40 - 140	9	40
Benzo[a]anthracene	2.00	1.69		ug/L		84	40 - 140	1	40
Benzo[a]pyrene	2.00	1.70		ug/L		85	40 - 140	10	40
Benzo[b]fluoranthene	2.00	1.56		ug/L		78	40 - 140	11	40
Benzo[g,h,i]perylene	2.00	1.81		ug/L		90	40 - 140	8	40
Benzo[k]fluoranthene	2.00	1.79		ug/L		89	40 - 140	0	40
Chrysene	2.00	1.74		ug/L		87	40 - 140	0	40
Dibenz(a,h)anthracene	2.00	1.92		ug/L		96	40 - 140	9	40
Fluoranthene	2.00	2.01		ug/L		101	40 - 140	2	40
Fluorene	2.00	1.80		ug/L		90	40 - 140	6	40

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

Lab Sample ID: LCSD 400-639567/12-A
Matrix: Water
Analysis Batch: 639844

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 639567

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Indeno[1,2,3-cd]pyrene			2.00	1.89		ug/L		94	40 - 140	8	40
Phenanthrene			2.00	1.71		ug/L		86	40 - 140	4	40
Pyrene			2.00	1.46		ug/L		73	40 - 140	2	40
1-Methylnaphthalene			2.00	1.64		ug/L		82	40 - 140	6	40
2-Methylnaphthalene			2.00	1.61		ug/L		81	40 - 140	6	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*82*		*18 - 147*
2-Fluorobiphenyl	*75*		*15 - 128*
Nitrobenzene-d5	*72*		*10 - 144*

Lab Sample ID: 400-242644-5 MS
Matrix: Water
Analysis Batch: 639844

Client Sample ID: MW3-ROX-082823
Prep Type: Total/NA
Prep Batch: 639567

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		119	112		ug/L		94	50 - 150
Acenaphthylene	ND		119	116		ug/L		97	50 - 150
Anthracene	ND		119	112		ug/L		94	50 - 150
Benzo[a]anthracene	ND		119	110		ug/L		92	50 - 150
Benzo[a]pyrene	ND		119	113		ug/L		95	50 - 150
Benzo[b]fluoranthene	ND		119	112		ug/L		94	50 - 150
Benzo[g,h,i]perylene	ND		119	107		ug/L		89	50 - 150
Benzo[k]fluoranthene	ND		119	106		ug/L		88	50 - 150
Chrysene	ND		119	103		ug/L		86	50 - 150
Dibenz(a,h)anthracene	0.089	J B	119	118		ug/L		99	50 - 150
Fluoranthene	0.046	J B	119	125		ug/L		104	50 - 150
Fluorene	ND		119	124		ug/L		104	50 - 150
Indeno[1,2,3-cd]pyrene	0.10	J B	119	114		ug/L		95	50 - 150
Phenanthrene	ND		119	109		ug/L		92	50 - 150
Pyrene	ND		119	92.9		ug/L		78	50 - 150
1-Methylnaphthalene	ND		119	99.6		ug/L		83	50 - 150
2-Methylnaphthalene	ND		119	99.8		ug/L		84	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*73*		*18 - 147*
2-Fluorobiphenyl	*85*		*15 - 128*
Nitrobenzene-d5	*86*		*10 - 144*

Lab Sample ID: 400-242644-5 MSD
Matrix: Water
Analysis Batch: 639844

Client Sample ID: MW3-ROX-082823
Prep Type: Total/NA
Prep Batch: 639567

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		118	104		ug/L		87	50 - 150	8	40
Acenaphthylene	ND		118	107		ug/L		91	50 - 150	7	40
Anthracene	ND		118	105		ug/L		88	50 - 150	7	40
Benzo[a]anthracene	ND		118	106		ug/L		90	50 - 150	3	40

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

Lab Sample ID: 400-242644-5 MSD
Matrix: Water
Analysis Batch: 639844

Client Sample ID: MW3-ROX-082823
Prep Type: Total/NA
Prep Batch: 639567

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[a]pyrene	ND		118	102		ug/L		86	50 - 150	10	40
Benzo[b]fluoranthene	ND		118	104		ug/L		88	50 - 150	8	40
Benzo[g,h,i]perylene	ND		118	100		ug/L		85	50 - 150	6	40
Benzo[k]fluoranthene	ND		118	93.8		ug/L		79	50 - 150	12	40
Chrysene	ND		118	102		ug/L		86	50 - 150	1	40
Dibenz(a,h)anthracene	0.089	J B	118	112		ug/L		95	50 - 150	5	40
Fluoranthene	0.046	J B	118	114		ug/L		96	50 - 150	9	40
Fluorene	ND		118	115		ug/L		97	50 - 150	8	40
Indeno[1,2,3-cd]pyrene	0.10	J B	118	108		ug/L		91	50 - 150	5	40
Phenanthrene	ND		118	101		ug/L		85	50 - 150	8	40
Pyrene	ND		118	90.9		ug/L		77	50 - 150	2	40
1-Methylnaphthalene	ND		118	94.6		ug/L		80	50 - 150	5	40
2-Methylnaphthalene	ND		118	93.9		ug/L		79	50 - 150	6	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*73*		*18 - 147*
2-Fluorobiphenyl	*80*		*15 - 128*
Nitrobenzene-d5	*82*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-639353/1-A
Matrix: Water
Analysis Batch: 639362

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 639353

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		08/31/23 14:48	08/31/23 17:10	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		08/31/23 14:48	08/31/23 17:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*150*	*S1+*	*51 - 149*	*08/31/23 14:48*	*08/31/23 17:10*	*1*

Lab Sample ID: LCS 400-639353/2-A
Matrix: Water
Analysis Batch: 639362

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 639353

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-D bromo-3-Chloropropane			0.101	0.223	*+	ug/L		222	60 - 140		
1,2-D bromoethane			0.101	0.200	*+	ug/L		198	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*149*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-639353/3-A
Matrix: Water
Analysis Batch: 639362

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 639353

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane			0.101	0.230	*+	ug/L		229	60 - 140	3	30
1,2-D bromoethane			0.101	0.216	*+	ug/L		215	60 - 140	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*164*	*S1+*	*51 - 149*

Lab Sample ID: 400-242644-5 MS
Matrix: Water
Analysis Batch: 639362

Client Sample ID: MW3-ROX-082823
Prep Type: Total/NA
Prep Batch: 639353

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-D bromo-3-Chloropropane	ND	F1 *+	0.104	0.338	F1	ug/L		324	10 - 150		
1,2-D bromoethane	ND	F1 *+	0.105	0.208	F1	ug/L		199	39 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*146*		*51 - 149*

Lab Sample ID: 400-242644-5 MSD
Matrix: Water
Analysis Batch: 639362

Client Sample ID: MW3-ROX-082823
Prep Type: Total/NA
Prep Batch: 639353

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane	ND	F1 *+	0.105	0.363	F1	ug/L		346	10 - 150	7	20
1,2-D bromoethane	ND	F1 *+	0.105	0.233	F1	ug/L		222	39 - 150	11	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*156*	*S1+*	*51 - 149*

Shell Oil Products US Chain Of Custody Record

400-242644 COC

AECOM

(LOCATION)

☐ EST (_____)
☐ 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: Melissa Remiger

PO #: 60697537 – 3.3.2

PlaNet Site or Pr.: 25278

GSAP Project ID: USPC/00114/R/02

DATE: 8/28/2023

PAGE: 1 of 1

CK IF NO INCIDENT # APPLIES

AECOM Project / Task Number: Roxana Monthly GW 60697537 – 3.3.2

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Other ID:

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

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

SAMPLER NAME(S) (Print): J. Mayer 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; loredana.filimon@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

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 8270LL
	TB-ROX-082823-8260	8/28/2023	0000	Water	2					2	X			
	TB-ROX-082823-8011	8/28/2023	0000	Water	2					2		X		
	MW24-ROX-082823-EB	8/28/2023	0850	Water	6			2		8	X	X	X	X
	MW24-ROX-082823	8/28/2023	1025	Water	6			2		8	X	X	X	X
	MW3-ROX-082823	8/28/2023	1140	Water	6			2		8	X	X	X	X
	MW3-ROX-082823	8/28/2023	1140	Water	6			2		8	X	X	X	X
	MW3-ROX-082823	8/28/2023	1140	Water	6			2		8	X	X	X	X
	MW16-ROX-082823	8/28/2023	1310	Water	6			2		8	X	X	X	X

Relinquished by: (Signature) JOE MAYER — Received by: (Signature) FEDEX: 6339 6594 5802 — Date: 8/28/2023 — Time: 1600

Relinquished by: (Signature) — Received by: (Signature) — Date: 8/29/23 — Time: 940

Relinquished by: (Signature) — Received by: (Signature) — Date: — Time:

Version 13Oct22

CUSTODY SEALS: 1599764, 1599765

1.2°C IR10

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9/7/2023

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc. Job Number: 400-242644-1

Login Number: 242644 **List Source: Eurofins Pensacola**
List Number: 1
Creator: Klingensmith, Leah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.2°C 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.	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: 400-242644-1
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	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	12-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-23
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 Monthly Groundwater – August/September 2023 Data Review

Laboratory SDG: 400-242724-1

Data Reviewer: Andrei Niculau

Peer Reviewer: Cheyana Cokley

Date Reviewed: 10/3/2023

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

Sample Identification	Sample Identification
TB-ROX-082923-8260-A	TB-ROX-082923-8011-B
TB-ROX-082923-8011-A	MW1-ROX-082923-EB
MW26-ROX-082923	MW1-ROX-082923
MW6C-ROX-082923	ROST4PZG-ROX-082923
MW6A-ROX-082923	P56-ROX-082923
MW6D-ROX-082923	P93A-ROX-082923
TB-ROX-082923-8260-B	--

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 MW6A-ROX-082923 were re-extracted 8 days outside extraction time criteria. SVOC and VOCs by 8011 LCS/LCSD recoveries, and/or SVOC LCS/LCSD RPDs, were outside evaluation criteria. Surrogate recoveries for VOCs by 8011 4-bromofluorobenzene in several investigative and quality control samples were outside criteria. Several VOCs and VOCs by 8011 MS/MSD recoveries, and/or MS/MSD RPDs, were outside evaluation criteria in sample MW6C-ROX-082923. The continuing calibration verification (CCV) for multiple analytes were outside evaluation criteria, biased low. The initial calibration verification (ICV) for 4,6-dinitro-ortho-cresol and 3,3'-dichlorobenzidine 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 sample MW6A-ROX-082923 were re-extracted 8 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 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 MW6A-ROX-082923 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
MW6A-ROX-082923 – RERA	PAHs	Dibenz(a,h)anthracene	**UJ**
MW6A-ROX-082923 – RERA	PAHs	Indeno[1,2,3-cd]pyrene	**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 400-639353/2-A/3-A	VOCs by 8011	1,2-Dibromo-3-Chloropropane	**222/229**	9	60-140/30
LCS/LCSD 400-639353/2-A/3-A	VOCs by 8011	1,2-Dibromoethane	**198/215**	8	60-140/30
LCS/LCSD 400-639760/14-A/15-A	SVOCs	Benzenethiol	**1**/64	**192**	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 below evaluation criteria; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW26-ROX-082923	SVOCs	Benzenethiol	**UJ**
MW6C-ROX-082923	SVOCs	Benzenethiol	**UJ**
MW6A-ROX-082923	SVOCs	Benzenethiol	**UJ**
MW6D-ROX-082923	SVOCs	Benzenethiol	**UJ**
MW1-ROX-082923	SVOCs	Benzenethiol	**UJ**
ROST4PZG-ROX-082923	SVOCs	Benzenethiol	**UJ**
P56-ROX-082923	SVOCs	Benzenethiol	**UJ**
P93A-ROX-082923	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW6C-ROX-082923	VOCs by 8011	4-Bromofluorobenzene	**154**	51-149
TB-ROX-082923-8011-B	VOCs by 8011	4-Bromofluorobenzene	**154**	51-149
LCSD 400-639353/3-A	VOCs by 8011	4-Bromofluorobenzene	**164**	51-149
MB 400-639353/1-A	VOCs by 8011	4-Bromofluorobenzene	**150**	51-149

Analytical data reported as non-detect and associated with surrogate recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Equipment blanks and method blanks are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, sample MW6C-ROX-082923 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
MW6C-ROX-082923 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW6C-ROX-082923 MS/MSD	VOCs	Hexachlorobutadiene	100/61	**49**	31-149/30
MW6C-ROX-082923 MS/MSD	VOCs	n-Butylbenzene	90/58	**43**	41-142/30
MW6C-ROX-082923 MS/MSD	VOCs	N-Propylbenzene	90/65	**32**	51-138/30
MW6C-ROX-082923 MS/MSD	VOCs	p-Isopropyltoluene	89/60	**39**	48-139/30
MW6C-ROX-082923 MS/MSD	VOCs	sec-Butylbenzene	90/63	**35**	50-138/30
MW6C-ROX-082923 MS/MSD	VOCs	tert-Butylbenzene	90/66	**31**	54-146/30
MW6C-ROX-082923 MS/MSD	VOCs	1,3,5-Trimethylbenzene	89/65	**31**	52-135/30
MW6C-ROX-082923 MS/MSD	VOCs by 8011	1,2-Dibromo-3-Chloropropane	**325/343**	5	10-150/20
MW6C-ROX-082923 MS/MSD	VOCs by 8011	1,2-Dibromoethane	**216/211**	0	39-150/20

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 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. Analytical data associated with MS/MSD RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW6C-ROX-082923	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 multiple analytes were outside evaluation criteria, biased low. Initial calibration verification (ICV) for 4,6-dinitro-ortho-cresol and 3,3'-dichlorobenzidine were outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW6C-ROX-082923	VOCs	Chloromethane	**UJ**
MW1-ROX-082923	VOCs	Chloromethane	**UJ**
P56-ROX-082923	VOCs	Chloromethane	**UJ**
P93A-ROX-082923	VOCs	Chloromethane	**UJ**
ROST4PZG-ROX-082923	VOCs	Chloromethane	**UJ**
MW6C-ROX-082923	VOCs	1,1-Dichloroethene	**UJ**
MW1-ROX-082923	VOCs	1,1-Dichloroethene	**UJ**
P56-ROX-082923	VOCs	1,1-Dichloroethene	**UJ**
P93A-ROX-082923	VOCs	1,1-Dichloroethene	**UJ**
ROST4PZG-ROX-082923	VOCs	1,1-Dichloroethene	**UJ**
MW26-ROX-082923	VOCs	Bromomethane	**UJ**
MW6A-ROX-082923	VOCs	Bromomethane	**UJ**
MW6D-ROX-082923	VOCs	Bromomethane	**UJ**
MW26-ROX-082923	VOCs	Chloromethane	**UJ**
MW6A-ROX-082923	VOCs	Chloromethane	**UJ**
MW6D-ROX-082923	VOCs	Chloromethane	**UJ**
MW6C-ROX-082923	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW26-ROX-082923	SVOCs	4,6-Dinitro-ortho-cresol	UJ
MW6A-ROX-082923	SVOCs	4,6-Dinitro-ortho-cresol	UJ
MW6D-ROX-082923	SVOCs	4,6-Dinitro-ortho-cresol	UJ
MW1-ROX-082923	SVOCs	4,6-Dinitro-ortho-cresol	UJ
ROST4PZG-ROX-082923	SVOCs	4,6-Dinitro-ortho-cresol	UJ
P56-ROX-082923	SVOCs	4,6-Dinitro-ortho-cresol	UJ
P93A-ROX-082923	SVOCs	4,6-Dinitro-ortho-cresol	UJ
MW6C-ROX-082923	SVOCs	3,3'-Dichlorobenzidine	UJ
MW26-ROX-082923	SVOCs	3,3'-Dichlorobenzidine	UJ
MW6A-ROX-082923	SVOCs	3,3'-Dichlorobenzidine	UJ
MW6D-ROX-082923	SVOCs	3,3'-Dichlorobenzidine	UJ
MW1-ROX-082923	SVOCs	3,3'-Dichlorobenzidine	UJ
ROST4PZG-ROX-082923	SVOCs	3,3'-Dichlorobenzidine	UJ
P56-ROX-082923	SVOCs	3,3'-Dichlorobenzidine	UJ
P93A-ROX-082923	SVOCs	3,3'-Dichlorobenzidine	UJ
MW6C-ROX-082923	SVOCs	Hexachlorocyclopentadiene	UJ
MW26-ROX-082923	SVOCs	Hexachlorocyclopentadiene	UJ
MW6A-ROX-082923	SVOCs	Hexachlorocyclopentadiene	UJ
MW6D-ROX-082923	SVOCs	Hexachlorocyclopentadiene	UJ
MW1-ROX-082923	SVOCs	Hexachlorocyclopentadiene	UJ
ROST4PZG-ROX-082923	SVOCs	Hexachlorocyclopentadiene	UJ
P56-ROX-082923	SVOCs	Hexachlorocyclopentadiene	UJ
P93A-ROX-082923	SVOCs	Hexachlorocyclopentadiene	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 9/22/2023 6:12:40 AM

JOB DESCRIPTION

ROXANA MONTHLY GW

JOB NUMBER

400-242724-1

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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Job ID: 400-242724-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-242724-1

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 8/30/2023 9:30 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 2.1°C

Receipt Exceptions
Unable to find a AECOM: Roxana Monthly GW project, picked the closest one.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-640044 recovered outside acceptance criteria, low biased, for 1,1-Dichloroethene and Chloromethane. 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: MW6C-ROX-082923 (400-242724-4), TB-ROX-082923-8260-B (400-242724-7), MW1-ROX-082923 (400-242724-10), ROST4PZG-ROX-082923 (400-242724-11), P56-ROX-082923 (400-242724-12) and P93A-ROX-082923 (400-242724-13). 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 RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-640044 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-640044 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 400-640044 was outside control limits. Sample matrix interference is suspected.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-640044 recovered above the upper control limit for 2-Chloroethyl vinyl ether. 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 400-640194 recovered outside acceptance criteria, low biased, for Bromomethane and Chloromethane. 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 400-640194 recovered above the upper control limit for 1,2-Dichloroethane, Dibromomethane and Vinyl acetate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Job ID: 400-242724-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

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-082923-8260-A (400-242724-1), MW26-ROX-082923 (400-242724-3), MW6A-ROX-082923 (400-242724-5), MW6D-ROX-082923 (400-242724-6) and MW1-ROX-082923-EB (400-242724-9). The requested target analyte list includes 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium..

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

GC/MS Semi VOA

Method 8270E: The laboratory control sample (LCS) for preparation batch 400-639760 and analytical batch 400-640111 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 400-640111 recovered above the upper control limit for 4-Nitrophenol, 2,4,5-Trichlorophenol, Phenol, 4-Chlorophenyl phenyl ether and 4-Bromophenyl phenyl ether. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-640111 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: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-639760 and analytical batch 400-640111 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-637784 was outside method criteria for the following analyte(s): 3,3'-Dichlorobenzidine and 4,6-Dinitro-ortho-cresol. 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 following sample was re-prepared outside of preparation holding time for verification: MW6A-ROX-082923 (400-242724-5). 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

Method 8011: The continuing calibration verification (CCV) associated with batch 400-639478 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 400-639353/6-A) and (CCV 400-639353/7-A).

Method 8011: Surrogate recovery for the following samples were outside the upper control limit: MW6C-ROX-082923 (400-242724-4) and TB-ROX-082923-8011-B (400-242724-8). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8011: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-639353 and analytical batch 400-639478 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected .The samples associated with this MS/MSD were non-detects for the affected analytes; therefore, the data have been reported.

Method 8011: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-639353 and analytical batch 400-639362 recovered outside control limits for the target analytes and surrogate: 4-Bromofluorobenzene, 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. The target analytes were biased high in the LCS and were not detected in the

Job ID: 400-242724-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

associated samples; therefore, the data have been reported.

Method 8011: The surrogate recovery for the blank associated with preparation batch 400-639353 and analytical batch 400-639362 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.

Sample Summary

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

Job ID: 400-242724-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-242724-1	TB-ROX-082923-8260-A	Water	08/29/23 12:00	08/30/23 09:30
400-242724-2	TB-ROX-082923-8011-A	Water	08/29/23 12:00	08/30/23 09:30
400-242724-3	MW26-ROX-082923	Water	08/29/23 09:20	08/30/23 09:30
400-242724-4	MW6C-ROX-082923	Water	08/29/23 11:00	08/30/23 09:30
400-242724-5	MW6A-ROX-082923	Water	08/29/23 12:20	08/30/23 09:30
400-242724-6	MW6D-ROX-082923	Water	08/29/23 13:30	08/30/23 09:30
400-242724-7	TB-ROX-082923-8260-B	Water	08/29/23 12:00	08/30/23 09:30
400-242724-8	TB-ROX-082923-8011-B	Water	08/29/23 12:00	08/30/23 09:30
400-242724-9	MW1-ROX-082923-EB	Water	08/29/23 08:10	08/30/23 09:30
400-242724-10	MW1-ROX-082923	Water	08/29/23 09:25	08/30/23 09:30
400-242724-11	ROST4PZG-ROX-082923	Water	08/29/23 10:35	08/30/23 09:30
400-242724-12	P56-ROX-082923	Water	08/29/23 12:50	08/30/23 09:30
400-242724-13	P93A-ROX-082923	Water	08/29/23 13:40	08/30/23 09:30

Detection Summary

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

Job ID: 400-242724-1

Client Sample ID: TB-ROX-082923-8260-A — Lab Sample ID: 400-242724-1

No Detections.

Client Sample ID: TB-ROX-082923-8011-A — Lab Sample ID: 400-242724-2

No Detections.

Client Sample ID: MW26-ROX-082923 — Lab Sample ID: 400-242724-3

No Detections.

Client Sample ID: MW6C-ROX-082923 — Lab Sample ID: 400-242724-4

No Detections.

Client Sample ID: MW6A-ROX-082923 — Lab Sample ID: 400-242724-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.28	J	1.0	0.22	ug/L	1		8260D	Total/NA
Dibenz(a,h)anthracene	0.048	J	0.20	0.048	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.054	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW6D-ROX-082923 — Lab Sample ID: 400-242724-6

No Detections.

Client Sample ID: TB-ROX-082923-8260-B — Lab Sample ID: 400-242724-7

No Detections.

Client Sample ID: TB-ROX-082923-8011-B — Lab Sample ID: 400-242724-8

No Detections.

Client Sample ID: MW1-ROX-082923-EB — Lab Sample ID: 400-242724-9

No Detections.

Client Sample ID: MW1-ROX-082923 — Lab Sample ID: 400-242724-10

No Detections.

Client Sample ID: ROST4PZG-ROX-082923 — Lab Sample ID: 400-242724-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11	J	25	10	ug/L	1		8260D	Total/NA

Client Sample ID: P56-ROX-082923 — Lab Sample ID: 400-242724-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	22	J	25	10	ug/L	1		8260D	Total/NA
Isopropy benzene	7.4		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	7.3		1.0	0.69	ug/L	1		8260D	Total/NA
sec-Butylbenzene	0.82	J	1.0	0.70	ug/L	1		8260D	Total/NA
1,2,4-Trimethy benzene	1.6		1.0	0.82	ug/L	1		8260D	Total/NA
1,3,5-Trimethy benzene	1.0		1.0	0.56	ug/L	1		8260D	Total/NA
Xylenes, Total	6.6	J	10	1.6	ug/L	1		8260D	Total/NA
Acenaphthene	0.40		0.19	0.094	ug/L	1		8270E SIM	Total/NA
Anthracene	0.072	J	0.19	0.045	ug/L	1		8270E SIM	Total/NA
Fluorene	0.27		0.19	0.085	ug/L	1		8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Pensacola

Client Sample ID: P56-ROX-082923 (Continued)

Lab Sample ID: 400-242724-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.52		0.19	0.086	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	7.3		0.19	0.076	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	6.8		0.19	0.063	ug/L	1		8270E SIM	Total/NA
Dibenzofuran	0.33	J	9.5	0.16	ug/L	1		8270E	Total/NA

Client Sample ID: P93A-ROX-082923

Lab Sample ID: 400-242724-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	84		1.0	0.50	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: 400-242724-1

Client Sample ID: TB-ROX-082923-8260-A
Date Collected: 08/29/23 12:00
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-1
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			09/08/23 16:47	1
Acrolein	ND		20	3.3	ug/L			09/08/23 16:47	1
Acrylonitrile	ND		10	2.8	ug/L			09/08/23 16:47	1
Benzene	ND		1.0	0.50	ug/L			09/08/23 16:47	1
Bromobenzene	ND		1.0	0.54	ug/L			09/08/23 16:47	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/08/23 16:47	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/08/23 16:47	1
Bromoform	ND		5.0	0.25	ug/L			09/08/23 16:47	1
Bromomethane	ND		1.0	0.98	ug/L			09/08/23 16:47	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/08/23 16:47	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/08/23 16:47	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/08/23 16:47	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/08/23 16:47	1
Chloroethane	ND		1.0	0.76	ug/L			09/08/23 16:47	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/08/23 16:47	1
Chloroform	ND		1.0	0.90	ug/L			09/08/23 16:47	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/08/23 16:47	1
Chloromethane	ND		1.0	0.90	ug/L			09/08/23 16:47	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/08/23 16:47	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/08/23 16:47	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/08/23 16:47	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/08/23 16:47	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/08/23 16:47	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/08/23 16:47	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/08/23 16:47	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/08/23 16:47	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/08/23 16:47	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/08/23 16:47	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/08/23 16:47	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/08/23 16:47	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/08/23 16:47	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/08/23 16:47	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/08/23 16:47	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/08/23 16:47	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/08/23 16:47	1
2-Hexanone	ND		25	1.4	ug/L			09/08/23 16:47	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/08/23 16:47	1
Methylene bromide	ND		5.0	0.22	ug/L			09/08/23 16:47	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/08/23 16:47	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/08/23 16:47	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/08/23 16:47	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/08/23 16:47	1
Naphthalene	ND		5.0	3.0	ug/L			09/08/23 16:47	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/08/23 16:47	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/08/23 16:47	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/08/23 16:47	1
o-Xylene	ND		5.0	0.60	ug/L			09/08/23 16:47	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/08/23 16:47	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/08/23 16:47	1

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

Job ID: 400-242724-1

Client Sample ID: TB-ROX-082923-8260-A
Date Collected: 08/29/23 12:00
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-1
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			09/08/23 16:47	1
Styrene	ND		1.0	1.0	ug/L			09/08/23 16:47	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/08/23 16:47	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/08/23 16:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/08/23 16:47	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/08/23 16:47	1
Toluene	ND		1.0	0.90	ug/L			09/08/23 16:47	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/08/23 16:47	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/08/23 16:47	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/08/23 16:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/08/23 16:47	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/08/23 16:47	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/08/23 16:47	1
Trichloroethene	ND		1.0	0.15	ug/L			09/08/23 16:47	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/08/23 16:47	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/08/23 16:47	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/08/23 16:47	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/08/23 16:47	1
Vinyl acetate	ND		25	0.93	ug/L			09/08/23 16:47	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/08/23 16:47	1
Xylenes, Total	ND		10	1.6	ug/L			09/08/23 16:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*09/08/23 16:47*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*09/08/23 16:47*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*09/08/23 16:47*	*1*

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

Job ID: 400-242724-1

Client Sample ID: TB-ROX-082923-8011-A
Date Collected: 08/29/23 12:00
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-2
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-D bromo-3-Chloropropane	ND	*+	0.031	0.018	ug/L		08/31/23 15:18	09/01/23 13:09	1
1,2-D bromoethane	ND	*+	0.021	0.016	ug/L		08/31/23 15:18	09/01/23 13:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*140*		*51 - 149*	*08/31/23 15:18*	*09/01/23 13:09*	*1*

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

Job ID: 400-242724-1

Client Sample ID: MW26-ROX-082923
Date Collected: 08/29/23 09:20
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-3
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			09/08/23 17:14	1
Acrolein	ND		20	3.3	ug/L			09/08/23 17:14	1
Acrylonitrile	ND		10	2.8	ug/L			09/08/23 17:14	1
Benzene	ND		1.0	0.50	ug/L			09/08/23 17:14	1
Bromobenzene	ND		1.0	0.54	ug/L			09/08/23 17:14	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/08/23 17:14	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/08/23 17:14	1
Bromoform	ND		5.0	0.25	ug/L			09/08/23 17:14	1
Bromomethane	ND		1.0	0.98	ug/L			09/08/23 17:14	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/08/23 17:14	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/08/23 17:14	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/08/23 17:14	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/08/23 17:14	1
Chloroethane	ND		1.0	0.76	ug/L			09/08/23 17:14	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/08/23 17:14	1
Chloroform	ND		1.0	0.90	ug/L			09/08/23 17:14	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/08/23 17:14	1
Chloromethane	ND		1.0	0.90	ug/L			09/08/23 17:14	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/08/23 17:14	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/08/23 17:14	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/08/23 17:14	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/08/23 17:14	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/08/23 17:14	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/08/23 17:14	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/08/23 17:14	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/08/23 17:14	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/08/23 17:14	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/08/23 17:14	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/08/23 17:14	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/08/23 17:14	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/08/23 17:14	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/08/23 17:14	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/08/23 17:14	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/08/23 17:14	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/08/23 17:14	1
2-Hexanone	ND		25	1.4	ug/L			09/08/23 17:14	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/08/23 17:14	1
Methylene bromide	ND		5.0	0.22	ug/L			09/08/23 17:14	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/08/23 17:14	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/08/23 17:14	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/08/23 17:14	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/08/23 17:14	1
Naphthalene	ND		5.0	3.0	ug/L			09/08/23 17:14	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/08/23 17:14	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/08/23 17:14	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/08/23 17:14	1
o-Xylene	ND		5.0	0.60	ug/L			09/08/23 17:14	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/08/23 17:14	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/08/23 17:14	1

Client Sample ID: MW26-ROX-082923
Date Collected: 08/29/23 09:20
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-3
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			09/08/23 17:14	1
Styrene	ND		1.0	1.0	ug/L			09/08/23 17:14	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/08/23 17:14	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/08/23 17:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/08/23 17:14	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/08/23 17:14	1
Toluene	ND		1.0	0.90	ug/L			09/08/23 17:14	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/08/23 17:14	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/08/23 17:14	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/08/23 17:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/08/23 17:14	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/08/23 17:14	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/08/23 17:14	1
Trichloroethene	ND		1.0	0.15	ug/L			09/08/23 17:14	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/08/23 17:14	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/08/23 17:14	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/08/23 17:14	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/08/23 17:14	1
Vinyl acetate	ND		25	0.93	ug/L			09/08/23 17:14	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/08/23 17:14	1
Xylenes, Total	ND		10	1.6	ug/L			09/08/23 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*72 - 130*		*09/08/23 17:14*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*09/08/23 17:14*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*09/08/23 17:14*	*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		09/05/23 14:55	09/08/23 19:20	1
Acenaphthylene	ND		0.20	0.043	ug/L		09/05/23 14:55	09/08/23 19:20	1
Anthracene	ND		0.20	0.046	ug/L		09/05/23 14:55	09/08/23 19:20	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		09/05/23 14:55	09/08/23 19:20	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		09/05/23 14:55	09/08/23 19:20	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		09/05/23 14:55	09/08/23 19:20	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		09/05/23 14:55	09/08/23 19:20	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		09/05/23 14:55	09/08/23 19:20	1
Chrysene	ND		0.20	0.032	ug/L		09/05/23 14:55	09/08/23 19:20	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		09/05/23 14:55	09/08/23 19:20	1
Fluoranthene	ND		0.20	0.033	ug/L		09/05/23 14:55	09/08/23 19:20	1
Fluorene	ND		0.20	0.087	ug/L		09/05/23 14:55	09/08/23 19:20	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		09/05/23 14:55	09/08/23 19:20	1
Phenanthrene	ND		0.20	0.088	ug/L		09/05/23 14:55	09/08/23 19:20	1
Pyrene	ND		0.20	0.038	ug/L		09/05/23 14:55	09/12/23 11:32	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		09/05/23 14:55	09/08/23 19:20	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		09/05/23 14:55	09/08/23 19:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*95*		*18 - 147*	*09/05/23 14:55*	*09/08/23 19:20*	*1*
2-Fluorobiphenyl	*79*		*15 - 128*	*09/05/23 14:55*	*09/08/23 19:20*	*1*

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

Job ID: 400-242724-1

Client Sample ID: MW26-ROX-082923
Date Collected: 08/29/23 09:20
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*61*		*10 - 144*	*09/05/23 14:55*	*09/08/23 19:20*	*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		09/05/23 14:55	09/07/23 21:05	1
Benzenethiol	ND	*- *1 UJ	9.8	1.7	ug/L		09/05/23 14:55	09/07/23 21:05	1
Benzoic acid	ND		29	7.2	ug/L		09/05/23 14:55	09/07/23 21:05	1
Benzyl alcohol	ND		9.8	2.0	ug/L		09/05/23 14:55	09/07/23 21:05	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		09/05/23 14:55	09/07/23 21:05	1
Bis(2-chloroethyl)ether	ND		9.8	2.7	ug/L		09/05/23 14:55	09/07/23 21:05	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		09/05/23 14:55	09/07/23 21:05	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		09/05/23 14:55	09/07/23 21:05	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		09/05/23 14:55	09/07/23 21:05	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		09/05/23 14:55	09/07/23 21:05	1
4-Chloroaniline	ND		9.8	3.3	ug/L		09/05/23 14:55	09/07/23 21:05	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		09/05/23 14:55	09/07/23 21:05	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		09/05/23 14:55	09/07/23 21:05	1
2-Chlorophenol	ND		9.8	2.2	ug/L		09/05/23 14:55	09/07/23 21:05	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		09/05/23 14:55	09/07/23 21:05	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		09/05/23 14:55	09/07/23 21:05	1
Dibenzofuran	ND		9.8	0.17	ug/L		09/05/23 14:55	09/07/23 21:05	1
3,3'-Dichlorobenzidine	ND		9.8	2.6	ug/L		09/05/23 14:55	09/07/23 21:05	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		09/05/23 14:55	09/07/23 21:05	1
Diethyl phthalate	ND		9.8	0.24	ug/L		09/05/23 14:55	09/07/23 21:05	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		09/05/23 14:55	09/07/23 21:05	1
Dimethyl phthalate	ND		9.8	0.17	ug/L		09/05/23 14:55	09/07/23 21:05	1
Di-n-butyl phthalate	ND		9.8	2.7	ug/L		09/05/23 14:55	09/07/23 21:05	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		09/05/23 14:55	09/07/23 21:05	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/05/23 14:55	09/07/23 21:05	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		09/05/23 14:55	09/07/23 21:05	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		09/05/23 14:55	09/07/23 21:05	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		09/05/23 14:55	09/07/23 21:05	1
1,4-Dioxane	ND		9.8	0.98	ug/L		09/05/23 14:55	09/07/23 21:05	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		09/05/23 14:55	09/07/23 21:05	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		09/05/23 14:55	09/07/23 21:05	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/05/23 14:55	09/07/23 21:05	1
Hexachloroethane	ND		9.8	4.1	ug/L		09/05/23 14:55	09/07/23 21:05	1
Indene	ND		9.8	0.98	ug/L		09/05/23 14:55	09/07/23 21:05	1
Isophorone	ND		9.8	0.14	ug/L		09/05/23 14:55	09/07/23 21:05	1
2-Methylphenol	ND		9.8	1.8	ug/L		09/05/23 14:55	09/07/23 21:05	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		09/05/23 14:55	09/07/23 21:05	1
2-Nitroaniline	ND		9.8	2.2	ug/L		09/05/23 14:55	09/07/23 21:05	1
3-Nitroaniline	ND		9.8	1.8	ug/L		09/05/23 14:55	09/07/23 21:05	1
4-Nitroaniline	ND		9.8	1.5	ug/L		09/05/23 14:55	09/07/23 21:05	1
Nitrobenzene	ND		9.8	0.13	ug/L		09/05/23 14:55	09/07/23 21:05	1
2-Nitrophenol	ND		9.8	5.1	ug/L		09/05/23 14:55	09/07/23 21:05	1
4-Nitrophenol	ND		9.8	2.1	ug/L		09/05/23 14:55	09/07/23 21:05	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		09/05/23 14:55	09/07/23 21:05	1

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

Job ID: 400-242724-1

Client Sample ID: MW26-ROX-082923
Date Collected: 08/29/23 09:20
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-3
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	3.2	ug/L		09/05/23 14:55	09/07/23 21:05	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		09/05/23 14:55	09/07/23 21:05	1
Pentachlorophenol	ND		20	1.4	ug/L		09/05/23 14:55	09/07/23 21:05	1
Phenol	ND		9.8	2.6	ug/L		09/05/23 14:55	09/07/23 21:05	1
Pyridine	ND		9.8	3.1	ug/L		09/05/23 14:55	09/07/23 21:05	1
Quinoline	ND		9.8	4.4	ug/L		09/05/23 14:55	09/07/23 21:05	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		09/05/23 14:55	09/07/23 21:05	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		09/05/23 14:55	09/07/23 21:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*46 - 124*	*09/05/23 14:55*	*09/07/23 21:05*	*1*
2-Fluorophenol	*37*		*13 - 113*	*09/05/23 14:55*	*09/07/23 21:05*	*1*
Nitrobenzene-d5	*73*		*36 - 126*	*09/05/23 14:55*	*09/07/23 21:05*	*1*
Phenol-d5	*51*		*17 - 127*	*09/05/23 14:55*	*09/07/23 21:05*	*1*
Terphenyl-d14	*100*		*44 - 149*	*09/05/23 14:55*	*09/07/23 21:05*	*1*
2,4,6-Tribromophenol	*58*		*26 - 150*	*09/05/23 14:55*	*09/07/23 21:05*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND	*+	0.031	0.018	ug/L		09/01/23 07:50	09/01/23 13:30	1
1,2-D bromoethane	ND	*+	0.021	0.015	ug/L		09/01/23 07:50	09/01/23 13:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*148*		*51 - 149*	*09/01/23 07:50*	*09/01/23 13:30*	*1*

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

Job ID: 400-242724-1

Client Sample ID: MW6C-ROX-082923
Date Collected: 08/29/23 11:00
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-4
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			09/07/23 12:31	1
Acrolein	ND		20	3.3	ug/L			09/07/23 12:31	1
Acrylonitrile	ND		10	2.8	ug/L			09/07/23 12:31	1
Benzene	ND		1.0	0.50	ug/L			09/07/23 12:31	1
Bromobenzene	ND		1.0	0.54	ug/L			09/07/23 12:31	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/07/23 12:31	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/07/23 12:31	1
Bromoform	ND		5.0	0.25	ug/L			09/07/23 12:31	1
Bromomethane	ND		1.0	0.98	ug/L			09/07/23 12:31	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/07/23 12:31	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/07/23 12:31	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/07/23 12:31	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/07/23 12:31	1
Chloroethane	ND		1.0	0.76	ug/L			09/07/23 12:31	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			09/07/23 12:31	1
Chloroform	ND		1.0	0.90	ug/L			09/07/23 12:31	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/07/23 12:31	1
Chloromethane	ND		1.0	0.90	ug/L			09/07/23 12:31	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/07/23 12:31	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/07/23 12:31	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/07/23 12:31	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/07/23 12:31	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/07/23 12:31	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/07/23 12:31	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/07/23 12:31	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/07/23 12:31	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/07/23 12:31	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 12:31	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 12:31	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 12:31	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/07/23 12:31	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/07/23 12:31	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/07/23 12:31	1
Hexachlorobutadiene	ND	F2	5.0	0.90	ug/L			09/07/23 12:31	1
2-Hexanone	ND		25	1.4	ug/L			09/07/23 12:31	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/07/23 12:31	1
Methylene bromide	ND		5.0	0.22	ug/L			09/07/23 12:31	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/07/23 12:31	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/07/23 12:31	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/07/23 12:31	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/07/23 12:31	1
Naphthalene	ND		5.0	3.0	ug/L			09/07/23 12:31	1
n-Butylbenzene	ND	F2	1.0	0.76	ug/L			09/07/23 12:31	1
N-Propylbenzene	ND	F2	1.0	0.69	ug/L			09/07/23 12:31	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/07/23 12:31	1
o-Xylene	ND		5.0	0.60	ug/L			09/07/23 12:31	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/07/23 12:31	1
p-Isopropyltoluene	ND	F2	1.0	0.71	ug/L			09/07/23 12:31	1
sec-Butylbenzene	ND	F2	1.0	0.70	ug/L			09/07/23 12:31	1

Client Sample ID: MW6C-ROX-082923
Date Collected: 08/29/23 11:00
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-4
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		1.0	1.0	ug/L			09/07/23 12:31	1
tert-Butylbenzene	ND	F2	1.0	0.63	ug/L			09/07/23 12:31	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/07/23 12:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/07/23 12:31	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/07/23 12:31	1
Toluene	ND		1.0	0.90	ug/L			09/07/23 12:31	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/07/23 12:31	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/07/23 12:31	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/07/23 12:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/07/23 12:31	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/07/23 12:31	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/07/23 12:31	1
Trichloroethene	ND		1.0	0.15	ug/L			09/07/23 12:31	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/07/23 12:31	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/07/23 12:31	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/07/23 12:31	1
1,3,5-Trimethy benzene	ND	F2	1.0	0.56	ug/L			09/07/23 12:31	1
Vinyl acetate	ND		25	0.93	ug/L			09/07/23 12:31	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/07/23 12:31	1
Xylenes, Total	ND		10	1.6	ug/L			09/07/23 12:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*09/07/23 12:31*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*09/07/23 12:31*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*09/07/23 12:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/08/23 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*09/08/23 17:41*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*09/08/23 17:41*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*09/08/23 17:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		09/05/23 14:55	09/08/23 18:59	1
Acenaphthylene	ND		0.20	0.044	ug/L		09/05/23 14:55	09/08/23 18:59	1
Anthracene	ND		0.20	0.047	ug/L		09/05/23 14:55	09/08/23 18:59	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		09/05/23 14:55	09/08/23 18:59	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		09/05/23 14:55	09/08/23 18:59	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		09/05/23 14:55	09/08/23 18:59	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		09/05/23 14:55	09/08/23 18:59	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		09/05/23 14:55	09/08/23 18:59	1
Chrysene	ND		0.20	0.033	ug/L		09/05/23 14:55	09/08/23 18:59	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		09/05/23 14:55	09/08/23 18:59	1
Fluoranthene	ND		0.20	0.034	ug/L		09/05/23 14:55	09/08/23 18:59	1
Fluorene	ND		0.20	0.089	ug/L		09/05/23 14:55	09/08/23 18:59	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		09/05/23 14:55	09/08/23 18:59	1

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

Job ID: 400-242724-1

Client Sample ID: MW6C-ROX-082923
Date Collected: 08/29/23 11:00
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-4
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	0.090	ug/L		09/05/23 14:55	09/08/23 18:59	1
Pyrene	ND		0.20	0.039	ug/L		09/05/23 14:55	09/21/23 16:50	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		09/05/23 14:55	09/08/23 18:59	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		09/05/23 14:55	09/08/23 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*80*		*18 - 147*	*09/05/23 14:55*	*09/08/23 18:59*	*1*
2-Fluorobiphenyl	*76*		*15 - 128*	*09/05/23 14:55*	*09/08/23 18:59*	*1*
Nitrobenzene-d5	*61*		*10 - 144*	*09/05/23 14:55*	*09/08/23 18:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		09/05/23 14:55	09/07/23 20:43	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		09/05/23 14:55	09/07/23 20:43	1
Benzoic acid	ND		30	7.3	ug/L		09/05/23 14:55	09/07/23 20:43	1
Benzyl alcohol	ND		10	2.0	ug/L		09/05/23 14:55	09/07/23 20:43	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		09/05/23 14:55	09/07/23 20:43	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		09/05/23 14:55	09/07/23 20:43	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		09/05/23 14:55	09/07/23 20:43	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		09/05/23 14:55	09/07/23 20:43	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		09/05/23 14:55	09/07/23 20:43	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		09/05/23 14:55	09/07/23 20:43	1
4-Chloroaniline	ND		10	3.4	ug/L		09/05/23 14:55	09/07/23 20:43	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		09/05/23 14:55	09/07/23 20:43	1
2-Chloronaphthalene	ND		10	0.14	ug/L		09/05/23 14:55	09/07/23 20:43	1
2-Chlorophenol	ND		10	2.2	ug/L		09/05/23 14:55	09/07/23 20:43	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		09/05/23 14:55	09/07/23 20:43	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		09/05/23 14:55	09/07/23 20:43	1
Dibenzofuran	ND		10	0.17	ug/L		09/05/23 14:55	09/07/23 20:43	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		09/05/23 14:55	09/07/23 20:43	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		09/05/23 14:55	09/07/23 20:43	1
Diethyl phthalate	ND		10	0.24	ug/L		09/05/23 14:55	09/07/23 20:43	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		09/05/23 14:55	09/07/23 20:43	1
Dimethyl phthalate	ND		10	0.17	ug/L		09/05/23 14:55	09/07/23 20:43	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		09/05/23 14:55	09/07/23 20:43	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		09/05/23 14:55	09/07/23 20:43	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		09/05/23 14:55	09/07/23 20:43	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		09/05/23 14:55	09/07/23 20:43	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		09/05/23 14:55	09/07/23 20:43	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		09/05/23 14:55	09/07/23 20:43	1
1,4-Dioxane	ND		10	1.0	ug/L		09/05/23 14:55	09/07/23 20:43	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		09/05/23 14:55	09/07/23 20:43	1
Hexachlorobenzene	ND		10	0.17	ug/L		09/05/23 14:55	09/07/23 20:43	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/05/23 14:55	09/07/23 20:43	1
Hexachloroethane	ND		10	4.2	ug/L		09/05/23 14:55	09/07/23 20:43	1
Indene	ND		10	1.0	ug/L		09/05/23 14:55	09/07/23 20:43	1
Isophorone	ND		10	0.14	ug/L		09/05/23 14:55	09/07/23 20:43	1
2-Methylphenol	ND		10	1.8	ug/L		09/05/23 14:55	09/07/23 20:43	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		09/05/23 14:55	09/07/23 20:43	1

Client Sample ID: MW6C-ROX-082923

Lab Sample ID: 400-242724-4

Date Collected: 08/29/23 11:00

Matrix: Water

Date Received: 08/30/23 09:30

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		09/05/23 14:55	09/07/23 20:43	1
3-Nitroaniline	ND		10	1.8	ug/L		09/05/23 14:55	09/07/23 20:43	1
4-Nitroaniline	ND		10	1.5	ug/L		09/05/23 14:55	09/07/23 20:43	1
Nitrobenzene	ND		10	0.13	ug/L		09/05/23 14:55	09/07/23 20:43	1
2-Nitrophenol	ND		10	5.2	ug/L		09/05/23 14:55	09/07/23 20:43	1
4-Nitrophenol	ND		10	2.1	ug/L		09/05/23 14:55	09/07/23 20:43	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		09/05/23 14:55	09/07/23 20:43	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		09/05/23 14:55	09/07/23 20:43	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		09/05/23 14:55	09/07/23 20:43	1
Pentachlorophenol	ND		20	1.4	ug/L		09/05/23 14:55	09/07/23 20:43	1
Phenol	ND		10	2.6	ug/L		09/05/23 14:55	09/07/23 20:43	1
Pyridine	ND		10	3.2	ug/L		09/05/23 14:55	09/07/23 20:43	1
Quinoline	ND		10	4.5	ug/L		09/05/23 14:55	09/07/23 20:43	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		09/05/23 14:55	09/07/23 20:43	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		09/05/23 14:55	09/07/23 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*51*		*46 - 124*	*09/05/23 14:55*	*09/07/23 20:43*	*1*
2-Fluorophenol	*33*		*13 - 113*	*09/05/23 14:55*	*09/07/23 20:43*	*1*
Nitrobenzene-d5	*48*		*36 - 126*	*09/05/23 14:55*	*09/07/23 20:43*	*1*
Phenol-d5	*45*		*17 - 127*	*09/05/23 14:55*	*09/07/23 20:43*	*1*
Terphenyl-d14	*57*		*44 - 149*	*09/05/23 14:55*	*09/07/23 20:43*	*1*
2,4,6-Tribromophenol	*54*		*26 - 150*	*09/05/23 14:55*	*09/07/23 20:43*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND	*+ F1	0.031	0.018	ug/L		09/01/23 07:50	09/01/23 13:51	1
1,2-D bromoethane	ND	*+ F1	0.021	0.016	ug/L		09/01/23 07:50	09/01/23 13:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*154*	*S1+*	*51 - 149*	*09/01/23 07:50*	*09/01/23 13:51*	*1*

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

Job ID: 400-242724-1

Client Sample ID: MW6A-ROX-082923
Date Collected: 08/29/23 12:20
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-5
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			09/08/23 18:08	1
Acrolein	ND		20	3.3	ug/L			09/08/23 18:08	1
Acrylonitrile	ND		10	2.8	ug/L			09/08/23 18:08	1
Benzene	ND		1.0	0.50	ug/L			09/08/23 18:08	1
Bromobenzene	ND		1.0	0.54	ug/L			09/08/23 18:08	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/08/23 18:08	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/08/23 18:08	1
Bromoform	ND		5.0	0.25	ug/L			09/08/23 18:08	1
Bromomethane	ND		1.0	0.98	ug/L			09/08/23 18:08	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/08/23 18:08	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/08/23 18:08	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/08/23 18:08	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/08/23 18:08	1
Chloroethane	ND		1.0	0.76	ug/L			09/08/23 18:08	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/08/23 18:08	1
Chloroform	ND		1.0	0.90	ug/L			09/08/23 18:08	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/08/23 18:08	1
Chloromethane	ND		1.0	0.90	ug/L			09/08/23 18:08	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/08/23 18:08	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/08/23 18:08	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/08/23 18:08	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/08/23 18:08	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/08/23 18:08	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/08/23 18:08	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/08/23 18:08	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/08/23 18:08	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/08/23 18:08	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/08/23 18:08	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/08/23 18:08	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/08/23 18:08	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/08/23 18:08	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/08/23 18:08	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/08/23 18:08	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/08/23 18:08	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/08/23 18:08	1
2-Hexanone	ND		25	1.4	ug/L			09/08/23 18:08	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/08/23 18:08	1
Methylene bromide	ND		5.0	0.22	ug/L			09/08/23 18:08	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/08/23 18:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/08/23 18:08	1
Methyl tert-butyl ether	**0.28**	**J**	1.0	0.22	ug/L			09/08/23 18:08	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/08/23 18:08	1
Naphthalene	ND		5.0	3.0	ug/L			09/08/23 18:08	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/08/23 18:08	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/08/23 18:08	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/08/23 18:08	1
o-Xylene	ND		5.0	0.60	ug/L			09/08/23 18:08	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/08/23 18:08	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/08/23 18:08	1

Client Sample ID: MW6A-ROX-082923
Date Collected: 08/29/23 12:20
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-5
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			09/08/23 18:08	1
Styrene	ND		1.0	1.0	ug/L			09/08/23 18:08	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/08/23 18:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/08/23 18:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/08/23 18:08	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/08/23 18:08	1
Toluene	ND		1.0	0.90	ug/L			09/08/23 18:08	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/08/23 18:08	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/08/23 18:08	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/08/23 18:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/08/23 18:08	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/08/23 18:08	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/08/23 18:08	1
Trichloroethene	ND		1.0	0.15	ug/L			09/08/23 18:08	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/08/23 18:08	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/08/23 18:08	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/08/23 18:08	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/08/23 18:08	1
Vinyl acetate	ND		25	0.93	ug/L			09/08/23 18:08	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/08/23 18:08	1
Xylenes, Total	ND		10	1.6	ug/L			09/08/23 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*72 - 130*		*09/08/23 18:08*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*09/08/23 18:08*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*09/08/23 18:08*	*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		09/05/23 14:55	09/08/23 19:40	1
Acenaphthylene	ND		0.20	0.044	ug/L		09/05/23 14:55	09/08/23 19:40	1
Anthracene	ND		0.20	0.047	ug/L		09/05/23 14:55	09/08/23 19:40	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		09/05/23 14:55	09/08/23 19:40	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		09/05/23 14:55	09/08/23 19:40	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		09/05/23 14:55	09/08/23 19:40	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		09/05/23 14:55	09/08/23 19:40	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		09/05/23 14:55	09/08/23 19:40	1
Chrysene	ND		0.20	0.033	ug/L		09/05/23 14:55	09/08/23 19:40	1
Dibenz(a,h)anthracene	**0.048**	**J**	0.20	0.048	ug/L		09/05/23 14:55	09/08/23 19:40	1
Fluoranthene	ND		0.20	0.034	ug/L		09/05/23 14:55	09/08/23 19:40	1
Fluorene	ND		0.20	0.090	ug/L		09/05/23 14:55	09/08/23 19:40	1
Indeno[1,2,3-cd]pyrene	**0.054**	**J**	0.20	0.034	ug/L		09/05/23 14:55	09/08/23 19:40	1
Phenanthrene	ND		0.20	0.091	ug/L		09/05/23 14:55	09/08/23 19:40	1
Pyrene	ND		0.20	0.039	ug/L		09/05/23 14:55	09/12/23 12:14	1
1-Methylnaphthalene	ND		0.20	0.081	ug/L		09/05/23 14:55	09/08/23 19:40	1
2-Methylnaphthalene	ND		0.20	0.067	ug/L		09/05/23 14:55	09/08/23 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*66*		*18 - 147*	*09/05/23 14:55*	*09/08/23 19:40*	*1*
2-Fluorobiphenyl	*62*		*15 - 128*	*09/05/23 14:55*	*09/08/23 19:40*	*1*

Client Sample ID: MW6A-ROX-082923
Date Collected: 08/29/23 12:20
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-5
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*54*		*10 - 144*	*09/05/23 14:55*	*09/08/23 19:40*	*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		09/13/23 10:04	09/15/23 18:26	1
Acenaphthylene	ND	H	0.20	0.043	ug/L		09/13/23 10:04	09/15/23 18:26	1
Anthracene	ND	H	0.20	0.046	ug/L		09/13/23 10:04	09/15/23 18:26	1
Benzo[a]anthracene	ND	H	0.20	0.033	ug/L		09/13/23 10:04	09/15/23 18:26	1
Benzo[a]pyrene	ND	H	0.20	0.062	ug/L		09/13/23 10:04	09/15/23 18:26	1
Benzo[b]fluoranthene	ND	H	0.20	0.036	ug/L		09/13/23 10:04	09/15/23 18:26	1
Benzo[g,h,i]perylene	ND	H	0.20	0.026	ug/L		09/13/23 10:04	09/15/23 18:26	1
Benzo[k]fluoranthene	ND	H	0.20	0.060	ug/L		09/13/23 10:04	09/15/23 18:26	1
Chrysene	ND	H	0.20	0.032	ug/L		09/13/23 10:04	09/15/23 18:26	1
Dibenz(a,h)anthracene	ND	H	0.20	0.047	ug/L		09/13/23 10:04	09/15/23 18:26	1
Fluoranthene	ND	H	0.20	0.033	ug/L		09/13/23 10:04	09/15/23 18:26	1
Fluorene	ND	H	0.20	0.087	ug/L		09/13/23 10:04	09/15/23 18:26	1
Indeno[1,2,3-cd]pyrene	ND	H	0.20	0.033	ug/L		09/13/23 10:04	09/15/23 18:26	1
Phenanthrene	ND	H	0.20	0.088	ug/L		09/13/23 10:04	09/15/23 18:26	1
Pyrene	ND	H	0.20	0.038	ug/L		09/13/23 10:04	09/15/23 18:26	1
1-Methylnaphthalene	ND	H	0.20	0.078	ug/L		09/13/23 10:04	09/15/23 18:26	1
2-Methylnaphthalene	ND	H	0.20	0.064	ug/L		09/13/23 10:04	09/15/23 18:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*77*		*18 - 147*	*09/13/23 10:04*	*09/15/23 18:26*	*1*
2-Fluorobiphenyl	*76*		*15 - 128*	*09/13/23 10:04*	*09/15/23 18:26*	*1*
Nitrobenzene-d5	*78*		*10 - 144*	*09/13/23 10:04*	*09/15/23 18:26*	*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		09/05/23 14:55	09/07/23 21:26	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		09/05/23 14:55	09/07/23 21:26	1
Benzoic acid	ND		30	7.4	ug/L		09/05/23 14:55	09/07/23 21:26	1
Benzyl alcohol	ND		10	2.0	ug/L		09/05/23 14:55	09/07/23 21:26	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		09/05/23 14:55	09/07/23 21:26	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		09/05/23 14:55	09/07/23 21:26	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		09/05/23 14:55	09/07/23 21:26	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		09/05/23 14:55	09/07/23 21:26	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		09/05/23 14:55	09/07/23 21:26	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		09/05/23 14:55	09/07/23 21:26	1
4-Chloroaniline	ND		10	3.4	ug/L		09/05/23 14:55	09/07/23 21:26	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		09/05/23 14:55	09/07/23 21:26	1
2-Chloronaphthalene	ND		10	0.14	ug/L		09/05/23 14:55	09/07/23 21:26	1
2-Chlorophenol	ND		10	2.2	ug/L		09/05/23 14:55	09/07/23 21:26	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		09/05/23 14:55	09/07/23 21:26	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		09/05/23 14:55	09/07/23 21:26	1
Dibenzofuran	ND		10	0.17	ug/L		09/05/23 14:55	09/07/23 21:26	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		09/05/23 14:55	09/07/23 21:26	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		09/05/23 14:55	09/07/23 21:26	1
Diethyl phthalate	ND		10	0.24	ug/L		09/05/23 14:55	09/07/23 21:26	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		09/05/23 14:55	09/07/23 21:26	1

Client Sample ID: MW6A-ROX-082923
Date Collected: 08/29/23 12:20
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-5
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		09/05/23 14:55	09/07/23 21:26	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		09/05/23 14:55	09/07/23 21:26	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		09/05/23 14:55	09/07/23 21:26	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		09/05/23 14:55	09/07/23 21:26	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		09/05/23 14:55	09/07/23 21:26	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		09/05/23 14:55	09/07/23 21:26	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		09/05/23 14:55	09/07/23 21:26	1
1,4-Dioxane	ND		10	1.0	ug/L		09/05/23 14:55	09/07/23 21:26	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		09/05/23 14:55	09/07/23 21:26	1
Hexachlorobenzene	ND		10	0.17	ug/L		09/05/23 14:55	09/07/23 21:26	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/05/23 14:55	09/07/23 21:26	1
Hexachloroethane	ND		10	4.2	ug/L		09/05/23 14:55	09/07/23 21:26	1
Indene	ND		10	1.0	ug/L		09/05/23 14:55	09/07/23 21:26	1
Isophorone	ND		10	0.14	ug/L		09/05/23 14:55	09/07/23 21:26	1
2-Methylphenol	ND		10	1.8	ug/L		09/05/23 14:55	09/07/23 21:26	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		09/05/23 14:55	09/07/23 21:26	1
2-Nitroaniline	ND		10	2.2	ug/L		09/05/23 14:55	09/07/23 21:26	1
3-Nitroaniline	ND		10	1.8	ug/L		09/05/23 14:55	09/07/23 21:26	1
4-Nitroaniline	ND		10	1.5	ug/L		09/05/23 14:55	09/07/23 21:26	1
Nitrobenzene	ND		10	0.13	ug/L		09/05/23 14:55	09/07/23 21:26	1
2-Nitrophenol	ND		10	5.2	ug/L		09/05/23 14:55	09/07/23 21:26	1
4-Nitrophenol	ND		10	2.1	ug/L		09/05/23 14:55	09/07/23 21:26	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		09/05/23 14:55	09/07/23 21:26	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		09/05/23 14:55	09/07/23 21:26	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		09/05/23 14:55	09/07/23 21:26	1
Pentachlorophenol	ND		20	1.4	ug/L		09/05/23 14:55	09/07/23 21:26	1
Phenol	ND		10	2.6	ug/L		09/05/23 14:55	09/07/23 21:26	1
Pyridine	ND		10	3.2	ug/L		09/05/23 14:55	09/07/23 21:26	1
Quinoline	ND		10	4.5	ug/L		09/05/23 14:55	09/07/23 21:26	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		09/05/23 14:55	09/07/23 21:26	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		09/05/23 14:55	09/07/23 21:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*46 - 124*	*09/05/23 14:55*	*09/07/23 21:26*	*1*
2-Fluorophenol	*26*		*13 - 113*	*09/05/23 14:55*	*09/07/23 21:26*	*1*
Nitrobenzene-d5	*58*		*36 - 126*	*09/05/23 14:55*	*09/07/23 21:26*	*1*
Phenol-d5	*44*		*17 - 127*	*09/05/23 14:55*	*09/07/23 21:26*	*1*
Terphenyl-d14	*73*		*44 - 149*	*09/05/23 14:55*	*09/07/23 21:26*	*1*
2,4,6-Tribromophenol	*62*		*26 - 150*	*09/05/23 14:55*	*09/07/23 21:26*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND	*+	0.030	0.017	ug/L		09/01/23 07:50	09/01/23 14:55	1
1,2-D bromoethane	ND	*+	0.020	0.015	ug/L		09/01/23 07:50	09/01/23 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*146*		*51 - 149*	*09/01/23 07:50*	*09/01/23 14:55*	*1*

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

Job ID: 400-242724-1

Client Sample ID: MW6D-ROX-082923
Date Collected: 08/29/23 13:30
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-6
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			09/08/23 18:35	1
Acrolein	ND		20	3.3	ug/L			09/08/23 18:35	1
Acrylonitrile	ND		10	2.8	ug/L			09/08/23 18:35	1
Benzene	ND		1.0	0.50	ug/L			09/08/23 18:35	1
Bromobenzene	ND		1.0	0.54	ug/L			09/08/23 18:35	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/08/23 18:35	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/08/23 18:35	1
Bromoform	ND		5.0	0.25	ug/L			09/08/23 18:35	1
Bromomethane	ND		1.0	0.98	ug/L			09/08/23 18:35	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/08/23 18:35	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/08/23 18:35	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/08/23 18:35	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/08/23 18:35	1
Chloroethane	ND		1.0	0.76	ug/L			09/08/23 18:35	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/08/23 18:35	1
Chloroform	ND		1.0	0.90	ug/L			09/08/23 18:35	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/08/23 18:35	1
Chloromethane	ND		1.0	0.90	ug/L			09/08/23 18:35	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/08/23 18:35	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/08/23 18:35	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/08/23 18:35	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/08/23 18:35	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/08/23 18:35	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/08/23 18:35	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/08/23 18:35	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/08/23 18:35	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/08/23 18:35	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/08/23 18:35	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/08/23 18:35	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/08/23 18:35	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/08/23 18:35	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/08/23 18:35	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/08/23 18:35	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/08/23 18:35	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/08/23 18:35	1
2-Hexanone	ND		25	1.4	ug/L			09/08/23 18:35	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/08/23 18:35	1
Methylene bromide	ND		5.0	0.22	ug/L			09/08/23 18:35	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/08/23 18:35	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/08/23 18:35	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/08/23 18:35	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/08/23 18:35	1
Naphthalene	ND		5.0	3.0	ug/L			09/08/23 18:35	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/08/23 18:35	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/08/23 18:35	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/08/23 18:35	1
o-Xylene	ND		5.0	0.60	ug/L			09/08/23 18:35	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/08/23 18:35	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/08/23 18:35	1

Client Sample ID: MW6D-ROX-082923
Date Collected: 08/29/23 13:30
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-6
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			09/08/23 18:35	1
Styrene	ND		1.0	1.0	ug/L			09/08/23 18:35	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/08/23 18:35	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/08/23 18:35	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/08/23 18:35	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/08/23 18:35	1
Toluene	ND		1.0	0.90	ug/L			09/08/23 18:35	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/08/23 18:35	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/08/23 18:35	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/08/23 18:35	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/08/23 18:35	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/08/23 18:35	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/08/23 18:35	1
Trichloroethene	ND		1.0	0.15	ug/L			09/08/23 18:35	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/08/23 18:35	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/08/23 18:35	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/08/23 18:35	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/08/23 18:35	1
Vinyl acetate	ND		25	0.93	ug/L			09/08/23 18:35	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/08/23 18:35	1
Xylenes, Total	ND		10	1.6	ug/L			09/08/23 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*09/08/23 18:35*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*09/08/23 18:35*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*09/08/23 18:35*	*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	0.099	ug/L		09/05/23 14:55	09/08/23 20:01	1
Acenaphthylene	ND		0.20	0.044	ug/L		09/05/23 14:55	09/08/23 20:01	1
Anthracene	ND		0.20	0.047	ug/L		09/05/23 14:55	09/08/23 20:01	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		09/05/23 14:55	09/08/23 20:01	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		09/05/23 14:55	09/08/23 20:01	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		09/05/23 14:55	09/08/23 20:01	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		09/05/23 14:55	09/08/23 20:01	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		09/05/23 14:55	09/08/23 20:01	1
Chrysene	ND		0.20	0.033	ug/L		09/05/23 14:55	09/08/23 20:01	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		09/05/23 14:55	09/08/23 20:01	1
Fluoranthene	ND		0.20	0.034	ug/L		09/05/23 14:55	09/08/23 20:01	1
Fluorene	ND		0.20	0.089	ug/L		09/05/23 14:55	09/08/23 20:01	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		09/05/23 14:55	09/08/23 20:01	1
Phenanthrene	ND		0.20	0.090	ug/L		09/05/23 14:55	09/08/23 20:01	1
Pyrene	ND		0.20	0.039	ug/L		09/05/23 14:55	09/12/23 12:35	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		09/05/23 14:55	09/08/23 20:01	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		09/05/23 14:55	09/08/23 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*76*		*18 - 147*	*09/05/23 14:55*	*09/08/23 20:01*	*1*
2-Fluorobiphenyl	*70*		*15 - 128*	*09/05/23 14:55*	*09/08/23 20:01*	*1*

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

Job ID: 400-242724-1

Client Sample ID: MW6D-ROX-082923

Date Collected: 08/29/23 13:30
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-6

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*	*09/05/23 14:55*	*09/08/23 20:01*	*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		09/05/23 14:55	09/07/23 21:47	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		09/05/23 14:55	09/07/23 21:47	1
Benzoic acid	ND		30	7.3	ug/L		09/05/23 14:55	09/07/23 21:47	1
Benzyl alcohol	ND		10	2.0	ug/L		09/05/23 14:55	09/07/23 21:47	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		09/05/23 14:55	09/07/23 21:47	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		09/05/23 14:55	09/07/23 21:47	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		09/05/23 14:55	09/07/23 21:47	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		09/05/23 14:55	09/07/23 21:47	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		09/05/23 14:55	09/07/23 21:47	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		09/05/23 14:55	09/07/23 21:47	1
4-Chloroaniline	ND		10	3.4	ug/L		09/05/23 14:55	09/07/23 21:47	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		09/05/23 14:55	09/07/23 21:47	1
2-Chloronaphthalene	ND		10	0.14	ug/L		09/05/23 14:55	09/07/23 21:47	1
2-Chlorophenol	ND		10	2.2	ug/L		09/05/23 14:55	09/07/23 21:47	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		09/05/23 14:55	09/07/23 21:47	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		09/05/23 14:55	09/07/23 21:47	1
Dibenzofuran	ND		10	0.17	ug/L		09/05/23 14:55	09/07/23 21:47	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		09/05/23 14:55	09/07/23 21:47	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		09/05/23 14:55	09/07/23 21:47	1
Diethyl phthalate	ND		10	0.24	ug/L		09/05/23 14:55	09/07/23 21:47	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		09/05/23 14:55	09/07/23 21:47	1
Dimethyl phthalate	ND		10	0.17	ug/L		09/05/23 14:55	09/07/23 21:47	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		09/05/23 14:55	09/07/23 21:47	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		09/05/23 14:55	09/07/23 21:47	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		09/05/23 14:55	09/07/23 21:47	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		09/05/23 14:55	09/07/23 21:47	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		09/05/23 14:55	09/07/23 21:47	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		09/05/23 14:55	09/07/23 21:47	1
1,4-Dioxane	ND		10	1.0	ug/L		09/05/23 14:55	09/07/23 21:47	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		09/05/23 14:55	09/07/23 21:47	1
Hexachlorobenzene	ND		10	0.17	ug/L		09/05/23 14:55	09/07/23 21:47	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/05/23 14:55	09/07/23 21:47	1
Hexachloroethane	ND		10	4.2	ug/L		09/05/23 14:55	09/07/23 21:47	1
Indene	ND		10	1.0	ug/L		09/05/23 14:55	09/07/23 21:47	1
Isophorone	ND		10	0.14	ug/L		09/05/23 14:55	09/07/23 21:47	1
2-Methylphenol	ND		10	1.8	ug/L		09/05/23 14:55	09/07/23 21:47	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		09/05/23 14:55	09/07/23 21:47	1
2-Nitroaniline	ND		10	2.2	ug/L		09/05/23 14:55	09/07/23 21:47	1
3-Nitroaniline	ND		10	1.8	ug/L		09/05/23 14:55	09/07/23 21:47	1
4-Nitroaniline	ND		10	1.5	ug/L		09/05/23 14:55	09/07/23 21:47	1
Nitrobenzene	ND		10	0.13	ug/L		09/05/23 14:55	09/07/23 21:47	1
2-Nitrophenol	ND		10	5.2	ug/L		09/05/23 14:55	09/07/23 21:47	1
4-Nitrophenol	ND		10	2.1	ug/L		09/05/23 14:55	09/07/23 21:47	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		09/05/23 14:55	09/07/23 21:47	1

Client Sample ID: MW6D-ROX-082923
Date Collected: 08/29/23 13:30
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-6
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	3.3	ug/L		09/05/23 14:55	09/07/23 21:47	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		09/05/23 14:55	09/07/23 21:47	1
Pentachlorophenol	ND		20	1.4	ug/L		09/05/23 14:55	09/07/23 21:47	1
Phenol	ND		10	2.6	ug/L		09/05/23 14:55	09/07/23 21:47	1
Pyridine	ND		10	3.2	ug/L		09/05/23 14:55	09/07/23 21:47	1
Quinoline	ND		10	4.5	ug/L		09/05/23 14:55	09/07/23 21:47	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		09/05/23 14:55	09/07/23 21:47	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		09/05/23 14:55	09/07/23 21:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*46 - 124*	*09/05/23 14:55*	*09/07/23 21:47*	*1*
2-Fluorophenol	*29*		*13 - 113*	*09/05/23 14:55*	*09/07/23 21:47*	*1*
Nitrobenzene-d5	*63*		*36 - 126*	*09/05/23 14:55*	*09/07/23 21:47*	*1*
Phenol-d5	*48*		*17 - 127*	*09/05/23 14:55*	*09/07/23 21:47*	*1*
Terphenyl-d14	*80*		*44 - 149*	*09/05/23 14:55*	*09/07/23 21:47*	*1*
2,4,6-Tribromophenol	*62*		*26 - 150*	*09/05/23 14:55*	*09/07/23 21:47*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND	*+	0.031	0.017	ug/L		09/01/23 07:50	09/01/23 15:16	1
1,2-D bromoethane	ND	*+	0.020	0.015	ug/L		09/01/23 07:50	09/01/23 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*142*		*51 - 149*	*09/01/23 07:50*	*09/01/23 15:16*	*1*

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

Job ID: 400-242724-1

Client Sample ID: TB-ROX-082923-8260-B
Date Collected: 08/29/23 12:00
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-7
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			09/07/23 16:09	1
Acrolein	ND		20	3.3	ug/L			09/07/23 16:09	1
Acrylonitrile	ND		10	2.8	ug/L			09/07/23 16:09	1
Benzene	ND		1.0	0.50	ug/L			09/07/23 16:09	1
Bromobenzene	ND		1.0	0.54	ug/L			09/07/23 16:09	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/07/23 16:09	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/07/23 16:09	1
Bromoform	ND		5.0	0.25	ug/L			09/07/23 16:09	1
Bromomethane	ND		1.0	0.98	ug/L			09/07/23 16:09	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/07/23 16:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/07/23 16:09	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/07/23 16:09	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/07/23 16:09	1
Chloroethane	ND		1.0	0.76	ug/L			09/07/23 16:09	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/07/23 16:09	1
Chloroform	ND		1.0	0.90	ug/L			09/07/23 16:09	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/07/23 16:09	1
Chloromethane	ND		1.0	0.90	ug/L			09/07/23 16:09	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/07/23 16:09	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/07/23 16:09	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/07/23 16:09	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/07/23 16:09	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/07/23 16:09	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/07/23 16:09	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/07/23 16:09	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/07/23 16:09	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/07/23 16:09	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/07/23 16:09	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 16:09	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 16:09	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 16:09	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/07/23 16:09	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/07/23 16:09	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/07/23 16:09	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/07/23 16:09	1
2-Hexanone	ND		25	1.4	ug/L			09/07/23 16:09	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/07/23 16:09	1
Methylene bromide	ND		5.0	0.22	ug/L			09/07/23 16:09	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/07/23 16:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/07/23 16:09	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/07/23 16:09	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/07/23 16:09	1
Naphthalene	ND		5.0	3.0	ug/L			09/07/23 16:09	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/07/23 16:09	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/07/23 16:09	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/07/23 16:09	1
o-Xylene	ND		5.0	0.60	ug/L			09/07/23 16:09	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/07/23 16:09	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/07/23 16:09	1

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

Job ID: 400-242724-1

Client Sample ID: TB-ROX-082923-8260-B
Date Collected: 08/29/23 12:00
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-7
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			09/07/23 16:09	1
Styrene	ND		1.0	1.0	ug/L			09/07/23 16:09	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/07/23 16:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/07/23 16:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/07/23 16:09	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/07/23 16:09	1
Toluene	ND		1.0	0.90	ug/L			09/07/23 16:09	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/07/23 16:09	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/07/23 16:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/07/23 16:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/07/23 16:09	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/07/23 16:09	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/07/23 16:09	1
Trichloroethene	ND		1.0	0.15	ug/L			09/07/23 16:09	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/07/23 16:09	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/07/23 16:09	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/07/23 16:09	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/07/23 16:09	1
Vinyl acetate	ND		25	0.93	ug/L			09/07/23 16:09	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/07/23 16:09	1
Xylenes, Total	ND		10	1.6	ug/L			09/07/23 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*09/07/23 16:09*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*09/07/23 16:09*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*09/07/23 16:09*	*1*

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

Job ID: 400-242724-1

Client Sample ID: TB-ROX-082923-8011-B
Date Collected: 08/29/23 12:00
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-8
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-D bromo-3-Chloropropane	ND	*+	0.031	0.018	ug/L		09/01/23 07:50	09/01/23 15:37	1
1,2-D bromoethane	ND	*+	0.021	0.016	ug/L		09/01/23 07:50	09/01/23 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*154*	*S1+*	*51 - 149*	*09/01/23 07:50*	*09/01/23 15:37*	*1*

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

Job ID: 400-242724-1

Client Sample ID: MW1-ROX-082923-EB
Date Collected: 08/29/23 08:10
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-9
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			09/08/23 19:02	1
Acrolein	ND		20	3.3	ug/L			09/08/23 19:02	1
Acrylonitrile	ND		10	2.8	ug/L			09/08/23 19:02	1
Benzene	ND		1.0	0.50	ug/L			09/08/23 19:02	1
Bromobenzene	ND		1.0	0.54	ug/L			09/08/23 19:02	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/08/23 19:02	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/08/23 19:02	1
Bromoform	ND		5.0	0.25	ug/L			09/08/23 19:02	1
Bromomethane	ND		1.0	0.98	ug/L			09/08/23 19:02	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/08/23 19:02	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/08/23 19:02	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/08/23 19:02	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/08/23 19:02	1
Chloroethane	ND		1.0	0.76	ug/L			09/08/23 19:02	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/08/23 19:02	1
Chloroform	ND		1.0	0.90	ug/L			09/08/23 19:02	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/08/23 19:02	1
Chloromethane	ND		1.0	0.90	ug/L			09/08/23 19:02	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/08/23 19:02	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/08/23 19:02	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/08/23 19:02	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/08/23 19:02	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/08/23 19:02	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/08/23 19:02	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/08/23 19:02	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/08/23 19:02	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/08/23 19:02	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/08/23 19:02	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/08/23 19:02	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/08/23 19:02	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/08/23 19:02	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/08/23 19:02	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/08/23 19:02	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/08/23 19:02	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/08/23 19:02	1
2-Hexanone	ND		25	1.4	ug/L			09/08/23 19:02	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/08/23 19:02	1
Methylene bromide	ND		5.0	0.22	ug/L			09/08/23 19:02	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/08/23 19:02	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/08/23 19:02	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/08/23 19:02	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/08/23 19:02	1
Naphthalene	ND		5.0	3.0	ug/L			09/08/23 19:02	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/08/23 19:02	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/08/23 19:02	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/08/23 19:02	1
o-Xylene	ND		5.0	0.60	ug/L			09/08/23 19:02	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/08/23 19:02	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/08/23 19:02	1

Client Sample ID: MW1-ROX-082923-EB
Date Collected: 08/29/23 08:10
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-9
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			09/08/23 19:02	1
Styrene	ND		1.0	1.0	ug/L			09/08/23 19:02	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/08/23 19:02	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/08/23 19:02	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/08/23 19:02	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/08/23 19:02	1
Toluene	ND		1.0	0.90	ug/L			09/08/23 19:02	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/08/23 19:02	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/08/23 19:02	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/08/23 19:02	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/08/23 19:02	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/08/23 19:02	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/08/23 19:02	1
Trichloroethene	ND		1.0	0.15	ug/L			09/08/23 19:02	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/08/23 19:02	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/08/23 19:02	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/08/23 19:02	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/08/23 19:02	1
Vinyl acetate	ND		25	0.93	ug/L			09/08/23 19:02	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/08/23 19:02	1
Xylenes, Total	ND		10	1.6	ug/L			09/08/23 19:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*09/08/23 19:02*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*09/08/23 19:02*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*09/08/23 19:02*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.094	ug/L		09/05/23 14:55	09/08/23 20:22	1
Acenaphthylene	ND		0.19	0.042	ug/L		09/05/23 14:55	09/08/23 20:22	1
Anthracene	ND		0.19	0.045	ug/L		09/05/23 14:55	09/08/23 20:22	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		09/05/23 14:55	09/08/23 20:22	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		09/05/23 14:55	09/08/23 20:22	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		09/05/23 14:55	09/08/23 20:22	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/05/23 14:55	09/08/23 20:22	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		09/05/23 14:55	09/08/23 20:22	1
Chrysene	ND		0.19	0.031	ug/L		09/05/23 14:55	09/08/23 20:22	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		09/05/23 14:55	09/08/23 20:22	1
Fluoranthene	ND		0.19	0.032	ug/L		09/05/23 14:55	09/08/23 20:22	1
Fluorene	ND		0.19	0.084	ug/L		09/05/23 14:55	09/08/23 20:22	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		09/05/23 14:55	09/08/23 20:22	1
Phenanthrene	ND		0.19	0.085	ug/L		09/05/23 14:55	09/08/23 20:22	1
Pyrene	ND		0.19	0.037	ug/L		09/05/23 14:55	09/12/23 12:56	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		09/05/23 14:55	09/08/23 20:22	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		09/05/23 14:55	09/08/23 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*92*		*18 - 147*	*09/05/23 14:55*	*09/08/23 20:22*	*1*
2-Fluorobiphenyl	*72*		*15 - 128*	*09/05/23 14:55*	*09/08/23 20:22*	*1*

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

Job ID: 400-242724-1

Client Sample ID: MW1-ROX-082923-EB

Date Collected: 08/29/23 08:10
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-9

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*58*		*10 - 144*	*09/05/23 14:55*	*09/08/23 20:22*	*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		09/05/23 14:55	09/07/23 22:08	1
Benzenethiol	ND	*- *1	9.5	1.6	ug/L		09/05/23 14:55	09/07/23 22:08	1
Benzoic acid	ND		28	6.9	ug/L		09/05/23 14:55	09/07/23 22:08	1
Benzyl alcohol	ND		9.5	1.9	ug/L		09/05/23 14:55	09/07/23 22:08	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		09/05/23 14:55	09/07/23 22:08	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		09/05/23 14:55	09/07/23 22:08	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		09/05/23 14:55	09/07/23 22:08	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		09/05/23 14:55	09/07/23 22:08	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		09/05/23 14:55	09/07/23 22:08	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		09/05/23 14:55	09/07/23 22:08	1
4-Chloroaniline	ND		9.5	3.2	ug/L		09/05/23 14:55	09/07/23 22:08	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		09/05/23 14:55	09/07/23 22:08	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		09/05/23 14:55	09/07/23 22:08	1
2-Chlorophenol	ND		9.5	2.1	ug/L		09/05/23 14:55	09/07/23 22:08	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		09/05/23 14:55	09/07/23 22:08	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		09/05/23 14:55	09/07/23 22:08	1
Dibenzofuran	ND		9.5	0.16	ug/L		09/05/23 14:55	09/07/23 22:08	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		09/05/23 14:55	09/07/23 22:08	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		09/05/23 14:55	09/07/23 22:08	1
Diethyl phthalate	ND		9.5	0.23	ug/L		09/05/23 14:55	09/07/23 22:08	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		09/05/23 14:55	09/07/23 22:08	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		09/05/23 14:55	09/07/23 22:08	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		09/05/23 14:55	09/07/23 22:08	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		09/05/23 14:55	09/07/23 22:08	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		09/05/23 14:55	09/07/23 22:08	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		09/05/23 14:55	09/07/23 22:08	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		09/05/23 14:55	09/07/23 22:08	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		09/05/23 14:55	09/07/23 22:08	1
1,4-Dioxane	ND		9.5	0.95	ug/L		09/05/23 14:55	09/07/23 22:08	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		09/05/23 14:55	09/07/23 22:08	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		09/05/23 14:55	09/07/23 22:08	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/05/23 14:55	09/07/23 22:08	1
Hexachloroethane	ND		9.5	4.0	ug/L		09/05/23 14:55	09/07/23 22:08	1
Indene	ND		9.5	0.95	ug/L		09/05/23 14:55	09/07/23 22:08	1
Isophorone	ND		9.5	0.13	ug/L		09/05/23 14:55	09/07/23 22:08	1
2-Methylphenol	ND		9.5	1.7	ug/L		09/05/23 14:55	09/07/23 22:08	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/05/23 14:55	09/07/23 22:08	1
2-Nitroaniline	ND		9.5	2.1	ug/L		09/05/23 14:55	09/07/23 22:08	1
3-Nitroaniline	ND		9.5	1.7	ug/L		09/05/23 14:55	09/07/23 22:08	1
4-Nitroaniline	ND		9.5	1.4	ug/L		09/05/23 14:55	09/07/23 22:08	1
Nitrobenzene	ND		9.5	0.12	ug/L		09/05/23 14:55	09/07/23 22:08	1
2-Nitrophenol	ND		9.5	4.9	ug/L		09/05/23 14:55	09/07/23 22:08	1
4-Nitrophenol	ND		9.5	2.0	ug/L		09/05/23 14:55	09/07/23 22:08	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		09/05/23 14:55	09/07/23 22:08	1

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

Job ID: 400-242724-1

Client Sample ID: MW1-ROX-082923-EB
Date Collected: 08/29/23 08:10
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-9
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	3.1	ug/L		09/05/23 14:55	09/07/23 22:08	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		09/05/23 14:55	09/07/23 22:08	1
Pentachlorophenol	ND		19	1.3	ug/L		09/05/23 14:55	09/07/23 22:08	1
Phenol	ND		9.5	2.5	ug/L		09/05/23 14:55	09/07/23 22:08	1
Pyridine	ND		9.5	3.0	ug/L		09/05/23 14:55	09/07/23 22:08	1
Quinoline	ND		9.5	4.3	ug/L		09/05/23 14:55	09/07/23 22:08	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		09/05/23 14:55	09/07/23 22:08	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		09/05/23 14:55	09/07/23 22:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*46 - 124*	*09/05/23 14:55*	*09/07/23 22:08*	*1*
2-Fluorophenol	*27*		*13 - 113*	*09/05/23 14:55*	*09/07/23 22:08*	*1*
Nitrobenzene-d5	*64*		*36 - 126*	*09/05/23 14:55*	*09/07/23 22:08*	*1*
Phenol-d5	*48*		*17 - 127*	*09/05/23 14:55*	*09/07/23 22:08*	*1*
Terphenyl-d14	*87*		*44 - 149*	*09/05/23 14:55*	*09/07/23 22:08*	*1*
2,4,6-Tribromophenol	*58*		*26 - 150*	*09/05/23 14:55*	*09/07/23 22:08*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND	*+	0.031	0.017	ug/L		09/01/23 07:50	09/01/23 15:59	1
1,2-D bromoethane	ND	*+	0.020	0.015	ug/L		09/01/23 07:50	09/01/23 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*135*		*51 - 149*	*09/01/23 07:50*	*09/01/23 15:59*	*1*

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

Job ID: 400-242724-1

Client Sample ID: MW1-ROX-082923
Date Collected: 08/29/23 09:25
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-10
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			09/07/23 18:24	1
Acrolein	ND		20	3.3	ug/L			09/07/23 18:24	1
Acrylonitrile	ND		10	2.8	ug/L			09/07/23 18:24	1
Benzene	ND		1.0	0.50	ug/L			09/07/23 18:24	1
Bromobenzene	ND		1.0	0.54	ug/L			09/07/23 18:24	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/07/23 18:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/07/23 18:24	1
Bromoform	ND		5.0	0.25	ug/L			09/07/23 18:24	1
Bromomethane	ND		1.0	0.98	ug/L			09/07/23 18:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/07/23 18:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/07/23 18:24	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/07/23 18:24	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/07/23 18:24	1
Chloroethane	ND		1.0	0.76	ug/L			09/07/23 18:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/07/23 18:24	1
Chloroform	ND		1.0	0.90	ug/L			09/07/23 18:24	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/07/23 18:24	1
Chloromethane	ND		1.0	0.90	ug/L			09/07/23 18:24	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/07/23 18:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/07/23 18:24	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/07/23 18:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/07/23 18:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/07/23 18:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/07/23 18:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/07/23 18:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/07/23 18:24	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/07/23 18:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/07/23 18:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 18:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 18:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 18:24	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/07/23 18:24	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/07/23 18:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/07/23 18:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/07/23 18:24	1
2-Hexanone	ND		25	1.4	ug/L			09/07/23 18:24	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/07/23 18:24	1
Methylene bromide	ND		5.0	0.22	ug/L			09/07/23 18:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/07/23 18:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/07/23 18:24	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/07/23 18:24	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/07/23 18:24	1
Naphthalene	ND		5.0	3.0	ug/L			09/07/23 18:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/07/23 18:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/07/23 18:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/07/23 18:24	1
o-Xylene	ND		5.0	0.60	ug/L			09/07/23 18:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/07/23 18:24	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/07/23 18:24	1

Client Sample ID: MW1-ROX-082923
Date Collected: 08/29/23 09:25
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-10
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			09/07/23 18:24	1
Styrene	ND		1.0	1.0	ug/L			09/07/23 18:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/07/23 18:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/07/23 18:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/07/23 18:24	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/07/23 18:24	1
Toluene	ND		1.0	0.90	ug/L			09/07/23 18:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/07/23 18:24	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/07/23 18:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/07/23 18:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/07/23 18:24	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/07/23 18:24	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/07/23 18:24	1
Trichloroethene	ND		1.0	0.15	ug/L			09/07/23 18:24	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/07/23 18:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/07/23 18:24	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/07/23 18:24	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/07/23 18:24	1
Vinyl acetate	ND		25	0.93	ug/L			09/07/23 18:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/07/23 18:24	1
Xylenes, Total	ND		10	1.6	ug/L			09/07/23 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*72 - 130*		*09/07/23 18:24*	*1*
Dibromofluoromethane	*110*		*75 - 126*		*09/07/23 18:24*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*09/07/23 18:24*	*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	0.094	ug/L		09/05/23 14:55	09/08/23 20:42	1
Acenaphthylene	ND		0.19	0.042	ug/L		09/05/23 14:55	09/08/23 20:42	1
Anthracene	ND		0.19	0.044	ug/L		09/05/23 14:55	09/08/23 20:42	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		09/05/23 14:55	09/08/23 20:42	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		09/05/23 14:55	09/08/23 20:42	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		09/05/23 14:55	09/08/23 20:42	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/05/23 14:55	09/08/23 20:42	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		09/05/23 14:55	09/08/23 20:42	1
Chrysene	ND		0.19	0.031	ug/L		09/05/23 14:55	09/08/23 20:42	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		09/05/23 14:55	09/08/23 20:42	1
Fluoranthene	ND		0.19	0.032	ug/L		09/05/23 14:55	09/08/23 20:42	1
Fluorene	ND		0.19	0.084	ug/L		09/05/23 14:55	09/08/23 20:42	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		09/05/23 14:55	09/08/23 20:42	1
Phenanthrene	ND		0.19	0.085	ug/L		09/05/23 14:55	09/08/23 20:42	1
Pyrene	ND		0.19	0.037	ug/L		09/05/23 14:55	09/12/23 13:17	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		09/05/23 14:55	09/08/23 20:42	1
2-Methylnaphthalene	ND		0.19	0.062	ug/L		09/05/23 14:55	09/08/23 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*76*		*18 - 147*	*09/05/23 14:55*	*09/08/23 20:42*	*1*
2-Fluorobiphenyl	*66*		*15 - 128*	*09/05/23 14:55*	*09/08/23 20:42*	*1*

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

Job ID: 400-242724-1

Client Sample ID: MW1-ROX-082923
Date Collected: 08/29/23 09:25
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-10
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	53		10 - 144	09/05/23 14:55	09/08/23 20:42	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		09/05/23 14:55	09/07/23 22:29	1
Benzenethiol	ND	*- *1	9.5	1.6	ug/L		09/05/23 14:55	09/07/23 22:29	1
Benzoic acid	ND		28	6.9	ug/L		09/05/23 14:55	09/07/23 22:29	1
Benzyl alcohol	ND		9.5	1.9	ug/L		09/05/23 14:55	09/07/23 22:29	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		09/05/23 14:55	09/07/23 22:29	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		09/05/23 14:55	09/07/23 22:29	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		09/05/23 14:55	09/07/23 22:29	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		09/05/23 14:55	09/07/23 22:29	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		09/05/23 14:55	09/07/23 22:29	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		09/05/23 14:55	09/07/23 22:29	1
4-Chloroaniline	ND		9.5	3.2	ug/L		09/05/23 14:55	09/07/23 22:29	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		09/05/23 14:55	09/07/23 22:29	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		09/05/23 14:55	09/07/23 22:29	1
2-Chlorophenol	ND		9.5	2.1	ug/L		09/05/23 14:55	09/07/23 22:29	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		09/05/23 14:55	09/07/23 22:29	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		09/05/23 14:55	09/07/23 22:29	1
Dibenzofuran	ND		9.5	0.16	ug/L		09/05/23 14:55	09/07/23 22:29	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		09/05/23 14:55	09/07/23 22:29	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		09/05/23 14:55	09/07/23 22:29	1
Diethyl phthalate	ND		9.5	0.23	ug/L		09/05/23 14:55	09/07/23 22:29	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		09/05/23 14:55	09/07/23 22:29	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		09/05/23 14:55	09/07/23 22:29	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		09/05/23 14:55	09/07/23 22:29	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		09/05/23 14:55	09/07/23 22:29	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		09/05/23 14:55	09/07/23 22:29	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		09/05/23 14:55	09/07/23 22:29	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		09/05/23 14:55	09/07/23 22:29	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		09/05/23 14:55	09/07/23 22:29	1
1,4-Dioxane	ND		9.5	0.95	ug/L		09/05/23 14:55	09/07/23 22:29	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		09/05/23 14:55	09/07/23 22:29	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		09/05/23 14:55	09/07/23 22:29	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/05/23 14:55	09/07/23 22:29	1
Hexachloroethane	ND		9.5	4.0	ug/L		09/05/23 14:55	09/07/23 22:29	1
Indene	ND		9.5	0.95	ug/L		09/05/23 14:55	09/07/23 22:29	1
Isophorone	ND		9.5	0.13	ug/L		09/05/23 14:55	09/07/23 22:29	1
2-Methylphenol	ND		9.5	1.7	ug/L		09/05/23 14:55	09/07/23 22:29	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/05/23 14:55	09/07/23 22:29	1
2-Nitroaniline	ND		9.5	2.1	ug/L		09/05/23 14:55	09/07/23 22:29	1
3-Nitroaniline	ND		9.5	1.7	ug/L		09/05/23 14:55	09/07/23 22:29	1
4-Nitroaniline	ND		9.5	1.4	ug/L		09/05/23 14:55	09/07/23 22:29	1
Nitrobenzene	ND		9.5	0.12	ug/L		09/05/23 14:55	09/07/23 22:29	1
2-Nitrophenol	ND		9.5	4.9	ug/L		09/05/23 14:55	09/07/23 22:29	1
4-Nitrophenol	ND		9.5	2.0	ug/L		09/05/23 14:55	09/07/23 22:29	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		09/05/23 14:55	09/07/23 22:29	1

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

Job ID: 400-242724-1

Client Sample ID: MW1-ROX-082923
Date Collected: 08/29/23 09:25
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-10
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		9.5	3.1	ug/L		09/05/23 14:55	09/07/23 22:29	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		09/05/23 14:55	09/07/23 22:29	1
Pentachlorophenol	ND		19	1.3	ug/L		09/05/23 14:55	09/07/23 22:29	1
Phenol	ND		9.5	2.5	ug/L		09/05/23 14:55	09/07/23 22:29	1
Pyridine	ND		9.5	3.0	ug/L		09/05/23 14:55	09/07/23 22:29	1
Quinoline	ND		9.5	4.3	ug/L		09/05/23 14:55	09/07/23 22:29	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		09/05/23 14:55	09/07/23 22:29	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		09/05/23 14:55	09/07/23 22:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*46 - 124*	*09/05/23 14:55*	*09/07/23 22:29*	*1*
2-Fluorophenol	*24*		*13 - 113*	*09/05/23 14:55*	*09/07/23 22:29*	*1*
Nitrobenzene-d5	*58*		*36 - 126*	*09/05/23 14:55*	*09/07/23 22:29*	*1*
Phenol-d5	*42*		*17 - 127*	*09/05/23 14:55*	*09/07/23 22:29*	*1*
Terphenyl-d14	*78*		*44 - 149*	*09/05/23 14:55*	*09/07/23 22:29*	*1*
2,4,6-Tribromophenol	*59*		*26 - 150*	*09/05/23 14:55*	*09/07/23 22:29*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND	*+	0.031	0.017	ug/L		09/01/23 07:50	09/01/23 16:20	1
1,2-D bromoethane	ND	*+	0.020	0.015	ug/L		09/01/23 07:50	09/01/23 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*124*		*51 - 149*	*09/01/23 07:50*	*09/01/23 16:20*	*1*

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

Job ID: 400-242724-1

Client Sample ID: ROST4PZG-ROX-082923
Date Collected: 08/29/23 10:35
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	11	J	25	10	ug/L			09/07/23 18:51	1
Acrolein	ND		20	3.3	ug/L			09/07/23 18:51	1
Acrylonitrile	ND		10	2.8	ug/L			09/07/23 18:51	1
Benzene	ND		1.0	0.50	ug/L			09/07/23 18:51	1
Bromobenzene	ND		1.0	0.54	ug/L			09/07/23 18:51	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/07/23 18:51	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/07/23 18:51	1
Bromoform	ND		5.0	0.25	ug/L			09/07/23 18:51	1
Bromomethane	ND		1.0	0.98	ug/L			09/07/23 18:51	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/07/23 18:51	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/07/23 18:51	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/07/23 18:51	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/07/23 18:51	1
Chloroethane	ND		1.0	0.76	ug/L			09/07/23 18:51	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/07/23 18:51	1
Chloroform	ND		1.0	0.90	ug/L			09/07/23 18:51	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/07/23 18:51	1
Chloromethane	ND		1.0	0.90	ug/L			09/07/23 18:51	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/07/23 18:51	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/07/23 18:51	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/07/23 18:51	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/07/23 18:51	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/07/23 18:51	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/07/23 18:51	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/07/23 18:51	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/07/23 18:51	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/07/23 18:51	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/07/23 18:51	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 18:51	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 18:51	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 18:51	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/07/23 18:51	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/07/23 18:51	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/07/23 18:51	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/07/23 18:51	1
2-Hexanone	ND		25	1.4	ug/L			09/07/23 18:51	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/07/23 18:51	1
Methylene bromide	ND		5.0	0.22	ug/L			09/07/23 18:51	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/07/23 18:51	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/07/23 18:51	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/07/23 18:51	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/07/23 18:51	1
Naphthalene	ND		5.0	3.0	ug/L			09/07/23 18:51	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/07/23 18:51	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/07/23 18:51	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/07/23 18:51	1
o-Xylene	ND		5.0	0.60	ug/L			09/07/23 18:51	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/07/23 18:51	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/07/23 18:51	1

Client Sample ID: ROST4PZG-ROX-082923
Date Collected: 08/29/23 10:35
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-11
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			09/07/23 18:51	1
Styrene	ND		1.0	1.0	ug/L			09/07/23 18:51	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/07/23 18:51	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/07/23 18:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/07/23 18:51	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/07/23 18:51	1
Toluene	ND		1.0	0.90	ug/L			09/07/23 18:51	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/07/23 18:51	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/07/23 18:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/07/23 18:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/07/23 18:51	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/07/23 18:51	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/07/23 18:51	1
Trichloroethene	ND		1.0	0.15	ug/L			09/07/23 18:51	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/07/23 18:51	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/07/23 18:51	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/07/23 18:51	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/07/23 18:51	1
Vinyl acetate	ND		25	0.93	ug/L			09/07/23 18:51	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/07/23 18:51	1
Xylenes, Total	ND		10	1.6	ug/L			09/07/23 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*09/07/23 18:51*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*09/07/23 18:51*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/07/23 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		0.19	0.093	ug/L		09/05/23 14:55	09/08/23 21:03	1
Acenaphthylene	ND		0.19	0.041	ug/L		09/05/23 14:55	09/08/23 21:03	1
Anthracene	ND		0.19	0.044	ug/L		09/05/23 14:55	09/08/23 21:03	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		09/05/23 14:55	09/08/23 21:03	1
Benzo[a]pyrene	ND		0.19	0.060	ug/L		09/05/23 14:55	09/08/23 21:03	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		09/05/23 14:55	09/08/23 21:03	1
Benzo[g,h,i]perylene	ND		0.19	0.025	ug/L		09/05/23 14:55	09/08/23 21:03	1
Benzo[k]fluoranthene	ND		0.19	0.058	ug/L		09/05/23 14:55	09/08/23 21:03	1
Chrysene	ND		0.19	0.031	ug/L		09/05/23 14:55	09/08/23 21:03	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		09/05/23 14:55	09/08/23 21:03	1
Fluoranthene	ND		0.19	0.032	ug/L		09/05/23 14:55	09/08/23 21:03	1
Fluorene	ND		0.19	0.084	ug/L		09/05/23 14:55	09/08/23 21:03	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		09/05/23 14:55	09/08/23 21:03	1
Phenanthrene	ND		0.19	0.085	ug/L		09/05/23 14:55	09/08/23 21:03	1
Pyrene	ND		0.19	0.037	ug/L		09/05/23 14:55	09/12/23 13:38	1
1-Methylnaphthalene	ND		0.19	0.075	ug/L		09/05/23 14:55	09/08/23 21:03	1
2-Methylnaphthalene	ND		0.19	0.062	ug/L		09/05/23 14:55	09/08/23 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*73*		*18 - 147*	*09/05/23 14:55*	*09/08/23 21:03*	*1*
2-Fluorobiphenyl	*65*		*15 - 128*	*09/05/23 14:55*	*09/08/23 21:03*	*1*

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

Job ID: 400-242724-1

Client Sample ID: ROST4PZG-ROX-082923
Date Collected: 08/29/23 10:35
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-11
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	52		10 - 144	09/05/23 14:55	09/08/23 21:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.4	3.6	ug/L		09/05/23 14:55	09/07/23 22:50	1
Benzenethiol	ND	*- *1	9.4	1.6	ug/L		09/05/23 14:55	09/07/23 22:50	1
Benzoic acid	ND		28	6.9	ug/L		09/05/23 14:55	09/07/23 22:50	1
Benzyl alcohol	ND		9.4	1.9	ug/L		09/05/23 14:55	09/07/23 22:50	1
Bis(2-chloroethoxy)methane	ND		9.4	0.15	ug/L		09/05/23 14:55	09/07/23 22:50	1
Bis(2-chloroethyl)ether	ND		9.4	2.5	ug/L		09/05/23 14:55	09/07/23 22:50	1
bis (2-chloroisopropyl) ether	ND		9.4	0.15	ug/L		09/05/23 14:55	09/07/23 22:50	1
Bis(2-ethylhexyl) phthalate	ND		9.4	4.7	ug/L		09/05/23 14:55	09/07/23 22:50	1
4-Bromophenyl phenyl ether	ND		9.4	0.19	ug/L		09/05/23 14:55	09/07/23 22:50	1
Butyl benzyl phthalate	ND		9.4	0.18	ug/L		09/05/23 14:55	09/07/23 22:50	1
4-Chloroaniline	ND		9.4	3.2	ug/L		09/05/23 14:55	09/07/23 22:50	1
4-Chloro-3-methylphenol	ND		9.4	3.6	ug/L		09/05/23 14:55	09/07/23 22:50	1
2-Chloronaphthalene	ND		9.4	0.13	ug/L		09/05/23 14:55	09/07/23 22:50	1
2-Chlorophenol	ND		9.4	2.1	ug/L		09/05/23 14:55	09/07/23 22:50	1
4-Chlorophenyl phenyl ether	ND		9.4	1.9	ug/L		09/05/23 14:55	09/07/23 22:50	1
Dibenz[a,h]acridine	ND		9.4	0.94	ug/L		09/05/23 14:55	09/07/23 22:50	1
Dibenzofuran	ND		9.4	0.16	ug/L		09/05/23 14:55	09/07/23 22:50	1
3,3'-Dichlorobenzidine	ND		9.4	2.4	ug/L		09/05/23 14:55	09/07/23 22:50	1
2,4-Dichlorophenol	ND		9.4	2.8	ug/L		09/05/23 14:55	09/07/23 22:50	1
Diethyl phthalate	ND		9.4	0.23	ug/L		09/05/23 14:55	09/07/23 22:50	1
2,4-Dimethylphenol	ND		9.4	3.3	ug/L		09/05/23 14:55	09/07/23 22:50	1
Dimethyl phthalate	ND		9.4	0.16	ug/L		09/05/23 14:55	09/07/23 22:50	1
Di-n-butyl phthalate	ND		9.4	2.5	ug/L		09/05/23 14:55	09/07/23 22:50	1
4,6-Dinitro-ortho-cresol	ND		9.4	1.5	ug/L		09/05/23 14:55	09/07/23 22:50	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		09/05/23 14:55	09/07/23 22:50	1
2,4-Dinitrotoluene	ND		9.4	1.8	ug/L		09/05/23 14:55	09/07/23 22:50	1
2,6-Dinitrotoluene	ND		9.4	1.8	ug/L		09/05/23 14:55	09/07/23 22:50	1
Di-n-octyl phthalate	ND		9.4	0.16	ug/L		09/05/23 14:55	09/07/23 22:50	1
1,4-Dioxane	ND		9.4	0.94	ug/L		09/05/23 14:55	09/07/23 22:50	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	0.94	ug/L		09/05/23 14:55	09/07/23 22:50	1
Hexachlorobenzene	ND		9.4	0.16	ug/L		09/05/23 14:55	09/07/23 22:50	1
Hexachlorocyclopentadiene	ND		19	2.4	ug/L		09/05/23 14:55	09/07/23 22:50	1
Hexachloroethane	ND		9.4	3.9	ug/L		09/05/23 14:55	09/07/23 22:50	1
Indene	ND		9.4	0.94	ug/L		09/05/23 14:55	09/07/23 22:50	1
Isophorone	ND		9.4	0.13	ug/L		09/05/23 14:55	09/07/23 22:50	1
2-Methylphenol	ND		9.4	1.7	ug/L		09/05/23 14:55	09/07/23 22:50	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/05/23 14:55	09/07/23 22:50	1
2-Nitroaniline	ND		9.4	2.1	ug/L		09/05/23 14:55	09/07/23 22:50	1
3-Nitroaniline	ND		9.4	1.7	ug/L		09/05/23 14:55	09/07/23 22:50	1
4-Nitroaniline	ND		9.4	1.4	ug/L		09/05/23 14:55	09/07/23 22:50	1
Nitrobenzene	ND		9.4	0.12	ug/L		09/05/23 14:55	09/07/23 22:50	1
2-Nitrophenol	ND		9.4	4.9	ug/L		09/05/23 14:55	09/07/23 22:50	1
4-Nitrophenol	ND		9.4	2.0	ug/L		09/05/23 14:55	09/07/23 22:50	1
N-Nitrosodimethylamine	ND		9.4	3.3	ug/L		09/05/23 14:55	09/07/23 22:50	1

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

Job ID: 400-242724-1

Client Sample ID: ROST4PZG-ROX-082923
Date Collected: 08/29/23 10:35
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-11
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		9.4	3.1	ug/L		09/05/23 14:55	09/07/23 22:50	1
N-Nitrosodiphenylamine	ND		9.4	0.17	ug/L		09/05/23 14:55	09/07/23 22:50	1
Pentachlorophenol	ND		19	1.3	ug/L		09/05/23 14:55	09/07/23 22:50	1
Phenol	ND		9.4	2.4	ug/L		09/05/23 14:55	09/07/23 22:50	1
Pyridine	ND		9.4	3.0	ug/L		09/05/23 14:55	09/07/23 22:50	1
Quinoline	ND		9.4	4.2	ug/L		09/05/23 14:55	09/07/23 22:50	1
2,4,5-Trichlorophenol	ND		9.4	3.5	ug/L		09/05/23 14:55	09/07/23 22:50	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		09/05/23 14:55	09/07/23 22:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*46 - 124*	*09/05/23 14:55*	*09/07/23 22:50*	*1*
2-Fluorophenol	*29*		*13 - 113*	*09/05/23 14:55*	*09/07/23 22:50*	*1*
Nitrobenzene-d5	*59*		*36 - 126*	*09/05/23 14:55*	*09/07/23 22:50*	*1*
Phenol-d5	*41*		*17 - 127*	*09/05/23 14:55*	*09/07/23 22:50*	*1*
Terphenyl-d14	*83*		*44 - 149*	*09/05/23 14:55*	*09/07/23 22:50*	*1*
2,4,6-Tribromophenol	*56*		*26 - 150*	*09/05/23 14:55*	*09/07/23 22:50*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND	*+	0.031	0.017	ug/L		09/01/23 07:50	09/01/23 17:02	1
1,2-D bromoethane	ND	*+	0.021	0.015	ug/L		09/01/23 07:50	09/01/23 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*148*		*51 - 149*	*09/01/23 07:50*	*09/01/23 17:02*	*1*

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

Job ID: 400-242724-1

Client Sample ID: P56-ROX-082923
Date Collected: 08/29/23 12:50
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**22**	**J**	25	10	ug/L			09/07/23 19:17	1
Acrolein	ND		20	3.3	ug/L			09/07/23 19:17	1
Acrylonitrile	ND		10	2.8	ug/L			09/07/23 19:17	1
Benzene	ND		1.0	0.50	ug/L			09/07/23 19:17	1
Bromobenzene	ND		1.0	0.54	ug/L			09/07/23 19:17	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/07/23 19:17	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/07/23 19:17	1
Bromoform	ND		5.0	0.25	ug/L			09/07/23 19:17	1
Bromomethane	ND		1.0	0.98	ug/L			09/07/23 19:17	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/07/23 19:17	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/07/23 19:17	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/07/23 19:17	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/07/23 19:17	1
Chloroethane	ND		1.0	0.76	ug/L			09/07/23 19:17	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/07/23 19:17	1
Chloroform	ND		1.0	0.90	ug/L			09/07/23 19:17	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/07/23 19:17	1
Chloromethane	ND		1.0	0.90	ug/L			09/07/23 19:17	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/07/23 19:17	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/07/23 19:17	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/07/23 19:17	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/07/23 19:17	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/07/23 19:17	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/07/23 19:17	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/07/23 19:17	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/07/23 19:17	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/07/23 19:17	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/07/23 19:17	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 19:17	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 19:17	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 19:17	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/07/23 19:17	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/07/23 19:17	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/07/23 19:17	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/07/23 19:17	1
2-Hexanone	ND		25	1.4	ug/L			09/07/23 19:17	1
Isopropylbenzene	**7.4**		1.0	0.53	ug/L			09/07/23 19:17	1
Methylene bromide	ND		5.0	0.22	ug/L			09/07/23 19:17	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/07/23 19:17	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/07/23 19:17	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/07/23 19:17	1
m-Xylene & p-Xylene	**6.6**		5.0	0.63	ug/L			09/07/23 19:17	1
Naphthalene	ND		5.0	3.0	ug/L			09/07/23 19:17	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/07/23 19:17	1
N-Propylbenzene	**7.3**		1.0	0.69	ug/L			09/07/23 19:17	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/07/23 19:17	1
o-Xylene	ND		5.0	0.60	ug/L			09/07/23 19:17	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/07/23 19:17	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/07/23 19:17	1

Client Sample ID: P56-ROX-082923
Date Collected: 08/29/23 12:50
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-12
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	**0.82**	**J**	1.0	0.70	ug/L			09/07/23 19:17	1
Styrene	ND		1.0	1.0	ug/L			09/07/23 19:17	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/07/23 19:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/07/23 19:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/07/23 19:17	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/07/23 19:17	1
Toluene	ND		1.0	0.90	ug/L			09/07/23 19:17	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/07/23 19:17	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/07/23 19:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/07/23 19:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/07/23 19:17	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/07/23 19:17	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/07/23 19:17	1
Trichloroethene	ND		1.0	0.15	ug/L			09/07/23 19:17	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/07/23 19:17	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/07/23 19:17	1
1,2,4-Trimethylbenzene	**1.6**		1.0	0.82	ug/L			09/07/23 19:17	1
1,3,5-Trimethylbenzene	**1.0**		1.0	0.56	ug/L			09/07/23 19:17	1
Vinyl acetate	ND		25	0.93	ug/L			09/07/23 19:17	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/07/23 19:17	1
Xylenes, Total	**6.6**	**J**	10	1.6	ug/L			09/07/23 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*09/07/23 19:17*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*09/07/23 19:17*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/07/23 19:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.40**		0.19	0.094	ug/L		09/05/23 14:55	09/08/23 21:24	1
Acenaphthylene	ND		0.19	0.042	ug/L		09/05/23 14:55	09/08/23 21:24	1
Anthracene	**0.072**	**J**	0.19	0.045	ug/L		09/05/23 14:55	09/08/23 21:24	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		09/05/23 14:55	09/08/23 21:24	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		09/05/23 14:55	09/08/23 21:24	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		09/05/23 14:55	09/08/23 21:24	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/05/23 14:55	09/08/23 21:24	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		09/05/23 14:55	09/08/23 21:24	1
Chrysene	ND		0.19	0.031	ug/L		09/05/23 14:55	09/08/23 21:24	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		09/05/23 14:55	09/08/23 21:24	1
Fluoranthene	ND		0.19	0.032	ug/L		09/05/23 14:55	09/08/23 21:24	1
Fluorene	**0.27**		0.19	0.085	ug/L		09/05/23 14:55	09/08/23 21:24	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		09/05/23 14:55	09/08/23 21:24	1
Phenanthrene	**0.52**		0.19	0.086	ug/L		09/05/23 14:55	09/08/23 21:24	1
Pyrene	ND		0.19	0.037	ug/L		09/05/23 14:55	09/12/23 13:59	1
1-Methylnaphthalene	**7.3**		0.19	0.076	ug/L		09/05/23 14:55	09/08/23 21:24	1
2-Methylnaphthalene	**6.8**		0.19	0.063	ug/L		09/05/23 14:55	09/08/23 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*72*		*18 - 147*	*09/05/23 14:55*	*09/08/23 21:24*	*1*
2-Fluorobiphenyl	*58*		*15 - 128*	*09/05/23 14:55*	*09/08/23 21:24*	*1*

Client Sample ID: P56-ROX-082923
Date Collected: 08/29/23 12:50
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-12
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*	*09/05/23 14:55*	*09/08/23 21:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		09/05/23 14:55	09/07/23 23:11	1
Benzenethiol	ND	*- *1	9.5	1.6	ug/L		09/05/23 14:55	09/07/23 23:11	1
Benzoic acid	ND		29	7.0	ug/L		09/05/23 14:55	09/07/23 23:11	1
Benzyl alcohol	ND		9.5	1.9	ug/L		09/05/23 14:55	09/07/23 23:11	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		09/05/23 14:55	09/07/23 23:11	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		09/05/23 14:55	09/07/23 23:11	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		09/05/23 14:55	09/07/23 23:11	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		09/05/23 14:55	09/07/23 23:11	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		09/05/23 14:55	09/07/23 23:11	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		09/05/23 14:55	09/07/23 23:11	1
4-Chloroaniline	ND		9.5	3.2	ug/L		09/05/23 14:55	09/07/23 23:11	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		09/05/23 14:55	09/07/23 23:11	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		09/05/23 14:55	09/07/23 23:11	1
2-Chlorophenol	ND		9.5	2.1	ug/L		09/05/23 14:55	09/07/23 23:11	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		09/05/23 14:55	09/07/23 23:11	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		09/05/23 14:55	09/07/23 23:11	1
Dibenzofuran	**0.33**	**J**	9.5	0.16	ug/L		09/05/23 14:55	09/07/23 23:11	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		09/05/23 14:55	09/07/23 23:11	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		09/05/23 14:55	09/07/23 23:11	1
Diethyl phthalate	ND		9.5	0.23	ug/L		09/05/23 14:55	09/07/23 23:11	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		09/05/23 14:55	09/07/23 23:11	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		09/05/23 14:55	09/07/23 23:11	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		09/05/23 14:55	09/07/23 23:11	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		09/05/23 14:55	09/07/23 23:11	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		09/05/23 14:55	09/07/23 23:11	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		09/05/23 14:55	09/07/23 23:11	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		09/05/23 14:55	09/07/23 23:11	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		09/05/23 14:55	09/07/23 23:11	1
1,4-Dioxane	ND		9.5	0.95	ug/L		09/05/23 14:55	09/07/23 23:11	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		09/05/23 14:55	09/07/23 23:11	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		09/05/23 14:55	09/07/23 23:11	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/05/23 14:55	09/07/23 23:11	1
Hexachloroethane	ND		9.5	4.0	ug/L		09/05/23 14:55	09/07/23 23:11	1
Indene	ND		9.5	0.95	ug/L		09/05/23 14:55	09/07/23 23:11	1
Isophorone	ND		9.5	0.13	ug/L		09/05/23 14:55	09/07/23 23:11	1
2-Methylphenol	ND		9.5	1.7	ug/L		09/05/23 14:55	09/07/23 23:11	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/05/23 14:55	09/07/23 23:11	1
2-Nitroaniline	ND		9.5	2.1	ug/L		09/05/23 14:55	09/07/23 23:11	1
3-Nitroaniline	ND		9.5	1.7	ug/L		09/05/23 14:55	09/07/23 23:11	1
4-Nitroaniline	ND		9.5	1.4	ug/L		09/05/23 14:55	09/07/23 23:11	1
Nitrobenzene	ND		9.5	0.12	ug/L		09/05/23 14:55	09/07/23 23:11	1
2-Nitrophenol	ND		9.5	5.0	ug/L		09/05/23 14:55	09/07/23 23:11	1
4-Nitrophenol	ND		9.5	2.0	ug/L		09/05/23 14:55	09/07/23 23:11	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		09/05/23 14:55	09/07/23 23:11	1

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

Job ID: 400-242724-1

Client Sample ID: P56-ROX-082923
Date Collected: 08/29/23 12:50
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-12
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		9.5	3.1	ug/L		09/05/23 14:55	09/07/23 23:11	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		09/05/23 14:55	09/07/23 23:11	1
Pentachlorophenol	ND		19	1.3	ug/L		09/05/23 14:55	09/07/23 23:11	1
Phenol	ND		9.5	2.5	ug/L		09/05/23 14:55	09/07/23 23:11	1
Pyridine	ND		9.5	3.1	ug/L		09/05/23 14:55	09/07/23 23:11	1
Quinoline	ND		9.5	4.3	ug/L		09/05/23 14:55	09/07/23 23:11	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		09/05/23 14:55	09/07/23 23:11	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		09/05/23 14:55	09/07/23 23:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*46 - 124*	*09/05/23 14:55*	*09/07/23 23:11*	*1*
2-Fluorophenol	*43*		*13 - 113*	*09/05/23 14:55*	*09/07/23 23:11*	*1*
Nitrobenzene-d5	*71*		*36 - 126*	*09/05/23 14:55*	*09/07/23 23:11*	*1*
Phenol-d5	*60*		*17 - 127*	*09/05/23 14:55*	*09/07/23 23:11*	*1*
Terphenyl-d14	*82*		*44 - 149*	*09/05/23 14:55*	*09/07/23 23:11*	*1*
2,4,6-Tribromophenol	*72*		*26 - 150*	*09/05/23 14:55*	*09/07/23 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-D bromo-3-Chloropropane	ND	*+	0.031	0.017	ug/L		09/01/23 07:50	09/01/23 17:24	1
1,2-D bromoethane	ND	*+	0.021	0.015	ug/L		09/01/23 07:50	09/01/23 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*142*		*51 - 149*	*09/01/23 07:50*	*09/01/23 17:24*	*1*

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

Job ID: 400-242724-1

Client Sample ID: P93A-ROX-082923
Date Collected: 08/29/23 13:40
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-13
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			09/07/23 19:44	1
Acrolein	ND		20	3.3	ug/L			09/07/23 19:44	1
Acrylonitrile	ND		10	2.8	ug/L			09/07/23 19:44	1
Benzene	**84**		1.0	0.50	ug/L			09/07/23 19:44	1
Bromobenzene	ND		1.0	0.54	ug/L			09/07/23 19:44	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/07/23 19:44	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/07/23 19:44	1
Bromoform	ND		5.0	0.25	ug/L			09/07/23 19:44	1
Bromomethane	ND		1.0	0.98	ug/L			09/07/23 19:44	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/07/23 19:44	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/07/23 19:44	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/07/23 19:44	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/07/23 19:44	1
Chloroethane	ND		1.0	0.76	ug/L			09/07/23 19:44	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/07/23 19:44	1
Chloroform	ND		1.0	0.90	ug/L			09/07/23 19:44	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/07/23 19:44	1
Chloromethane	ND		1.0	0.90	ug/L			09/07/23 19:44	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/07/23 19:44	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/07/23 19:44	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/07/23 19:44	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/07/23 19:44	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/07/23 19:44	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/07/23 19:44	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/07/23 19:44	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/07/23 19:44	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/07/23 19:44	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/07/23 19:44	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 19:44	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 19:44	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 19:44	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/07/23 19:44	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/07/23 19:44	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/07/23 19:44	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/07/23 19:44	1
2-Hexanone	ND		25	1.4	ug/L			09/07/23 19:44	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/07/23 19:44	1
Methylene bromide	ND		5.0	0.22	ug/L			09/07/23 19:44	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/07/23 19:44	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/07/23 19:44	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/07/23 19:44	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/07/23 19:44	1
Naphthalene	ND		5.0	3.0	ug/L			09/07/23 19:44	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/07/23 19:44	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/07/23 19:44	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/07/23 19:44	1
o-Xylene	ND		5.0	0.60	ug/L			09/07/23 19:44	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/07/23 19:44	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/07/23 19:44	1

Client Sample ID: P93A-ROX-082923
Date Collected: 08/29/23 13:40
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-13
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			09/07/23 19:44	1
Styrene	ND		1.0	1.0	ug/L			09/07/23 19:44	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/07/23 19:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/07/23 19:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/07/23 19:44	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/07/23 19:44	1
Toluene	ND		1.0	0.90	ug/L			09/07/23 19:44	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/07/23 19:44	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/07/23 19:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/07/23 19:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/07/23 19:44	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/07/23 19:44	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/07/23 19:44	1
Trichloroethene	ND		1.0	0.15	ug/L			09/07/23 19:44	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/07/23 19:44	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/07/23 19:44	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/07/23 19:44	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/07/23 19:44	1
Vinyl acetate	ND		25	0.93	ug/L			09/07/23 19:44	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/07/23 19:44	1
Xylenes, Total	ND		10	1.6	ug/L			09/07/23 19:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*09/07/23 19:44*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*09/07/23 19:44*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/07/23 19:44*	*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		09/05/23 14:55	09/08/23 21:45	1
Acenaphthylene	ND		0.19	0.042	ug/L		09/05/23 14:55	09/08/23 21:45	1
Anthracene	ND		0.19	0.045	ug/L		09/05/23 14:55	09/08/23 21:45	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		09/05/23 14:55	09/08/23 21:45	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		09/05/23 14:55	09/08/23 21:45	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		09/05/23 14:55	09/08/23 21:45	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/05/23 14:55	09/08/23 21:45	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		09/05/23 14:55	09/08/23 21:45	1
Chrysene	ND		0.19	0.031	ug/L		09/05/23 14:55	09/08/23 21:45	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		09/05/23 14:55	09/08/23 21:45	1
Fluoranthene	ND		0.19	0.032	ug/L		09/05/23 14:55	09/08/23 21:45	1
Fluorene	ND		0.19	0.085	ug/L		09/05/23 14:55	09/08/23 21:45	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		09/05/23 14:55	09/08/23 21:45	1
Phenanthrene	ND		0.19	0.086	ug/L		09/05/23 14:55	09/08/23 21:45	1
Pyrene	ND		0.19	0.037	ug/L		09/05/23 14:55	09/12/23 14:20	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		09/05/23 14:55	09/08/23 21:45	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		09/05/23 14:55	09/08/23 21:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*70*		*18 - 147*	*09/05/23 14:55*	*09/08/23 21:45*	*1*
2-Fluorobiphenyl	*61*		*15 - 128*	*09/05/23 14:55*	*09/08/23 21:45*	*1*

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

Job ID: 400-242724-1

Client Sample ID: P93A-ROX-082923
Date Collected: 08/29/23 13:40
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-13
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*50*		*10 - 144*	*09/05/23 14:55*	*09/08/23 21:45*	*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		09/05/23 14:55	09/07/23 23:32	1
Benzenethiol	ND	*- *1	9.5	1.6	ug/L		09/05/23 14:55	09/07/23 23:32	1
Benzoic acid	ND		29	6.9	ug/L		09/05/23 14:55	09/07/23 23:32	1
Benzyl alcohol	ND		9.5	1.9	ug/L		09/05/23 14:55	09/07/23 23:32	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		09/05/23 14:55	09/07/23 23:32	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		09/05/23 14:55	09/07/23 23:32	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		09/05/23 14:55	09/07/23 23:32	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		09/05/23 14:55	09/07/23 23:32	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		09/05/23 14:55	09/07/23 23:32	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		09/05/23 14:55	09/07/23 23:32	1
4-Chloroaniline	ND		9.5	3.2	ug/L		09/05/23 14:55	09/07/23 23:32	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		09/05/23 14:55	09/07/23 23:32	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		09/05/23 14:55	09/07/23 23:32	1
2-Chlorophenol	ND		9.5	2.1	ug/L		09/05/23 14:55	09/07/23 23:32	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		09/05/23 14:55	09/07/23 23:32	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		09/05/23 14:55	09/07/23 23:32	1
Dibenzofuran	ND		9.5	0.16	ug/L		09/05/23 14:55	09/07/23 23:32	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		09/05/23 14:55	09/07/23 23:32	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		09/05/23 14:55	09/07/23 23:32	1
Diethyl phthalate	ND		9.5	0.23	ug/L		09/05/23 14:55	09/07/23 23:32	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		09/05/23 14:55	09/07/23 23:32	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		09/05/23 14:55	09/07/23 23:32	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		09/05/23 14:55	09/07/23 23:32	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		09/05/23 14:55	09/07/23 23:32	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		09/05/23 14:55	09/07/23 23:32	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		09/05/23 14:55	09/07/23 23:32	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		09/05/23 14:55	09/07/23 23:32	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		09/05/23 14:55	09/07/23 23:32	1
1,4-Dioxane	ND		9.5	0.95	ug/L		09/05/23 14:55	09/07/23 23:32	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		09/05/23 14:55	09/07/23 23:32	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		09/05/23 14:55	09/07/23 23:32	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/05/23 14:55	09/07/23 23:32	1
Hexachloroethane	ND		9.5	4.0	ug/L		09/05/23 14:55	09/07/23 23:32	1
Indene	ND		9.5	0.95	ug/L		09/05/23 14:55	09/07/23 23:32	1
Isophorone	ND		9.5	0.13	ug/L		09/05/23 14:55	09/07/23 23:32	1
2-Methylphenol	ND		9.5	1.7	ug/L		09/05/23 14:55	09/07/23 23:32	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/05/23 14:55	09/07/23 23:32	1
2-Nitroaniline	ND		9.5	2.1	ug/L		09/05/23 14:55	09/07/23 23:32	1
3-Nitroaniline	ND		9.5	1.7	ug/L		09/05/23 14:55	09/07/23 23:32	1
4-Nitroaniline	ND		9.5	1.4	ug/L		09/05/23 14:55	09/07/23 23:32	1
Nitrobenzene	ND		9.5	0.12	ug/L		09/05/23 14:55	09/07/23 23:32	1
2-Nitrophenol	ND		9.5	5.0	ug/L		09/05/23 14:55	09/07/23 23:32	1
4-Nitrophenol	ND		9.5	2.0	ug/L		09/05/23 14:55	09/07/23 23:32	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		09/05/23 14:55	09/07/23 23:32	1

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

Job ID: 400-242724-1

Client Sample ID: P93A-ROX-082923
Date Collected: 08/29/23 13:40
Date Received: 08/30/23 09:30

Lab Sample ID: 400-242724-13
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		9.5	3.1	ug/L		09/05/23 14:55	09/07/23 23:32	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		09/05/23 14:55	09/07/23 23:32	1
Pentachlorophenol	ND		19	1.3	ug/L		09/05/23 14:55	09/07/23 23:32	1
Phenol	ND		9.5	2.5	ug/L		09/05/23 14:55	09/07/23 23:32	1
Pyridine	ND		9.5	3.0	ug/L		09/05/23 14:55	09/07/23 23:32	1
Quinoline	ND		9.5	4.3	ug/L		09/05/23 14:55	09/07/23 23:32	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		09/05/23 14:55	09/07/23 23:32	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		09/05/23 14:55	09/07/23 23:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*46 - 124*	*09/05/23 14:55*	*09/07/23 23:32*	*1*
2-Fluorophenol	*14*		*13 - 113*	*09/05/23 14:55*	*09/07/23 23:32*	*1*
Nitrobenzene-d5	*56*		*36 - 126*	*09/05/23 14:55*	*09/07/23 23:32*	*1*
Phenol-d5	*26*		*17 - 127*	*09/05/23 14:55*	*09/07/23 23:32*	*1*
Terphenyl-d14	*71*		*44 - 149*	*09/05/23 14:55*	*09/07/23 23:32*	*1*
2,4,6-Tribromophenol	*50*		*26 - 150*	*09/05/23 14:55*	*09/07/23 23:32*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND	*+	0.031	0.017	ug/L		09/01/23 07:50	09/01/23 17:45	1
1,2-D bromoethane	ND	*+	0.021	0.015	ug/L		09/01/23 07:50	09/01/23 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*140*		*51 - 149*	*09/01/23 07:50*	*09/01/23 17:45*	*1*

Definitions/Glossary

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

Job ID: 400-242724-1

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.
*1	LCS/LCSD 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.

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
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: 400-242724-1

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)
400-242724-1	TB-ROX-082923-8260-A	102	107	99
400-242724-3	MW26-ROX-082923	100	108	97
400-242724-4	MW6C-ROX-082923	101	106	100
400-242724-4 - RA	MW6C-ROX-082923	103	107	98
400-242724-4 MS	MW6C-ROX-082923	102	103	100
400-242724-4 MSD	MW6C-ROX-082923	105	106	101
400-242724-5	MW6A-ROX-082923	100	109	99
400-242724-6	MW6D-ROX-082923	101	109	98
400-242724-7	TB-ROX-082923-8260-B	103	109	100
400-242724-9	MW1-ROX-082923-EB	102	109	99
400-242724-10	MW1-ROX-082923	100	110	98
400-242724-11	ROST4PZG-ROX-082923	103	105	101
400-242724-12	P56-ROX-082923	104	104	101
400-242724-13	P93A-ROX-082923	101	106	101
LCS 400-640044/1002	Lab Control Sample	104	107	101
LCS 400-640194/1002	Lab Control Sample	101	104	99
MB 400-640044/4	Method Blank	101	108	99
MB 400-640194/4	Method Blank	100	108	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)
400-242724-3	MW26-ROX-082923	80	37	73	51	100	58
400-242724-4	MW6C-ROX-082923	51	33	48	45	57	54
400-242724-4 MS	MW6C-ROX-082923	84	46	77	67	89	78
400-242724-4 MSD	MW6C-ROX-082923	77	56	73	69	87	75
400-242724-5	MW6A-ROX-082923	63	26	58	44	73	62
400-242724-6	MW6D-ROX-082923	70	29	63	48	80	62
400-242724-9	MW1-ROX-082923-EB	70	27	64	48	87	58
400-242724-10	MW1-ROX-082923	66	24	58	42	78	59
400-242724-11	ROST4PZG-ROX-082923	65	29	59	41	83	56
400-242724-12	P56-ROX-082923	75	43	71	60	82	72
400-242724-13	P93A-ROX-082923	62	14	56	26	71	50
LCS 400-639760/14-A	Lab Control Sample	66	30	59	47	77	51
LCS 400-639760/2-A	Lab Control Sample	83	64	76	75	87	76
LCSD 400-639760/15-A	Lab Control Sample Dup	84	69	76	81	98	69
MB 400-639760/1-A	Method Blank	80	48	73	69	89	61

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5

Client: AECOM Technical Services Inc.
Job ID: 400-242724-1
Project/Site: ROXANA MONTHLY GW

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)
400-242724-3	MW26-ROX-082923	95	79	61
400-242724-4	MW6C-ROX-082923	80	76	61
400-242724-4 MS	MW6C-ROX-082923	78	78	58
400-242724-4 MSD	MW6C-ROX-082923	75	77	59
400-242724-5	MW6A-ROX-082923	66	62	54
400-242724-5 - RERA	MW6A-ROX-082923	77	76	78
400-242724-6	MW6D-ROX-082923	76	70	57
400-242724-9	MW1-ROX-082923-EB	92	72	58
400-242724-10	MW1-ROX-082923	76	66	53
400-242724-11	ROST4PZG-ROX-082923	73	65	52
400-242724-12	P56-ROX-082923	72	58	60
400-242724-13	P93A-ROX-082923	70	61	50
LCS 400-639760/16-A	Lab Control Sample	84	76	61
LCS 400-640651/19-A	Lab Control Sample	112	91	66
LCSD 400-639760/17-A	Lab Control Sample Dup	84	73	58
LCSD 400-640651/20-A	Lab Control Sample Dup	112	94	67
MB 400-639760/1-A	Method Blank	96	83	63
MB 400-640651/1-A	Method Blank	94	75	69

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)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-242724-2	TB-ROX-082923-8011-A	140
400-242724-3	MW26-ROX-082923	148
400-242724-4	MW6C-ROX-082923	154 S1+
400-242724-4 MS	MW6C-ROX-082923	146
400-242724-4 MSD	MW6C-ROX-082923	139
400-242724-5	MW6A-ROX-082923	146
400-242724-6	MW6D-ROX-082923	142
400-242724-8	TB-ROX-082923-8011-B	154 S1+
400-242724-9	MW1-ROX-082923-EB	135
400-242724-10	MW1-ROX-082923	124
400-242724-11	ROST4PZG-ROX-082923	148
400-242724-12	P56-ROX-082923	142
400-242724-13	P93A-ROX-082923	140
LCS 400-639353/2-A	Lab Control Sample	149
LCSD 400-639353/3-A	Lab Control Sample Dup	164 S1+
MB 400-639353/1-A	Method Blank	150 S1+

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-242724-1

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: 400-242724-1

Client Sample ID: TB-ROX-082923-8260-A
Lab Sample ID: 400-242724-1
Date Collected: 08/29/23 12:00
Matrix: Water
Date Received: 08/30/23 09:30

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	640194	09/08/23 16:47	BPO	EET PEN

Client Sample ID: TB-ROX-082923-8011-A
Lab Sample ID: 400-242724-2
Date Collected: 08/29/23 12:00
Matrix: Water
Date Received: 08/30/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			33.6 mL	35 mL	639353	08/31/23 15:18	PG	EET PEN
Total/NA	Analysis	8011		1			639478	09/01/23 13:09	PG	EET PEN

Client Sample ID: MW26-ROX-082923
Lab Sample ID: 400-242724-3
Date Collected: 08/29/23 09:20
Matrix: Water
Date Received: 08/30/23 09:30

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	640194	09/08/23 17:14	BPO	EET PEN
Total/NA	Prep	3520C			254.4 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640111	09/07/23 21:05	S1B	EET PEN
Total/NA	Prep	3520C			254.4 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640207	09/08/23 19:20	S1B	EET PEN
Total/NA	Prep	3520C			254.4 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 11:32	TH	EET PEN
Total/NA	Prep	8011			34 mL	35 mL	639353	09/01/23 07:50	PG	EET PEN
Total/NA	Analysis	8011		1			639478	09/01/23 13:30	PG	EET PEN

Client Sample ID: MW6C-ROX-082923
Lab Sample ID: 400-242724-4
Date Collected: 08/29/23 11:00
Matrix: Water
Date Received: 08/30/23 09:30

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	640044	09/07/23 12:31	BPO	EET PEN
Total/NA	Analysis	8260D	RA	1	5 mL	5 mL	640194	09/08/23 17:41	BPO	EET PEN
Total/NA	Prep	3520C			251.2 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640111	09/07/23 20:43	S1B	EET PEN
Total/NA	Prep	3520C			251.2 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640207	09/08/23 18:59	S1B	EET PEN
Total/NA	Prep	3520C			251.2 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	642127	09/21/23 16:50	KJA	EET PEN
Total/NA	Prep	8011			33.4 mL	35 mL	639353	09/01/23 07:50	PG	EET PEN
Total/NA	Analysis	8011		1			639478	09/01/23 13:51	PG	EET PEN

Client Sample ID: MW6A-ROX-082923

Lab Sample ID: 400-242724-5

Date Collected: 08/29/23 12:20

Matrix: Water

Date Received: 08/30/23 09:30

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	640194	09/08/23 18:08	BPO	EET PEN
Total/NA	Prep	3520C			248 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640111	09/07/23 21:26	S1B	EET PEN
Total/NA	Prep	3520C			248 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640207	09/08/23 19:40	S1B	EET PEN
Total/NA	Prep	3520C			248 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 12:14	TH	EET PEN
Total/NA	Prep	3520C	RERA		256.4 mL	1 mL	640651	09/13/23 10:04	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	641154	09/15/23 18:26	KJA	EET PEN
Total/NA	Prep	8011			34.5 mL	35 mL	639353	09/01/23 07:50	PG	EET PEN
Total/NA	Analysis	8011		1			639478	09/01/23 14:55	PG	EET PEN

Client Sample ID: MW6D-ROX-082923

Lab Sample ID: 400-242724-6

Date Collected: 08/29/23 13:30

Matrix: Water

Date Received: 08/30/23 09:30

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	640194	09/08/23 18:35	BPO	EET PEN
Total/NA	Prep	3520C			249.6 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640111	09/07/23 21:47	S1B	EET PEN
Total/NA	Prep	3520C			249.6 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640207	09/08/23 20:01	S1B	EET PEN
Total/NA	Prep	3520C			249.6 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 12:35	TH	EET PEN
Total/NA	Prep	8011			34.2 mL	35 mL	639353	09/01/23 07:50	PG	EET PEN
Total/NA	Analysis	8011		1			639478	09/01/23 15:16	PG	EET PEN

Client Sample ID: TB-ROX-082923-8260-B

Lab Sample ID: 400-242724-7

Date Collected: 08/29/23 12:00

Matrix: Water

Date Received: 08/30/23 09:30

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	640044	09/07/23 16:09	BPO	EET PEN

Client Sample ID: TB-ROX-082923-8011-B

Lab Sample ID: 400-242724-8

Date Collected: 08/29/23 12:00

Matrix: Water

Date Received: 08/30/23 09:30

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	639353	09/01/23 07:50	PG	EET PEN
Total/NA	Analysis	8011		1			639478	09/01/23 15:37	PG	EET PEN

Client Sample ID: MW1-ROX-082923-EB

Lab Sample ID: 400-242724-9

Date Collected: 08/29/23 08:10

Matrix: Water

Date Received: 08/30/23 09:30

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	640194	09/08/23 19:02	BPO	EET PEN
Total/NA	Prep	3520C			263.6 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640111	09/07/23 22:08	S1B	EET PEN
Total/NA	Prep	3520C			263.6 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640207	09/08/23 20:22	S1B	EET PEN
Total/NA	Prep	3520C			263.6 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 12:56	TH	EET PEN
Total/NA	Prep	8011			34.2 mL	35 mL	639353	09/01/23 07:50	PG	EET PEN
Total/NA	Analysis	8011		1			639478	09/01/23 15:59	PG	EET PEN

Client Sample ID: MW1-ROX-082923

Lab Sample ID: 400-242724-10

Date Collected: 08/29/23 09:25

Matrix: Water

Date Received: 08/30/23 09:30

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	640044	09/07/23 18:24	BPO	EET PEN
Total/NA	Prep	3520C			264.2 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640111	09/07/23 22:29	S1B	EET PEN
Total/NA	Prep	3520C			264.2 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640207	09/08/23 20:42	S1B	EET PEN
Total/NA	Prep	3520C			264.2 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 13:17	TH	EET PEN
Total/NA	Prep	8011			34.4 mL	35 mL	639353	09/01/23 07:50	PG	EET PEN
Total/NA	Analysis	8011		1			639478	09/01/23 16:20	PG	EET PEN

Client Sample ID: ROST4PZG-ROX-082923

Lab Sample ID: 400-242724-11

Date Collected: 08/29/23 10:35

Matrix: Water

Date Received: 08/30/23 09:30

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	640044	09/07/23 18:51	BPO	EET PEN
Total/NA	Prep	3520C			266.2 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640111	09/07/23 22:50	S1B	EET PEN
Total/NA	Prep	3520C			266.2 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640207	09/08/23 21:03	S1B	EET PEN
Total/NA	Prep	3520C			266.2 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 13:38	TH	EET PEN
Total/NA	Prep	8011			34.1 mL	35 mL	639353	09/01/23 07:50	PG	EET PEN
Total/NA	Analysis	8011		1			639478	09/01/23 17:02	PG	EET PEN

Client Sample ID: P56-ROX-082923

Lab Sample ID: 400-242724-12

Date Collected: 08/29/23 12:50

Matrix: Water

Date Received: 08/30/23 09:30

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	640044	09/07/23 19:17	BPO	EET PEN
Total/NA	Prep	3520C			262.2 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640111	09/07/23 23:11	S1B	EET PEN
Total/NA	Prep	3520C			262.2 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640207	09/08/23 21:24	S1B	EET PEN
Total/NA	Prep	3520C			262.2 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 13:59	TH	EET PEN
Total/NA	Prep	8011			34.1 mL	35 mL	639353	09/01/23 07:50	PG	EET PEN
Total/NA	Analysis	8011		1			639478	09/01/23 17:24	PG	EET PEN

Client Sample ID: P93A-ROX-082923

Lab Sample ID: 400-242724-13

Date Collected: 08/29/23 13:40

Matrix: Water

Date Received: 08/30/23 09:30

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	640044	09/07/23 19:44	BPO	EET PEN
Total/NA	Prep	3520C			262.6 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640111	09/07/23 23:32	S1B	EET PEN
Total/NA	Prep	3520C			262.6 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640207	09/08/23 21:45	S1B	EET PEN
Total/NA	Prep	3520C			262.6 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 14:20	TH	EET PEN
Total/NA	Prep	8011			34.1 mL	35 mL	639353	09/01/23 07:50	PG	EET PEN
Total/NA	Analysis	8011		1			639478	09/01/23 17:45	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-639353/1-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	639353	08/31/23 14:48	PG	EET PEN
Total/NA	Analysis	8011		1			639362	08/31/23 17:10	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-639760/1-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	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640111	09/07/23 18:36	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640207	09/08/23 15:52	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-242724-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-640044/4
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	640044	09/07/23 11:37	BPO	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-640194/4
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	640194	09/08/23 10:52	BPO	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-640651/1-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	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641154	09/15/23 16:40	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-639353/2-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	639353	08/31/23 14:48	PG	EET PEN
Total/NA	Analysis	8011		1			639362	08/31/23 17:32	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-639760/14-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	639760	09/05/23 14:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640111	09/07/23 18:57	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-639760/16-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	3520C			250 mL	1 mL	639760	09/05/23 14:56	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640207	09/08/23 17:36	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-242724-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-639760/2-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	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640111	09/07/23 19:40	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640044/1002
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	640044	09/07/23 10:20	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640194/1002
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	640194	09/08/23 09:44	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640651/19-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	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641090	09/14/23 20:05	TH	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-639353/3-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	639353	08/31/23 14:48	PG	EET PEN
Total/NA	Analysis	8011		1			639362	08/31/23 17:53	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-639760/15-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	3520C			250 mL	1 mL	639760	09/05/23 14:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640111	09/07/23 19:19	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-639760/17-A

Date Collected: N/A
Matrix: Water
Date Received: N/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	639760	09/05/23 14:56	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640207	09/08/23 17:57	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-640651/20-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	640651	09/12/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641090	09/14/23 20:25	TH	EET PEN

Client Sample ID: MW6C-ROX-082923
Lab Sample ID: 400-242724-4 MS

Date Collected: 08/29/23 11:00
Matrix: Water
Date Received: 08/30/23 09:30

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	640044	09/07/23 14:20	BPO	EET PEN
Total/NA	Prep	3520C			254.8 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640111	09/07/23 20:01	S1B	EET PEN
Total/NA	Prep	3520C			254.8 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	640207	09/08/23 18:18	S1B	EET PEN
Total/NA	Prep	8011			34.2 mL	35 mL	639353	09/01/23 07:50	PG	EET PEN
Total/NA	Analysis	8011		1			639478	09/01/23 14:13	PG	EET PEN

Client Sample ID: MW6C-ROX-082923
Lab Sample ID: 400-242724-4 MSD

Date Collected: 08/29/23 11:00
Matrix: Water
Date Received: 08/30/23 09:30

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	640044	09/07/23 14:47	BPO	EET PEN
Total/NA	Prep	3520C			254.8 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640111	09/07/23 20:22	S1B	EET PEN
Total/NA	Prep	3520C			254.8 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	640207	09/08/23 18:38	S1B	EET PEN
Total/NA	Prep	8011			34.2 mL	35 mL	639353	09/01/23 07:50	PG	EET PEN
Total/NA	Analysis	8011		1			639478	09/01/23 14:34	PG	EET PEN

Laboratory References:
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 640044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242724-4	MW6C-ROX-082923	Total/NA	Water	8260D	
400-242724-7	TB-ROX-082923-8260-B	Total/NA	Water	8260D	
400-242724-10	MW1-ROX-082923	Total/NA	Water	8260D	
400-242724-11	ROST4PZG-ROX-082923	Total/NA	Water	8260D	
400-242724-12	P56-ROX-082923	Total/NA	Water	8260D	
400-242724-13	P93A-ROX-082923	Total/NA	Water	8260D	
MB 400-640044/4	Method Blank	Total/NA	Water	8260D	
LCS 400-640044/1002	Lab Control Sample	Total/NA	Water	8260D	
400-242724-4 MS	MW6C-ROX-082923	Total/NA	Water	8260D	
400-242724-4 MSD	MW6C-ROX-082923	Total/NA	Water	8260D	

Analysis Batch: 640194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242724-1	TB-ROX-082923-8260-A	Total/NA	Water	8260D	
400-242724-3	MW26-ROX-082923	Total/NA	Water	8260D	
400-242724-4 - RA	MW6C-ROX-082923	Total/NA	Water	8260D	
400-242724-5	MW6A-ROX-082923	Total/NA	Water	8260D	
400-242724-6	MW6D-ROX-082923	Total/NA	Water	8260D	
400-242724-9	MW1-ROX-082923-EB	Total/NA	Water	8260D	
MB 400-640194/4	Method Blank	Total/NA	Water	8260D	
LCS 400-640194/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 639760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242724-3	MW26-ROX-082923	Total/NA	Water	3520C	
400-242724-4	MW6C-ROX-082923	Total/NA	Water	3520C	
400-242724-5	MW6A-ROX-082923	Total/NA	Water	3520C	
400-242724-6	MW6D-ROX-082923	Total/NA	Water	3520C	
400-242724-9	MW1-ROX-082923-EB	Total/NA	Water	3520C	
400-242724-10	MW1-ROX-082923	Total/NA	Water	3520C	
400-242724-11	ROST4PZG-ROX-082923	Total/NA	Water	3520C	
400-242724-12	P56-ROX-082923	Total/NA	Water	3520C	
400-242724-13	P93A-ROX-082923	Total/NA	Water	3520C	
MB 400-639760/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-639760/14-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-639760/16-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-639760/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-639760/15-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-639760/17-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-242724-4 MS	MW6C-ROX-082923	Total/NA	Water	3520C	
400-242724-4 MSD	MW6C-ROX-082923	Total/NA	Water	3520C	

Analysis Batch: 640111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242724-3	MW26-ROX-082923	Total/NA	Water	8270E	639760
400-242724-4	MW6C-ROX-082923	Total/NA	Water	8270E	639760
400-242724-5	MW6A-ROX-082923	Total/NA	Water	8270E	639760
400-242724-6	MW6D-ROX-082923	Total/NA	Water	8270E	639760
400-242724-9	MW1-ROX-082923-EB	Total/NA	Water	8270E	639760

GC/MS Semi VOA (Continued)

Analysis Batch: 640111 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242724-10	MW1-ROX-082923	Total/NA	Water	8270E	639760
400-242724-11	ROST4PZG-ROX-082923	Total/NA	Water	8270E	639760
400-242724-12	P56-ROX-082923	Total/NA	Water	8270E	639760
400-242724-13	P93A-ROX-082923	Total/NA	Water	8270E	639760
MB 400-639760/1-A	Method Blank	Total/NA	Water	8270E	639760
LCS 400-639760/14-A	Lab Control Sample	Total/NA	Water	8270E	639760
LCS 400-639760/2-A	Lab Control Sample	Total/NA	Water	8270E	639760
LCSD 400-639760/15-A	Lab Control Sample Dup	Total/NA	Water	8270E	639760
400-242724-4 MS	MW6C-ROX-082923	Total/NA	Water	8270E	639760
400-242724-4 MSD	MW6C-ROX-082923	Total/NA	Water	8270E	639760

Analysis Batch: 640207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242724-3	MW26-ROX-082923	Total/NA	Water	8270E SIM	639760
400-242724-4	MW6C-ROX-082923	Total/NA	Water	8270E SIM	639760
400-242724-5	MW6A-ROX-082923	Total/NA	Water	8270E SIM	639760
400-242724-6	MW6D-ROX-082923	Total/NA	Water	8270E SIM	639760
400-242724-9	MW1-ROX-082923-EB	Total/NA	Water	8270E SIM	639760
400-242724-10	MW1-ROX-082923	Total/NA	Water	8270E SIM	639760
400-242724-11	ROST4PZG-ROX-082923	Total/NA	Water	8270E SIM	639760
400-242724-12	P56-ROX-082923	Total/NA	Water	8270E SIM	639760
400-242724-13	P93A-ROX-082923	Total/NA	Water	8270E SIM	639760
MB 400-639760/1-A	Method Blank	Total/NA	Water	8270E SIM	639760
LCS 400-639760/16-A	Lab Control Sample	Total/NA	Water	8270E SIM	639760
LCSD 400-639760/17-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	639760
400-242724-4 MS	MW6C-ROX-082923	Total/NA	Water	8270E SIM	639760
400-242724-4 MSD	MW6C-ROX-082923	Total/NA	Water	8270E SIM	639760

Analysis Batch: 640637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242724-3	MW26-ROX-082923	Total/NA	Water	8270E SIM	639760
400-242724-5	MW6A-ROX-082923	Total/NA	Water	8270E SIM	639760
400-242724-6	MW6D-ROX-082923	Total/NA	Water	8270E SIM	639760
400-242724-9	MW1-ROX-082923-EB	Total/NA	Water	8270E SIM	639760
400-242724-10	MW1-ROX-082923	Total/NA	Water	8270E SIM	639760
400-242724-11	ROST4PZG-ROX-082923	Total/NA	Water	8270E SIM	639760
400-242724-12	P56-ROX-082923	Total/NA	Water	8270E SIM	639760
400-242724-13	P93A-ROX-082923	Total/NA	Water	8270E SIM	639760

Prep Batch: 640651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242724-5 - RERA	MW6A-ROX-082923	Total/NA	Water	3520C	
MB 400-640651/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-640651/19-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-640651/20-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 641090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-640651/19-A	Lab Control Sample	Total/NA	Water	8270E SIM	640651
LCSD 400-640651/20-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	640651

GC/MS Semi VOA

Analysis Batch: 641154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242724-5 - RERA	MW6A-ROX-082923	Total/NA	Water	8270E SIM	640651
MB 400-640651/1-A	Method Blank	Total/NA	Water	8270E SIM	640651

Analysis Batch: 642127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242724-4	MW6C-ROX-082923	Total/NA	Water	8270E SIM	639760

GC Semi VOA

Prep Batch: 639353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242724-2	TB-ROX-082923-8011-A	Total/NA	Water	8011	
400-242724-3	MW26-ROX-082923	Total/NA	Water	8011	
400-242724-4	MW6C-ROX-082923	Total/NA	Water	8011	
400-242724-5	MW6A-ROX-082923	Total/NA	Water	8011	
400-242724-6	MW6D-ROX-082923	Total/NA	Water	8011	
400-242724-8	TB-ROX-082923-8011-B	Total/NA	Water	8011	
400-242724-9	MW1-ROX-082923-EB	Total/NA	Water	8011	
400-242724-10	MW1-ROX-082923	Total/NA	Water	8011	
400-242724-11	ROST4PZG-ROX-082923	Total/NA	Water	8011	
400-242724-12	P56-ROX-082923	Total/NA	Water	8011	
400-242724-13	P93A-ROX-082923	Total/NA	Water	8011	
MB 400-639353/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-639353/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-639353/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-242724-4 MS	MW6C-ROX-082923	Total/NA	Water	8011	
400-242724-4 MSD	MW6C-ROX-082923	Total/NA	Water	8011	

Analysis Batch: 639362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-639353/1-A	Method Blank	Total/NA	Water	8011	639353
LCS 400-639353/2-A	Lab Control Sample	Total/NA	Water	8011	639353
LCSD 400-639353/3-A	Lab Control Sample Dup	Total/NA	Water	8011	639353

Analysis Batch: 639478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242724-2	TB-ROX-082923-8011-A	Total/NA	Water	8011	639353
400-242724-3	MW26-ROX-082923	Total/NA	Water	8011	639353
400-242724-4	MW6C-ROX-082923	Total/NA	Water	8011	639353
400-242724-5	MW6A-ROX-082923	Total/NA	Water	8011	639353
400-242724-6	MW6D-ROX-082923	Total/NA	Water	8011	639353
400-242724-8	TB-ROX-082923-8011-B	Total/NA	Water	8011	639353
400-242724-9	MW1-ROX-082923-EB	Total/NA	Water	8011	639353
400-242724-10	MW1-ROX-082923	Total/NA	Water	8011	639353
400-242724-11	ROST4PZG-ROX-082923	Total/NA	Water	8011	639353
400-242724-12	P56-ROX-082923	Total/NA	Water	8011	639353
400-242724-13	P93A-ROX-082923	Total/NA	Water	8011	639353
400-242724-4 MS	MW6C-ROX-082923	Total/NA	Water	8011	639353
400-242724-4 MSD	MW6C-ROX-082923	Total/NA	Water	8011	639353

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

Lab Sample ID: MB 400-640044/4
Matrix: Water
Analysis Batch: 640044

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			09/07/23 11:37	1
Acrolein	ND		20	3.3	ug/L			09/07/23 11:37	1
Acrylonitrile	ND		10	2.8	ug/L			09/07/23 11:37	1
Benzene	ND		1.0	0.50	ug/L			09/07/23 11:37	1
Bromobenzene	ND		1.0	0.54	ug/L			09/07/23 11:37	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/07/23 11:37	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/07/23 11:37	1
Bromoform	ND		5.0	0.25	ug/L			09/07/23 11:37	1
Bromomethane	ND		1.0	0.98	ug/L			09/07/23 11:37	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/07/23 11:37	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/07/23 11:37	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/07/23 11:37	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/07/23 11:37	1
Chloroethane	ND		1.0	0.76	ug/L			09/07/23 11:37	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/07/23 11:37	1
Chloroform	ND		1.0	0.90	ug/L			09/07/23 11:37	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/07/23 11:37	1
Chloromethane	ND		1.0	0.90	ug/L			09/07/23 11:37	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/07/23 11:37	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/07/23 11:37	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/07/23 11:37	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/07/23 11:37	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/07/23 11:37	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/07/23 11:37	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/07/23 11:37	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/07/23 11:37	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/07/23 11:37	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/07/23 11:37	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 11:37	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 11:37	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/07/23 11:37	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/07/23 11:37	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/07/23 11:37	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/07/23 11:37	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/07/23 11:37	1
2-Hexanone	ND		25	1.4	ug/L			09/07/23 11:37	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/07/23 11:37	1
Methylene bromide	ND		5.0	0.22	ug/L			09/07/23 11:37	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/07/23 11:37	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/07/23 11:37	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/07/23 11:37	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/07/23 11:37	1
Naphthalene	ND		5.0	3.0	ug/L			09/07/23 11:37	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/07/23 11:37	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/07/23 11:37	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/07/23 11:37	1
o-Xylene	ND		5.0	0.60	ug/L			09/07/23 11:37	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/07/23 11:37	1

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

Lab Sample ID: MB 400-640044/4
Matrix: Water
Analysis Batch: 640044

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			09/07/23 11:37	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			09/07/23 11:37	1
Styrene	ND		1.0	1.0	ug/L			09/07/23 11:37	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/07/23 11:37	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/07/23 11:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/07/23 11:37	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/07/23 11:37	1
Toluene	ND		1.0	0.90	ug/L			09/07/23 11:37	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/07/23 11:37	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/07/23 11:37	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/07/23 11:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/07/23 11:37	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/07/23 11:37	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/07/23 11:37	1
Trichloroethene	ND		1.0	0.15	ug/L			09/07/23 11:37	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/07/23 11:37	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/07/23 11:37	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/07/23 11:37	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/07/23 11:37	1
Vinyl acetate	ND		25	0.93	ug/L			09/07/23 11:37	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/07/23 11:37	1
Xylenes, Total	ND		10	1.6	ug/L			09/07/23 11:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*09/07/23 11:37*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*09/07/23 11:37*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*09/07/23 11:37*	*1*

Lab Sample ID: LCS 400-640044/1002
Matrix: Water
Analysis Batch: 640044

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	200		ug/L		100	43 - 160
Acrolein	500	608		ug/L		122	38 - 160
Acrylonitrile	500	504		ug/L		101	64 - 142
Benzene	50.0	46.5		ug/L		93	70 - 130
Bromobenzene	50.0	46.1		ug/L		92	70 - 132
Bromochloromethane	50.0	46.1		ug/L		92	70 - 130
Bromodichloromethane	50.0	48.0		ug/L		96	67 - 133
Bromoform	50.0	48.4		ug/L		97	57 - 140
Bromomethane	50.0	45.4		ug/L		91	10 - 160
2-Butanone (MEK)	200	230		ug/L		115	61 - 145
Carbon disulfide	50.0	34.2		ug/L		68	61 - 137
Carbon tetrachloride	50.0	49.2		ug/L		98	61 - 137
Chlorobenzene	50.0	46.3		ug/L		93	70 - 130
Chloroethane	50.0	46.2		ug/L		92	55 - 141
2-Chloroethyl vinyl ether	50.0	60.1		ug/L		120	10 - 160

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

Lab Sample ID: LCS 400-640044/1002
Matrix: Water
Analysis Batch: 640044

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	48.2		ug/L		96	69 - 130
1-Chlorohexane	50.0	46.9		ug/L		94	69 - 130
Chloromethane	50.0	38.4		ug/L		77	58 - 137
cis-1,2-Dichloroethene	50.0	49.1		ug/L		98	68 - 130
cis-1,3-Dichloropropene	50.0	44.6		ug/L		89	69 - 132
Dibromochloromethane	50.0	47.1		ug/L		94	67 - 135
1,2-Dichlorobenzene	50.0	44.9		ug/L		90	67 - 130
1,3-Dichlorobenzene	50.0	45.1		ug/L		90	70 - 130
1,4-Dichlorobenzene	50.0	45.0		ug/L		90	70 - 130
Dichlorodifluoromethane	50.0	47.3		ug/L		95	41 - 146
1,1-Dichloroethane	50.0	47.5		ug/L		95	70 - 130
1,2-Dichloroethane	50.0	51.3		ug/L		103	69 - 130
1,1-Dichloroethene	50.0	37.2		ug/L		74	63 - 134
1,2-Dichloropropane	50.0	46.3		ug/L		93	70 - 130
1,3-Dichloropropane	50.0	47.3		ug/L		95	70 - 130
2,2-Dichloropropane	50.0	48.9		ug/L		98	52 - 135
1,1-Dichloropropene	50.0	46.8		ug/L		94	70 - 130
Ethylbenzene	50.0	45.8		ug/L		92	70 - 130
Ethyl methacrylate	50.0	49.4		ug/L		99	68 - 130
Hexachlorobutadiene	50.0	47.2		ug/L		94	53 - 140
2-Hexanone	200	221		ug/L		110	65 - 137
Isopropy benzene	50.0	46.3		ug/L		93	70 - 130
Methylene bromide	50.0	50.1		ug/L		100	70 - 130
Methylene Chloride	50.0	42.7		ug/L		85	66 - 135
4-Methyl-2-pentanone (MIBK)	200	200		ug/L		100	69 - 138
Methyl tert-butyl ether	50.0	47.5		ug/L		95	66 - 130
m-Xylene & p-Xylene	50.0	45.8		ug/L		92	70 - 130
Naphthalene	50.0	48.3		ug/L		97	47 - 149
n-Butylbenzene	50.0	46.1		ug/L		92	67 - 130
N-Propylbenzene	50.0	45.8		ug/L		92	70 - 130
o-Chlorotoluene	50.0	46.9		ug/L		94	70 - 130
o-Xylene	50.0	44.3		ug/L		89	70 - 130
p-Chlorotoluene	50.0	46.0		ug/L		92	70 - 130
p-Isopropyltoluene	50.0	44.4		ug/L		89	65 - 130
sec-Butylbenzene	50.0	45.6		ug/L		91	66 - 130
Styrene	50.0	44.5		ug/L		89	70 - 130
tert-Butylbenzene	50.0	45.5		ug/L		91	64 - 139
1,1,1,2-Tetrachloroethane	50.0	47.0		ug/L		94	67 - 131
1,1,2,2-Tetrachloroethane	50.0	47.2		ug/L		94	70 - 131
Tetrachloroethene	50.0	50.9		ug/L		102	65 - 130
Toluene	50.0	45.6		ug/L		91	70 - 130
trans-1,2-Dichloroethene	50.0	46.6		ug/L		93	70 - 130
trans-1,3-Dichloropropene	50.0	48.4		ug/L		97	63 - 130
1,2,3-Trichlorobenzene	50.0	46.5		ug/L		93	60 - 138
1,2,4-Trichlorobenzene	50.0	46.2		ug/L		92	60 - 140
1,1,1-Trichloroethane	50.0	49.8		ug/L		100	68 - 130
1,1,2-Trichloroethane	50.0	47.8		ug/L		96	70 - 130
Trichloroethene	50.0	47.6		ug/L		95	70 - 130
Trichlorofluoromethane	50.0	47.4		ug/L		95	65 - 138

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

Lab Sample ID: LCS 400-640044/1002
Matrix: Water
Analysis Batch: 640044

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-Trimethy benzene	50.0	43.8		ug/L		88	70 - 130
1,3,5-Trimethy benzene	50.0	44.4		ug/L		89	69 - 130
Vinyl acetate	100	117		ug/L		117	26 - 160
Vinyl chloride	50.0	45.2		ug/L		90	59 - 136
Xylenes, Total	100	90.1		ug/L		90	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*72 - 130*
Dibromofluoromethane	*107*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

Lab Sample ID: 400-242724-4 MS
Matrix: Water
Analysis Batch: 640044

Client Sample ID: MW6C-ROX-082923
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND		200	136		ug/L		68	43 - 150
Acrolein	ND		500	506		ug/L		101	38 - 150
Acrylonitrile	ND		500	496		ug/L		99	62 - 149
Benzene	ND		50.0	46.6		ug/L		93	56 - 142
Bromobenzene	ND		50.0	46.0		ug/L		92	59 - 136
Bromochloromethane	ND		50.0	46.3		ug/L		93	64 - 140
Bromodichloromethane	ND		50.0	48.1		ug/L		96	59 - 143
Bromoform	ND		50.0	47.7		ug/L		95	50 - 140
Bromomethane	ND		50.0	24.4		ug/L		49	10 - 150
2-Butanone (MEK)	ND		200	195		ug/L		98	55 - 150
Carbon disulfide	ND		50.0	34.4		ug/L		69	48 - 150
Carbon tetrachloride	ND		50.0	47.6		ug/L		95	55 - 145
Chlorobenzene	ND		50.0	46.1		ug/L		92	64 - 130
Chloroethane	ND		50.0	40.8		ug/L		82	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	48.4		ug/L		97	60 - 141
1-Chlorohexane	ND		50.0	46.0		ug/L		92	56 - 136
Chloromethane	ND		50.0	28.9		ug/L		58	49 - 148
cis-1,2-Dichloroethene	ND		50.0	48.4		ug/L		97	59 - 143
cis-1,3-Dichloropropene	ND		50.0	44.4		ug/L		89	57 - 140
Dibromochloromethane	ND		50.0	46.7		ug/L		93	56 - 143
1,2-Dichlorobenzene	ND		50.0	45.4		ug/L		91	52 - 137
1,3-Dichlorobenzene	ND		50.0	45.2		ug/L		90	54 - 135
1,4-Dichlorobenzene	ND		50.0	44.8		ug/L		90	53 - 135
Dichlorodifluoromethane	ND		50.0	36.4		ug/L		73	16 - 150
1,1-Dichloroethane	ND		50.0	46.7		ug/L		93	61 - 144
1,2-Dichloroethane	0.64	J	50.0	52.2		ug/L		103	60 - 141
1,1-Dichloroethene	ND		50.0	37.5		ug/L		75	54 - 147
1,2-Dichloropropane	ND		50.0	47.1		ug/L		94	66 - 137
1,3-Dichloropropane	ND		50.0	47.5		ug/L		95	66 - 133
2,2-Dichloropropane	ND		50.0	46.9		ug/L		94	42 - 144

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

Lab Sample ID: 400-242724-4 MS
Matrix: Water
Analysis Batch: 640044

Client Sample ID: MW6C-ROX-082923
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	45.7		ug/L		91	65 - 136
Ethylbenzene	ND		50.0	46.1		ug/L		92	58 - 131
Ethyl methacrylate	ND		50.0	50.4		ug/L		101	64 - 130
Hexachlorobutadiene	ND	F2	50.0	49.9		ug/L		100	31 - 149
2-Hexanone	ND		200	197		ug/L		98	65 - 140
Isopropy benzene	ND		50.0	46.2		ug/L		92	56 - 133
Methylene bromide	ND		50.0	50.2		ug/L		100	63 - 138
Methylene Chloride	ND		50.0	42.7		ug/L		85	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	198		ug/L		99	63 - 146
Methyl tert-butyl ether	ND		50.0	47.6		ug/L		95	59 - 137
m-Xylene & p-Xylene	ND		50.0	45.6		ug/L		91	57 - 130
Naphthalene	ND		50.0	48.1		ug/L		96	25 - 150
n-Butylbenzene	ND	F2	50.0	44.9		ug/L		90	41 - 142
N-Propylbenzene	ND	F2	50.0	44.9		ug/L		90	51 - 138
o-Chlorotoluene	ND		50.0	44.9		ug/L		90	53 - 134
o-Xylene	ND		50.0	44.8		ug/L		90	61 - 130
p-Chlorotoluene	ND		50.0	45.6		ug/L		91	54 - 133
p-Isopropyltoluene	ND	F2	50.0	44.7		ug/L		89	48 - 139
sec-Butylbenzene	ND	F2	50.0	44.9		ug/L		90	50 - 138
Styrene	ND		50.0	44.8		ug/L		90	58 - 131
tert-Butylbenzene	ND	F2	50.0	45.0		ug/L		90	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	48.5		ug/L		97	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	47.8		ug/L		96	66 - 135
Tetrachloroethene	ND		50.0	44.9		ug/L		90	52 - 133
Toluene	ND		50.0	45.2		ug/L		90	65 - 130
trans-1,2-Dichloroethene	ND		50.0	45.6		ug/L		91	61 - 143
trans-1,3-Dichloropropene	ND		50.0	48.3		ug/L		97	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	46.3		ug/L		93	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	45.6		ug/L		91	39 - 148
1,1,1-Trichloroethane	ND		50.0	48.1		ug/L		96	57 - 142
1,1,2-Trichloroethane	ND		50.0	48.0		ug/L		96	66 - 131
Trichloroethene	ND		50.0	46.8		ug/L		94	64 - 136
Trichlorofluoromethane	ND		50.0	41.0		ug/L		82	54 - 150
1,2,3-Trichloropropane	ND		50.0	50.2		ug/L		100	65 - 133
1,2,4-Trimethy benzene	ND		50.0	43.7		ug/L		87	50 - 139
1,3,5-Trimethy benzene	ND	F2	50.0	44.6		ug/L		89	52 - 135
Vinyl acetate	ND		100	100		ug/L		100	26 - 150
Vinyl chloride	ND		50.0	36.2		ug/L		72	46 - 150
Xylenes, Total	ND		100	90.4		ug/L		90	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*72 - 130*
Dibromofluoromethane	*103*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

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

Lab Sample ID: 400-242724-4 MSD
Matrix: Water
Analysis Batch: 640044

Client Sample ID: MW6C-ROX-082923
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	131		ug/L		65	43 - 150	4	30
Acrolein	ND		500	514		ug/L		103	38 - 150	2	31
Acrylonitrile	ND		500	490		ug/L		98	62 - 149	1	30
Benzene	ND		50.0	41.3		ug/L		83	56 - 142	12	30
Bromobenzene	ND		50.0	38.5		ug/L		77	59 - 136	18	30
Bromochloromethane	ND		50.0	43.1		ug/L		86	64 - 140	7	30
Bromodichloromethane	ND		50.0	44.0		ug/L		88	59 - 143	9	30
Bromoform	ND		50.0	45.4		ug/L		91	50 - 140	5	30
Bromomethane	ND		50.0	29.0		ug/L		58	10 - 150	17	50
2-Butanone (MEK)	ND		200	190		ug/L		95	55 - 150	3	30
Carbon disulfide	ND		50.0	30.1		ug/L		60	48 - 150	13	30
Carbon tetrachloride	ND		50.0	41.9		ug/L		84	55 - 145	13	30
Chlorobenzene	ND		50.0	37.9		ug/L		76	64 - 130	19	30
Chloroethane	ND		50.0	38.1		ug/L		76	50 - 150	7	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	44.3		ug/L		89	60 - 141	9	30
1-Chlorohexane	ND		50.0	34.8		ug/L		70	56 - 136	28	30
Chloromethane	ND		50.0	29.8		ug/L		60	49 - 148	3	31
cis-1,2-Dichloroethene	ND		50.0	44.5		ug/L		89	59 - 143	8	30
cis-1,3-Dichloropropene	ND		50.0	40.2		ug/L		80	57 - 140	10	30
Dibromochloromethane	ND		50.0	43.5		ug/L		87	56 - 143	7	30
1,2-Dichlorobenzene	ND		50.0	36.5		ug/L		73	52 - 137	22	30
1,3-Dichlorobenzene	ND		50.0	34.8		ug/L		70	54 - 135	26	30
1,4-Dichlorobenzene	ND		50.0	34.6		ug/L		69	53 - 135	26	30
Dichlorodifluoromethane	ND		50.0	36.3		ug/L		73	16 - 150	0	31
1,1-Dichloroethane	ND		50.0	43.4		ug/L		87	61 - 144	7	30
1,2-Dichloroethane	0.64	J	50.0	48.9		ug/L		97	60 - 141	6	30
1,1-Dichloroethene	ND		50.0	33.0		ug/L		66	54 - 147	13	30
1,2-Dichloropropane	ND		50.0	44.1		ug/L		88	66 - 137	7	30
1,3-Dichloropropane	ND		50.0	44.9		ug/L		90	66 - 133	6	30
2,2-Dichloropropane	ND		50.0	43.8		ug/L		88	42 - 144	7	31
1,1-Dichloropropene	ND		50.0	40.1		ug/L		80	65 - 136	13	30
Ethylbenzene	ND		50.0	36.0		ug/L		72	58 - 131	25	30
Ethyl methacrylate	ND		50.0	48.2		ug/L		96	64 - 130	4	30
Hexachlorobutadiene	ND	F2	50.0	30.4	F2	ug/L		61	31 - 149	49	36
2-Hexanone	ND		200	192		ug/L		96	65 - 140	2	30
Isopropy benzene	ND		50.0	34.0		ug/L		68	56 - 133	30	30
Methylene bromide	ND		50.0	47.2		ug/L		94	63 - 138	6	30
Methylene Chloride	ND		50.0	39.9		ug/L		80	60 - 146	7	32
4-Methyl-2-pentanone (MIBK)	ND		200	193		ug/L		96	63 - 146	3	30
Methyl tert-butyl ether	ND		50.0	46.8		ug/L		94	59 - 137	2	30
m-Xylene & p-Xylene	ND		50.0	35.3		ug/L		71	57 - 130	25	30
Naphthalene	ND		50.0	44.1		ug/L		88	25 - 150	9	30
n-Butylbenzene	ND	F2	50.0	29.0	F2	ug/L		58	41 - 142	43	31
N-Propylbenzene	ND	F2	50.0	32.4	F2	ug/L		65	51 - 138	32	30
o-Chlorotoluene	ND		50.0	34.1		ug/L		68	53 - 134	27	30
o-Xylene	ND		50.0	35.2		ug/L		70	61 - 130	24	30
p-Chlorotoluene	ND		50.0	34.6		ug/L		69	54 - 133	28	30

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

Lab Sample ID: 400-242724-4 MSD
Matrix: Water
Analysis Batch: 640044

Client Sample ID: MW6C-ROX-082923
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	30.0	F2	ug/L		60	48 - 139	39	30
sec-Butylbenzene	ND	F2	50.0	31.4	F2	ug/L		63	50 - 138	35	30
Styrene	ND		50.0	35.5		ug/L		71	58 - 131	23	30
tert-Butylbenzene	ND	F2	50.0	33.1	F2	ug/L		66	54 - 146	31	30
1,1,1,2-Tetrachloroethane	ND		50.0	41.4		ug/L		83	59 - 137	16	30
1,1,2,2-Tetrachloroethane	ND		50.0	46.2		ug/L		92	66 - 135	3	30
Tetrachloroethene	ND		50.0	36.1		ug/L		72	52 - 133	22	30
Toluene	ND		50.0	38.5		ug/L		77	65 - 130	16	30
trans-1,2-Dichloroethene	ND		50.0	41.0		ug/L		82	61 - 143	11	30
trans-1,3-Dichloropropene	ND		50.0	44.4		ug/L		89	53 - 133	8	30
1,2,3-Trichlorobenzene	ND		50.0	38.7		ug/L		77	43 - 145	18	30
1,2,4-Trichlorobenzene	ND		50.0	36.3		ug/L		73	39 - 148	23	30
1,1,1-Trichloroethane	ND		50.0	43.6		ug/L		87	57 - 142	10	30
1,1,2-Trichloroethane	ND		50.0	44.8		ug/L		90	66 - 131	7	30
Trichloroethene	ND		50.0	40.4		ug/L		81	64 - 136	15	30
Trichlorofluoromethane	ND		50.0	37.3		ug/L		75	54 - 150	10	30
1,2,3-Trichloropropane	ND		50.0	48.8		ug/L		98	65 - 133	3	30
1,2,4-Trimethy benzene	ND		50.0	32.5		ug/L		65	50 - 139	29	30
1,3,5-Trimethy benzene	ND	F2	50.0	32.7	F2	ug/L		65	52 - 135	31	30
Vinyl acetate	ND		100	97.7		ug/L		98	26 - 150	2	33
Vinyl chloride	ND		50.0	36.1		ug/L		72	46 - 150	0	30
Xylenes, Total	ND		100	70.4		ug/L		70	59 - 130	25	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*72 - 130*
Dibromofluoromethane	*106*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

Lab Sample ID: MB 400-640194/4
Matrix: Water
Analysis Batch: 640194

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			09/08/23 10:52	1
Acrolein	ND		20	3.3	ug/L			09/08/23 10:52	1
Acrylonitrile	ND		10	2.8	ug/L			09/08/23 10:52	1
Benzene	ND		1.0	0.50	ug/L			09/08/23 10:52	1
Bromobenzene	ND		1.0	0.54	ug/L			09/08/23 10:52	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/08/23 10:52	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/08/23 10:52	1
Bromoform	ND		5.0	0.25	ug/L			09/08/23 10:52	1
Bromomethane	ND		1.0	0.98	ug/L			09/08/23 10:52	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/08/23 10:52	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/08/23 10:52	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/08/23 10:52	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/08/23 10:52	1
Chloroethane	ND		1.0	0.76	ug/L			09/08/23 10:52	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/08/23 10:52	1

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

Lab Sample ID: MB 400-640194/4
Matrix: Water
Analysis Batch: 640194

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			09/08/23 10:52	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/08/23 10:52	1
Chloromethane	ND		1.0	0.90	ug/L			09/08/23 10:52	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/08/23 10:52	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/08/23 10:52	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/08/23 10:52	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/08/23 10:52	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/08/23 10:52	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/08/23 10:52	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/08/23 10:52	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/08/23 10:52	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/08/23 10:52	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/08/23 10:52	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/08/23 10:52	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/08/23 10:52	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/08/23 10:52	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/08/23 10:52	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/08/23 10:52	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/08/23 10:52	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/08/23 10:52	1
2-Hexanone	ND		25	1.4	ug/L			09/08/23 10:52	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/08/23 10:52	1
Methylene bromide	ND		5.0	0.22	ug/L			09/08/23 10:52	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/08/23 10:52	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/08/23 10:52	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/08/23 10:52	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/08/23 10:52	1
Naphthalene	ND		5.0	3.0	ug/L			09/08/23 10:52	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/08/23 10:52	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/08/23 10:52	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/08/23 10:52	1
o-Xylene	ND		5.0	0.60	ug/L			09/08/23 10:52	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/08/23 10:52	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/08/23 10:52	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			09/08/23 10:52	1
Styrene	ND		1.0	1.0	ug/L			09/08/23 10:52	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/08/23 10:52	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/08/23 10:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/08/23 10:52	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/08/23 10:52	1
Toluene	ND		1.0	0.90	ug/L			09/08/23 10:52	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/08/23 10:52	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/08/23 10:52	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/08/23 10:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/08/23 10:52	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/08/23 10:52	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/08/23 10:52	1
Trichloroethene	ND		1.0	0.15	ug/L			09/08/23 10:52	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/08/23 10:52	1

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

Lab Sample ID: MB 400-640194/4
Matrix: Water
Analysis Batch: 640194

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			09/08/23 10:52	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/08/23 10:52	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/08/23 10:52	1
Vinyl acetate	ND		25	0.93	ug/L			09/08/23 10:52	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/08/23 10:52	1
Xylenes, Total	ND		10	1.6	ug/L			09/08/23 10:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*72 - 130*		*09/08/23 10:52*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*09/08/23 10:52*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*09/08/23 10:52*	*1*

Lab Sample ID: LCS 400-640194/1002
Matrix: Water
Analysis Batch: 640194

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	241		ug/L		121	43 - 160
Acrolein	500	605		ug/L		121	38 - 160
Acrylonitrile	500	593		ug/L		119	64 - 142
Benzene	50.0	54.1		ug/L		108	70 - 130
Bromobenzene	50.0	52.7		ug/L		105	70 - 132
Bromochloromethane	50.0	54.3		ug/L		109	70 - 130
Bromodichloromethane	50.0	58.1		ug/L		116	67 - 133
Bromoform	50.0	56.4		ug/L		113	57 - 140
Bromomethane	50.0	29.4		ug/L		59	10 - 160
2-Butanone (MEK)	200	278		ug/L		139	61 - 145
Carbon disulfide	50.0	39.3		ug/L		79	61 - 137
Carbon tetrachloride	50.0	56.0		ug/L		112	61 - 137
Chlorobenzene	50.0	53.8		ug/L		108	70 - 130
Chloroethane	50.0	44.0		ug/L		88	55 - 141
2-Chloroethyl vinyl ether	50.0	59.7		ug/L		119	10 - 160
Chloroform	50.0	56.2		ug/L		112	69 - 130
1-Chlorohexane	50.0	53.6		ug/L		107	69 - 130
Chloromethane	50.0	38.9		ug/L		78	58 - 137
cis-1,2-Dichloroethene	50.0	56.7		ug/L		113	68 - 130
cis-1,3-Dichloropropene	50.0	53.3		ug/L		107	69 - 132
Dibromochloromethane	50.0	56.4		ug/L		113	67 - 135
1,2-Dichlorobenzene	50.0	52.7		ug/L		105	67 - 130
1,3-Dichlorobenzene	50.0	51.9		ug/L		104	70 - 130
1,4-Dichlorobenzene	50.0	51.9		ug/L		104	70 - 130
Dichlorodifluoromethane	50.0	43.2		ug/L		86	41 - 146
1,1-Dichloroethane	50.0	54.5		ug/L		109	70 - 130
1,2-Dichloroethane	50.0	61.4		ug/L		123	69 - 130
1,1-Dichloroethene	50.0	42.5		ug/L		85	63 - 134
1,2-Dichloropropane	50.0	56.8		ug/L		114	70 - 130
1,3-Dichloropropane	50.0	56.4		ug/L		113	70 - 130
2,2-Dichloropropane	50.0	55.1		ug/L		110	52 - 135

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

Lab Sample ID: LCS 400-640194/1002
Matrix: Water
Analysis Batch: 640194

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	53.3		ug/L		107	70 - 130
Ethylbenzene	50.0	53.0		ug/L		106	70 - 130
Ethyl methacrylate	50.0	58.6		ug/L		117	68 - 130
Hexachlorobutadiene	50.0	55.2		ug/L		110	53 - 140
2-Hexanone	200	260		ug/L		130	65 - 137
Isopropy benzene	50.0	53.2		ug/L		106	70 - 130
Methylene bromide	50.0	60.4		ug/L		121	70 - 130
Methylene Chloride	50.0	50.2		ug/L		100	66 - 135
4-Methyl-2-pentanone (MIBK)	200	244		ug/L		122	69 - 138
Methyl tert-butyl ether	50.0	55.3		ug/L		111	66 - 130
m-Xylene & p-Xylene	50.0	52.5		ug/L		105	70 - 130
Naphthalene	50.0	53.8		ug/L		108	47 - 149
n-Butylbenzene	50.0	50.6		ug/L		101	67 - 130
N-Propylbenzene	50.0	51.7		ug/L		103	70 - 130
o-Chlorotoluene	50.0	50.0		ug/L		100	70 - 130
o-Xylene	50.0	51.4		ug/L		103	70 - 130
p-Chlorotoluene	50.0	52.8		ug/L		106	70 - 130
p-Isopropyltoluene	50.0	51.2		ug/L		102	65 - 130
sec-Butylbenzene	50.0	51.6		ug/L		103	66 - 130
Styrene	50.0	52.2		ug/L		104	70 - 130
tert-Butylbenzene	50.0	51.5		ug/L		103	64 - 139
1,1,1,2-Tetrachloroethane	50.0	56.2		ug/L		112	67 - 131
1,1,2,2-Tetrachloroethane	50.0	55.2		ug/L		110	70 - 131
Tetrachloroethene	50.0	58.6		ug/L		117	65 - 130
Toluene	50.0	52.1		ug/L		104	70 - 130
trans-1,2-Dichloroethene	50.0	52.7		ug/L		105	70 - 130
trans-1,3-Dichloropropene	50.0	57.7		ug/L		115	63 - 130
1,2,3-Trichlorobenzene	50.0	52.5		ug/L		105	60 - 138
1,2,4-Trichlorobenzene	50.0	52.7		ug/L		105	60 - 140
1,1,1-Trichloroethane	50.0	56.8		ug/L		114	68 - 130
1,1,2-Trichloroethane	50.0	56.4		ug/L		113	70 - 130
Trichloroethene	50.0	55.1		ug/L		110	70 - 130
Trichlorofluoromethane	50.0	48.4		ug/L		97	65 - 138
1,2,3-Trichloropropane	50.0	58.3		ug/L		117	70 - 130
1,2,4-Trimethy benzene	50.0	50.3		ug/L		101	70 - 130
1,3,5-Trimethy benzene	50.0	51.0		ug/L		102	69 - 130
Vinyl acetate	100	122		ug/L		122	26 - 160
Vinyl chloride	50.0	42.4		ug/L		85	59 - 136
Xylenes, Total	100	104		ug/L		104	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*72 - 130*
Dibromofluoromethane	*104*		*75 - 126*
Toluene-d8 (Surr)	*99*		*64 - 132*

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

Lab Sample ID: MB 400-639760/1-A
Matrix: Water
Analysis Batch: 640111

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 639760

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		09/05/23 14:55	09/07/23 18:36	1
Benzenethiol	ND		10	1.7	ug/L		09/05/23 14:55	09/07/23 18:36	1
Benzoic acid	ND		30	7.3	ug/L		09/05/23 14:55	09/07/23 18:36	1
Benzyl alcohol	ND		10	2.0	ug/L		09/05/23 14:55	09/07/23 18:36	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		09/05/23 14:55	09/07/23 18:36	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		09/05/23 14:55	09/07/23 18:36	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		09/05/23 14:55	09/07/23 18:36	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		09/05/23 14:55	09/07/23 18:36	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		09/05/23 14:55	09/07/23 18:36	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		09/05/23 14:55	09/07/23 18:36	1
4-Chloroaniline	ND		10	3.4	ug/L		09/05/23 14:55	09/07/23 18:36	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		09/05/23 14:55	09/07/23 18:36	1
2-Chloronaphthalene	ND		10	0.14	ug/L		09/05/23 14:55	09/07/23 18:36	1
2-Chlorophenol	ND		10	2.2	ug/L		09/05/23 14:55	09/07/23 18:36	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		09/05/23 14:55	09/07/23 18:36	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		09/05/23 14:55	09/07/23 18:36	1
Dibenzofuran	ND		10	0.17	ug/L		09/05/23 14:55	09/07/23 18:36	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		09/05/23 14:55	09/07/23 18:36	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		09/05/23 14:55	09/07/23 18:36	1
Diethyl phthalate	ND		10	0.24	ug/L		09/05/23 14:55	09/07/23 18:36	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		09/05/23 14:55	09/07/23 18:36	1
Dimethyl phthalate	ND		10	0.17	ug/L		09/05/23 14:55	09/07/23 18:36	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		09/05/23 14:55	09/07/23 18:36	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		09/05/23 14:55	09/07/23 18:36	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		09/05/23 14:55	09/07/23 18:36	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		09/05/23 14:55	09/07/23 18:36	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		09/05/23 14:55	09/07/23 18:36	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		09/05/23 14:55	09/07/23 18:36	1
1,4-Dioxane	ND		10	1.0	ug/L		09/05/23 14:55	09/07/23 18:36	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		09/05/23 14:55	09/07/23 18:36	1
Hexachlorobenzene	ND		10	0.17	ug/L		09/05/23 14:55	09/07/23 18:36	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/05/23 14:55	09/07/23 18:36	1
Hexachloroethane	ND		10	4.2	ug/L		09/05/23 14:55	09/07/23 18:36	1
Indene	ND		10	1.0	ug/L		09/05/23 14:55	09/07/23 18:36	1
Isophorone	ND		10	0.14	ug/L		09/05/23 14:55	09/07/23 18:36	1
2-Methylphenol	ND		10	1.8	ug/L		09/05/23 14:55	09/07/23 18:36	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		09/05/23 14:55	09/07/23 18:36	1
2-Nitroaniline	ND		10	2.2	ug/L		09/05/23 14:55	09/07/23 18:36	1
3-Nitroaniline	ND		10	1.8	ug/L		09/05/23 14:55	09/07/23 18:36	1
4-Nitroaniline	ND		10	1.5	ug/L		09/05/23 14:55	09/07/23 18:36	1
Nitrobenzene	ND		10	0.13	ug/L		09/05/23 14:55	09/07/23 18:36	1
2-Nitrophenol	ND		10	5.2	ug/L		09/05/23 14:55	09/07/23 18:36	1
4-Nitrophenol	ND		10	2.1	ug/L		09/05/23 14:55	09/07/23 18:36	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		09/05/23 14:55	09/07/23 18:36	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		09/05/23 14:55	09/07/23 18:36	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		09/05/23 14:55	09/07/23 18:36	1
Pentachlorophenol	ND		20	1.4	ug/L		09/05/23 14:55	09/07/23 18:36	1
Phenol	ND		10	2.6	ug/L		09/05/23 14:55	09/07/23 18:36	1

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

Lab Sample ID: MB 400-639760/1-A
Matrix: Water
Analysis Batch: 640111

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 639760

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	ND		10	3.2	ug/L		09/05/23 14:55	09/07/23 18:36	1
Quinoline	ND		10	4.5	ug/L		09/05/23 14:55	09/07/23 18:36	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		09/05/23 14:55	09/07/23 18:36	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		09/05/23 14:55	09/07/23 18:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*46 - 124*	*09/05/23 14:55*	*09/07/23 18:36*	*1*
2-Fluorophenol	*48*		*13 - 113*	*09/05/23 14:55*	*09/07/23 18:36*	*1*
Nitrobenzene-d5	*73*		*36 - 126*	*09/05/23 14:55*	*09/07/23 18:36*	*1*
Phenol-d5	*69*		*17 - 127*	*09/05/23 14:55*	*09/07/23 18:36*	*1*
Terphenyl-d14	*89*		*44 - 149*	*09/05/23 14:55*	*09/07/23 18:36*	*1*
2,4,6-Tribromophenol	*61*		*26 - 150*	*09/05/23 14:55*	*09/07/23 18:36*	*1*

Lab Sample ID: LCS 400-639760/14-A
Matrix: Water
Analysis Batch: 640111

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	ND	*-	ug/L		1	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*46 - 124*
2-Fluorophenol	*30*		*13 - 113*
Nitrobenzene-d5	*59*		*36 - 126*
Phenol-d5	*47*		*17 - 127*
Terphenyl-d14	*77*		*44 - 149*
2,4,6-Tribromophenol	*51*		*26 - 150*

Lab Sample ID: LCS 400-639760/2-A
Matrix: Water
Analysis Batch: 640111

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	82.3		ug/L		69	21 - 120
Benzoic acid	522	269		ug/L		52	10 - 144
Benzyl alcohol	120	94.0		ug/L		78	28 - 120
Bis(2-chloroethoxy)methane	120	77.7		ug/L		65	47 - 120
Bis(2-chloroethyl)ether	120	78.7		ug/L		66	44 - 120
bis (2-chloroisopropyl) ether	120	80.2		ug/L		67	33 - 121
Bis(2-ethylhexyl) phthalate	120	82.6		ug/L		69	52 - 147
4-Bromophenyl phenyl ether	120	93.9		ug/L		78	54 - 122
Butyl benzyl phthalate	120	82.4		ug/L		69	54 - 133
4-Chloroaniline	120	53.4		ug/L		45	26 - 120
4-Chloro-3-methylphenol	120	91.5		ug/L		76	48 - 131
2-Chloronaphthalene	120	87.5		ug/L		73	52 - 121
2-Chlorophenol	120	80.7		ug/L		67	40 - 120
4-Chlorophenyl phenyl ether	120	103		ug/L		86	56 - 125
Dibenz[a,h]acridine	120	105		ug/L		88	31 - 150

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

Lab Sample ID: LCS 400-639760/2-A
Matrix: Water
Analysis Batch: 640111

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dibenzofuran	120	93.1		ug/L		78	56 - 122
3,3'-Dichlorobenzidine	160	140		ug/L		88	36 - 132
2,4-Dichlorophenol	120	85.1		ug/L		71	49 - 120
Diethyl phthalate	120	91.7		ug/L		76	50 - 137
2,4-Dimethylphenol	120	90.1		ug/L		75	48 - 120
Dimethyl phthalate	120	92.6		ug/L		77	57 - 124
Di-n-butyl phthalate	120	87.2		ug/L		73	58 - 126
4,6-Dinitro-ortho-cresol	240	186		ug/L		78	23 - 148
2,4-Dinitrophenol	240	184		ug/L		77	10 - 150
2,4-Dinitrotoluene	120	98.1		ug/L		82	54 - 142
2,6-Dinitrotoluene	120	90.3		ug/L		75	55 - 130
Di-n-octyl phthalate	120	84.1		ug/L		70	57 - 138
1,4-Dioxane	120	63.6		ug/L		53	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	82.3		ug/L		69	45 - 124
Hexachlorobenzene	120	93.4		ug/L		78	52 - 129
Hexachlorocyclopentadiene	120	38.8		ug/L		32	10 - 134
Hexachloroethane	120	69.4		ug/L		58	20 - 120
Indene	120	84.4		ug/L		70	49 - 120
Isophorone	120	83.9		ug/L		70	48 - 120
2-Methylphenol	120	87.6		ug/L		73	46 - 124
3 & 4 Methylphenol	120	89.7		ug/L		75	45 - 120
2-Nitroaniline	120	97.3		ug/L		81	51 - 145
3-Nitroaniline	120	94.4		ug/L		79	37 - 127
4-Nitroaniline	120	115		ug/L		96	36 - 137
Nitrobenzene	120	82.3		ug/L		69	45 - 120
2-Nitrophenol	120	86.1		ug/L		72	40 - 124
4-Nitrophenol	240	207		ug/L		86	23 - 146
N-Nitrosodimethylamine	120	94.0		ug/L		78	29 - 137
N-Nitrosodi-n-propylamine	120	95.2		ug/L		79	45 - 120
N-Nitrosodiphenylamine	119	86.0		ug/L		72	54 - 120
Pentachlorophenol	240	169		ug/L		71	31 - 130
Phenol	120	89.4		ug/L		74	11 - 120
Pyridine	240	130		ug/L		54	16 - 120
Quinoline	120	102		ug/L		86	49 - 130
2,4,5-Trichlorophenol	120	101		ug/L		84	51 - 136
2,4,6-Trichlorophenol	120	91.6		ug/L		76	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*46 - 124*
2-Fluorophenol	*64*		*13 - 113*
Nitrobenzene-d5	*76*		*36 - 126*
Phenol-d5	*75*		*17 - 127*
Terphenyl-d14	*87*		*44 - 149*
2,4,6-Tribromophenol	*76*		*26 - 150*

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

Lab Sample ID: LCSD 400-639760/15-A
Matrix: Water
Analysis Batch: 640111

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 639760

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	76.4	*1	ug/L		64	10 - 120	192	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*46 - 124*
2-Fluorophenol	*69*		*13 - 113*
Nitrobenzene-d5	*76*		*36 - 126*
Phenol-d5	*81*		*17 - 127*
Terphenyl-d14	*98*		*44 - 149*
2,4,6-Tribromophenol	*69*		*26 - 150*

Lab Sample ID: 400-242724-4 MS
Matrix: Water
Analysis Batch: 640111

Client Sample ID: MW6C-ROX-082923
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	ND		118	84.5		ug/L		72	10 - 120
Benzoic acid	ND		512	334		ug/L		65	10 - 149
Benzyl alcohol	ND		118	93.1		ug/L		79	33 - 120
Bis(2-chloroethoxy)methane	ND		118	78.0		ug/L		66	26 - 120
Bis(2-chloroethyl)ether	ND		118	75.8		ug/L		64	42 - 120
bis (2-chloroisopropyl) ether	ND		118	79.1		ug/L		67	28 - 120
Bis(2-ethylhexyl) phthalate	ND		118	84.6		ug/L		72	39 - 120
4-Bromophenyl phenyl ether	ND		118	93.2		ug/L		79	40 - 120
Butyl benzyl phthalate	ND		118	84.4		ug/L		72	45 - 120
4-Chloroaniline	ND		118	72.9		ug/L		62	10 - 120
4-Chloro-3-methylphenol	ND		118	89.9		ug/L		76	34 - 120
2-Chloronaphthalene	ND		118	86.4		ug/L		73	39 - 120
2-Chlorophenol	ND		118	68.2		ug/L		58	25 - 120
4-Chlorophenyl phenyl ether	ND		118	103		ug/L		88	44 - 120
Dibenz[a,h]acridine	ND		117	103		ug/L		88	50 - 150
Dibenzofuran	ND		118	92.9		ug/L		79	25 - 130
3,3'-Dichlorobenzidine	ND		157	127		ug/L		81	10 - 120
2,4-Dichlorophenol	ND		118	79.9		ug/L		68	31 - 120
Diethyl phthalate	ND		118	92.5		ug/L		79	46 - 120
2,4-Dimethylphenol	ND		118	88.6		ug/L		75	21 - 120
Dimethyl phthalate	ND		118	93.9		ug/L		80	38 - 120
Di-n-butyl phthalate	ND		118	87.9		ug/L		75	49 - 120
4,6-Dinitro-ortho-cresol	ND		235	192		ug/L		81	25 - 120
2,4-Dinitrophenol	ND		235	204		ug/L		86	15 - 140
2,4-Dinitrotoluene	ND		118	97.8		ug/L		83	53 - 120
2,6-Dinitrotoluene	ND		118	92.5		ug/L		79	43 - 120
Di-n-octyl phthalate	ND		118	85.2		ug/L		72	35 - 121
1,4-Dioxane	ND		118	64.2		ug/L		55	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		118	82.6		ug/L		70	50 - 150
Hexachlorobenzene	ND		118	93.2		ug/L		79	38 - 122
Hexachlorocyclopentadiene	ND		118	57.1		ug/L		49	10 - 120
Hexachloroethane	ND		118	67.6		ug/L		57	10 - 150

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

Lab Sample ID: 400-242724-4 MS
Matrix: Water
Analysis Batch: 640111

Client Sample ID: MW6C-ROX-082923
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Indene	ND		118	83.1		ug/L		71	50 - 150
Isophorone	ND		118	83.3		ug/L		71	42 - 120
2-Methylphenol	ND		118	82.3		ug/L		70	28 - 120
3 & 4 Methylphenol	ND		118	84.4		ug/L		72	31 - 120
2-Nitroaniline	ND		118	97.1		ug/L		82	45 - 120
3-Nitroaniline	ND		118	93.0		ug/L		79	10 - 130
4-Nitroaniline	ND		118	105		ug/L		89	10 - 132
Nitrobenzene	ND		118	82.5		ug/L		70	39 - 120
2-Nitrophenol	ND		118	78.5		ug/L		67	33 - 120
4-Nitrophenol	ND		235	214		ug/L		91	10 - 120
N-Nitrosodimethylamine	ND		118	92.7		ug/L		79	10 - 139
N-Nitrosodi-n-propylamine	ND		118	93.5		ug/L		79	37 - 124
N-Nitrosodiphenylamine	ND		117	85.4		ug/L		73	10 - 150
Pentachlorophenol	ND		235	178		ug/L		75	29 - 130
Phenol	ND		118	79.6		ug/L		68	10 - 150
Pyridine	ND		235	130		ug/L		55	10 - 120
Quinoline	ND		117	101		ug/L		86	51 - 120
2,4,5-Trichlorophenol	ND		118	101		ug/L		86	34 - 120
2,4,6-Trichlorophenol	ND		118	89.5		ug/L		76	33 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*46 - 124*
2-Fluorophenol	*46*		*13 - 113*
Nitrobenzene-d5	*77*		*36 - 126*
Phenol-d5	*67*		*17 - 127*
Terphenyl-d14	*89*		*44 - 149*
2,4,6-Tribromophenol	*78*		*26 - 150*

Lab Sample ID: 400-242724-4 MSD
Matrix: Water
Analysis Batch: 640111

Client Sample ID: MW6C-ROX-082923
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	ND		118	83.0		ug/L		70	10 - 120	2	63
Benzoic acid	ND		512	326		ug/L		64	10 - 149	2	49
Benzyl alcohol	ND		118	86.9		ug/L		74	33 - 120	7	37
Bis(2-chloroethoxy)methane	ND		118	72.5		ug/L		62	26 - 120	7	70
Bis(2-chloroethyl)ether	ND		118	68.9		ug/L		59	42 - 120	10	42
bis (2-chloroisopropyl) ether	ND		118	74.0		ug/L		63	28 - 120	7	41
Bis(2-ethylhexyl) phthalate	ND		118	77.0		ug/L		65	39 - 120	9	35
4-Bromophenyl phenyl ether	ND		118	87.3		ug/L		74	40 - 120	7	30
Butyl benzyl phthalate	ND		118	80.3		ug/L		68	45 - 120	5	32
4-Chloroaniline	ND		118	49.8		ug/L		42	10 - 120	38	94
4-Chloro-3-methylphenol	ND		118	85.4		ug/L		73	34 - 120	5	40
2-Chloronaphthalene	ND		118	80.3		ug/L		68	39 - 120	7	29
2-Chlorophenol	ND		118	74.3		ug/L		63	25 - 120	9	42
4-Chlorophenyl phenyl ether	ND		118	94.1		ug/L		80	44 - 120	9	27
Dibenz[a,h]acridine	ND		117	96.6		ug/L		82	50 - 150	7	40

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

Lab Sample ID: 400-242724-4 MSD
Matrix: Water
Analysis Batch: 640111

Client Sample ID: MW6C-ROX-082923
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dibenzofuran	ND		118	84.9		ug/L		72	25 - 130	9	29
3,3'-Dichlorobenzidine	ND		157	121		ug/L		77	10 - 120	5	58
2,4-Dichlorophenol	ND		118	80.1		ug/L		68	31 - 120	0	43
Diethyl phthalate	ND		118	84.4		ug/L		72	46 - 120	9	40
2,4-Dimethylphenol	ND		118	85.5		ug/L		73	21 - 120	4	47
Dimethyl phthalate	ND		118	85.5		ug/L		73	38 - 120	9	36
Di-n-butyl phthalate	ND		118	78.8		ug/L		67	49 - 120	11	32
4,6-Dinitro-ortho-cresol	ND		235	183		ug/L		78	25 - 120	5	42
2,4-Dinitrophenol	ND		235	191		ug/L		81	15 - 140	6	36
2,4-Dinitrotoluene	ND		118	91.7		ug/L		78	53 - 120	6	28
2,6-Dinitrotoluene	ND		118	85.1		ug/L		72	43 - 120	8	28
Di-n-octyl phthalate	ND		118	76.2		ug/L		65	35 - 121	11	35
1,4-Dioxane	ND		118	62.6		ug/L		53	50 - 150	2	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		118	77.2		ug/L		66	50 - 150	7	40
Hexachlorobenzene	ND		118	87.2		ug/L		74	38 - 122	7	33
Hexachlorocyclopentadiene	ND		118	61.2		ug/L		52	10 - 120	7	50
Hexachloroethane	ND		118	64.2		ug/L		55	10 - 150	5	41
Indene	ND		118	78.2		ug/L		66	50 - 150	6	40
Isophorone	ND		118	77.7		ug/L		66	42 - 120	7	33
2-Methylphenol	ND		118	82.1		ug/L		70	28 - 120	0	47
3 & 4 Methylphenol	ND		118	83.1		ug/L		71	31 - 120	2	47
2-Nitroaniline	ND		118	91.1		ug/L		77	45 - 120	6	33
3-Nitroaniline	ND		118	87.7		ug/L		74	10 - 130	6	39
4-Nitroaniline	ND		118	102		ug/L		86	10 - 132	4	50
Nitrobenzene	ND		118	78.3		ug/L		67	39 - 120	5	35
2-Nitrophenol	ND		118	83.6		ug/L		71	33 - 120	6	43
4-Nitrophenol	ND		235	206		ug/L		88	10 - 120	4	82
N-Nitrosodimethylamine	ND		118	93.0		ug/L		79	10 - 139	0	62
N-Nitrosodi-n-propylamine	ND		118	88.7		ug/L		75	37 - 124	5	36
N-Nitrosodiphenylamine	ND		117	80.6		ug/L		69	10 - 150	6	34
Pentachlorophenol	ND		235	169		ug/L		72	29 - 130	5	42
Phenol	ND		118	84.0		ug/L		71	10 - 150	5	52
Pyridine	ND		235	124		ug/L		52	10 - 120	5	55
Quinoline	ND		117	94.1		ug/L		80	51 - 120	7	40
2,4,5-Trichlorophenol	ND		118	95.4		ug/L		81	34 - 120	5	42
2,4,6-Trichlorophenol	ND		118	85.6		ug/L		73	33 - 120	4	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*77*		*46 - 124*
2-Fluorophenol	*56*		*13 - 113*
Nitrobenzene-d5	*73*		*36 - 126*
Phenol-d5	*69*		*17 - 127*
Terphenyl-d14	*87*		*44 - 149*
2,4,6-Tribromophenol	*75*		*26 - 150*

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

Lab Sample ID: MB 400-639760/1-A
Matrix: Water
Analysis Batch: 640207

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 639760

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		09/05/23 14:55	09/08/23 15:52	1
Acenaphthylene	ND		0.20	0.044	ug/L		09/05/23 14:55	09/08/23 15:52	1
Anthracene	ND		0.20	0.047	ug/L		09/05/23 14:55	09/08/23 15:52	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		09/05/23 14:55	09/08/23 15:52	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		09/05/23 14:55	09/08/23 15:52	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		09/05/23 14:55	09/08/23 15:52	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		09/05/23 14:55	09/08/23 15:52	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		09/05/23 14:55	09/08/23 15:52	1
Chrysene	ND		0.20	0.033	ug/L		09/05/23 14:55	09/08/23 15:52	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		09/05/23 14:55	09/08/23 15:52	1
Fluoranthene	ND		0.20	0.034	ug/L		09/05/23 14:55	09/08/23 15:52	1
Fluorene	ND		0.20	0.089	ug/L		09/05/23 14:55	09/08/23 15:52	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		09/05/23 14:55	09/08/23 15:52	1
Phenanthrene	ND		0.20	0.090	ug/L		09/05/23 14:55	09/08/23 15:52	1
Pyrene	ND		0.20	0.039	ug/L		09/05/23 14:55	09/08/23 15:52	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		09/05/23 14:55	09/08/23 15:52	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		09/05/23 14:55	09/08/23 15:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*96*		*18 - 147*	*09/05/23 14:55*	*09/08/23 15:52*	*1*
2-Fluorobiphenyl	*83*		*15 - 128*	*09/05/23 14:55*	*09/08/23 15:52*	*1*
Nitrobenzene-d5	*63*		*10 - 144*	*09/05/23 14:55*	*09/08/23 15:52*	*1*

Lab Sample ID: LCS 400-639760/16-A
Matrix: Water
Analysis Batch: 640207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	2.00	1.59		ug/L		80	40 - 140
Acenaphthylene	2.00	1.55		ug/L		77	40 - 140
Anthracene	2.00	1.56		ug/L		78	40 - 140
Benzo[a]anthracene	2.00	1.55		ug/L		78	40 - 140
Benzo[a]pyrene	2.00	1.28		ug/L		64	40 - 140
Benzo[b]fluoranthene	2.00	1.35		ug/L		67	40 - 140
Benzo[g,h,i]perylene	2.00	1.32		ug/L		66	40 - 140
Benzo[k]fluoranthene	2.00	1.37		ug/L		68	40 - 140
Chrysene	2.00	1.57		ug/L		79	40 - 140
Dibenz(a,h)anthracene	2.00	1.18		ug/L		59	40 - 140
Fluoranthene	2.00	1.74		ug/L		87	40 - 140
Fluorene	2.00	1.58		ug/L		79	40 - 140
Indeno[1,2,3-cd]pyrene	2.00	1.26		ug/L		63	40 - 140
Phenanthrene	2.00	1.59		ug/L		80	40 - 140
Pyrene	2.00	1.43		ug/L		71	40 - 140
1-Methylnaphthalene	2.00	1.61		ug/L		80	40 - 140
2-Methylnaphthalene	2.00	1.59		ug/L		80	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*84*		*18 - 147*

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

Lab Sample ID: LCS 400-639760/16-A
Matrix: Water
Analysis Batch: 640207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 639760

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	76		15 - 128
Nitrobenzene-d5	61		10 - 144

Lab Sample ID: LCSD 400-639760/17-A
Matrix: Water
Analysis Batch: 640207

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 639760

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			2.00	1.54		ug/L		77	40 - 140	4	40
Acenaphthylene			2.00	1.59		ug/L		80	40 - 140	3	40
Anthracene			2.00	1.50		ug/L		75	40 - 140	4	40
Benzo[a]anthracene			2.00	1.54		ug/L		77	40 - 140	1	40
Benzo[a]pyrene			2.00	1.29		ug/L		65	40 - 140	1	40
Benzo[b]fluoranthene			2.00	1.29		ug/L		64	40 - 140	4	40
Benzo[g,h,i]perylene			2.00	1.30		ug/L		65	40 - 140	1	40
Benzo[k]fluoranthene			2.00	1.34		ug/L		67	40 - 140	2	40
Chrysene			2.00	1.51		ug/L		76	40 - 140	4	40
Dibenz(a,h)anthracene			2.00	1.20		ug/L		60	40 - 140	2	40
Fluoranthene			2.00	1.71		ug/L		86	40 - 140	2	40
Fluorene			2.00	1.61		ug/L		81	40 - 140	2	40
Indeno[1,2,3-cd]pyrene			2.00	1.28		ug/L		64	40 - 140	1	40
Phenanthrene			2.00	1.49		ug/L		74	40 - 140	7	40
Pyrene			2.00	1.33		ug/L		67	40 - 140	7	40
1-Methylnaphthalene			2.00	1.56		ug/L		78	40 - 140	3	40
2-Methylnaphthalene			2.00	1.53		ug/L		76	40 - 140	4	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	84		18 - 147
2-Fluorobiphenyl	73		15 - 128
Nitrobenzene-d5	58		10 - 144

Lab Sample ID: 400-242724-4 MS
Matrix: Water
Analysis Batch: 640207

Client Sample ID: MW6C-ROX-082923
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		118	95.7		ug/L		81	50 - 150
Acenaphthylene	ND		118	100		ug/L		85	50 - 150
Anthracene	ND		118	97.7		ug/L		83	50 - 150
Benzo[a]anthracene	ND		118	98.5		ug/L		84	50 - 150
Benzo[a]pyrene	ND		118	88.5		ug/L		75	50 - 150
Benzo[b]fluoranthene	ND		118	94.3		ug/L		80	50 - 150
Benzo[g,h,i]perylene	ND		118	93.5		ug/L		79	50 - 150
Benzo[k]fluoranthene	ND		118	81.3		ug/L		69	50 - 150
Chrysene	ND		118	90.9		ug/L		77	50 - 150
Dibenz(a,h)anthracene	ND		118	91.1		ug/L		77	50 - 150
Fluoranthene	ND		118	106		ug/L		90	50 - 150
Fluorene	ND		118	101		ug/L		85	50 - 150

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

Lab Sample ID: 400-242724-4 MS
Matrix: Water
Analysis Batch: 640207

Client Sample ID: MW6C-ROX-082923
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Indeno[1,2,3-cd]pyrene	ND		118	93.3		ug/L		79	50 - 150
Phenanthrene	ND		118	93.7		ug/L		80	50 - 150
Pyrene	ND		118	80.8		ug/L		69	50 - 150
1-Methylnaphthalene	ND		118	79.5		ug/L		68	50 - 150
2-Methylnaphthalene	ND		118	78.6		ug/L		67	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*78*		*18 - 147*
2-Fluorobiphenyl	*78*		*15 - 128*
Nitrobenzene-d5	*58*		*10 - 144*

Lab Sample ID: 400-242724-4 MSD
Matrix: Water
Analysis Batch: 640207

Client Sample ID: MW6C-ROX-082923
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		118	95.1		ug/L		81	50 - 150	1	40
Acenaphthylene	ND		118	98.6		ug/L		84	50 - 150	1	40
Anthracene	ND		118	97.2		ug/L		83	50 - 150	1	40
Benzo[a]anthracene	ND		118	96.1		ug/L		82	50 - 150	2	40
Benzo[a]pyrene	ND		118	88.8		ug/L		75	50 - 150	0	40
Benzo[b]fluoranthene	ND		118	87.1		ug/L		74	50 - 150	8	40
Benzo[g,h,i]perylene	ND		118	85.4		ug/L		73	50 - 150	9	40
Benzo[k]fluoranthene	ND		118	85.7		ug/L		73	50 - 150	5	40
Chrysene	ND		118	88.5		ug/L		75	50 - 150	3	40
Dibenz(a,h)anthracene	ND		118	86.0		ug/L		73	50 - 150	6	40
Fluoranthene	ND		118	105		ug/L		89	50 - 150	1	40
Fluorene	ND		118	99.5		ug/L		85	50 - 150	1	40
Indeno[1,2,3-cd]pyrene	ND		118	87.2		ug/L		74	50 - 150	7	40
Phenanthrene	ND		118	92.8		ug/L		79	50 - 150	1	40
Pyrene	ND		118	77.3		ug/L		66	50 - 150	4	40
1-Methylnaphthalene	ND		118	79.7		ug/L		68	50 - 150	0	40
2-Methylnaphthalene	ND		118	78.8		ug/L		67	50 - 150	0	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*75*		*18 - 147*
2-Fluorobiphenyl	*77*		*15 - 128*
Nitrobenzene-d5	*59*		*10 - 144*

Lab Sample ID: MB 400-640651/1-A
Matrix: Water
Analysis Batch: 641154

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640651

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		09/12/23 10:32	09/15/23 16:40	1
Acenaphthylene	ND		0.20	0.044	ug/L		09/12/23 10:32	09/15/23 16:40	1
Anthracene	ND		0.20	0.047	ug/L		09/12/23 10:32	09/15/23 16:40	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		09/12/23 10:32	09/15/23 16:40	1

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

Lab Sample ID: MB 400-640651/1-A
Matrix: Water
Analysis Batch: 641154

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640651

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.20	0.064	ug/L		09/12/23 10:32	09/15/23 16:40	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		09/12/23 10:32	09/15/23 16:40	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		09/12/23 10:32	09/15/23 16:40	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		09/12/23 10:32	09/15/23 16:40	1
Chrysene	ND		0.20	0.033	ug/L		09/12/23 10:32	09/15/23 16:40	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		09/12/23 10:32	09/15/23 16:40	1
Fluoranthene	ND		0.20	0.034	ug/L		09/12/23 10:32	09/15/23 16:40	1
Fluorene	ND		0.20	0.089	ug/L		09/12/23 10:32	09/15/23 16:40	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		09/12/23 10:32	09/15/23 16:40	1
Phenanthrene	ND		0.20	0.090	ug/L		09/12/23 10:32	09/15/23 16:40	1
Pyrene	ND		0.20	0.039	ug/L		09/12/23 10:32	09/15/23 16:40	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		09/12/23 10:32	09/15/23 16:40	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		09/12/23 10:32	09/15/23 16:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*94*		*18 - 147*	*09/12/23 10:32*	*09/15/23 16:40*	*1*
2-Fluorobiphenyl	*75*		*15 - 128*	*09/12/23 10:32*	*09/15/23 16:40*	*1*
Nitrobenzene-d5	*69*		*10 - 144*	*09/12/23 10:32*	*09/15/23 16:40*	*1*

Lab Sample ID: LCS 400-640651/19-A
Matrix: Water
Analysis Batch: 641090

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640651

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	2.00	1.64		ug/L		82	40 - 140
Acenaphthylene	2.00	1.79		ug/L		89	40 - 140
Anthracene	2.00	1.55		ug/L		77	40 - 140
Benzo[a]anthracene	2.00	1.74		ug/L		87	40 - 140
Benzo[a]pyrene	2.00	1.41		ug/L		71	40 - 140
Benzo[b]fluoranthene	2.00	1.55		ug/L		78	40 - 140
Benzo[g,h,i]perylene	2.00	1.54		ug/L		77	40 - 140
Benzo[k]fluoranthene	2.00	1.60		ug/L		80	40 - 140
Chrysene	2.00	1.73		ug/L		87	40 - 140
Dibenz(a,h)anthracene	2.00	1.37		ug/L		69	40 - 140
Fluoranthene	2.00	1.78		ug/L		89	40 - 140
Fluorene	2.00	1.67		ug/L		83	40 - 140
Indeno[1,2,3-cd]pyrene	2.00	1.45		ug/L		73	40 - 140
Phenanthrene	2.00	1.52		ug/L		76	40 - 140
Pyrene	2.00	1.72		ug/L		86	40 - 140
1-Methylnaphthalene	2.00	1.74		ug/L		87	40 - 140
2-Methylnaphthalene	2.00	1.78		ug/L		89	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*112*		*18 - 147*
2-Fluorobiphenyl	*91*		*15 - 128*
Nitrobenzene-d5	*66*		*10 - 144*

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

Lab Sample ID: LCSD 400-640651/20-A
Matrix: Water
Analysis Batch: 641090

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640651

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			2.00	1.63		ug/L		81	40 - 140	1	40
Acenaphthylene			2.00	1.75		ug/L		87	40 - 140	2	40
Anthracene			2.00	1.57		ug/L		79	40 - 140	1	40
Benzo[a]anthracene			2.00	1.82		ug/L		91	40 - 140	4	40
Benzo[a]pyrene			2.00	1.43		ug/L		72	40 - 140	2	40
Benzo[b]fluoranthene			2.00	1.46		ug/L		73	40 - 140	6	40
Benzo[g,h,i]perylene			2.00	1.47		ug/L		74	40 - 140	4	40
Benzo[k]fluoranthene			2.00	1.54		ug/L		77	40 - 140	4	40
Chrysene			2.00	1.72		ug/L		86	40 - 140	1	40
Dibenz(a,h)anthracene			2.00	1.34		ug/L		67	40 - 140	2	40
Fluoranthene			2.00	1.82		ug/L		91	40 - 140	3	40
Fluorene			2.00	1.63		ug/L		82	40 - 140	2	40
Indeno[1,2,3-cd]pyrene			2.00	1.44		ug/L		72	40 - 140	1	40
Phenanthrene			2.00	1.54		ug/L		77	40 - 140	1	40
Pyrene			2.00	1.71		ug/L		85	40 - 140	1	40
1-Methylnaphthalene			2.00	1.83		ug/L		91	40 - 140	5	40
2-Methylnaphthalene			2.00	1.86		ug/L		93	40 - 140	4	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*112*		*18 - 147*
2-Fluorobiphenyl	*94*		*15 - 128*
Nitrobenzene-d5	*67*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-639353/1-A
Matrix: Water
Analysis Batch: 639362

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 639353

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		08/31/23 14:48	08/31/23 17:10	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		08/31/23 14:48	08/31/23 17:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*150*	*S1+*	*51 - 149*	*08/31/23 14:48*	*08/31/23 17:10*	*1*

Lab Sample ID: LCS 400-639353/2-A
Matrix: Water
Analysis Batch: 639362

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 639353

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-D bromo-3-Chloropropane			0.101	0.223	*+	ug/L		222	60 - 140		
1,2-D bromoethane			0.101	0.200	*+	ug/L		198	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*149*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-639353/3-A
Matrix: Water
Analysis Batch: 639362

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 639353

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane			0.101	0.230	*+	ug/L		229	60 - 140	9	30
1,2-D bromoethane			0.101	0.216	*+	ug/L		215	60 - 140	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*164*	*S1+*	*51 - 149*

Lab Sample ID: 400-242724-4 MS
Matrix: Water
Analysis Batch: 639478

Client Sample ID: MW6C-ROX-082923
Prep Type: Total/NA
Prep Batch: 639353

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-D bromo-3-Chloropropane	ND	*+ F1	0.103	0.334	F1	ug/L		325	10 - 150		
1,2-D bromoethane	ND	*+ F1 F2	0.103	0.223	F1	ug/L		216	39 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*146*		*51 - 149*

Lab Sample ID: 400-242724-4 MSD
Matrix: Water
Analysis Batch: 639478

Client Sample ID: MW6C-ROX-082923
Prep Type: Total/NA
Prep Batch: 639353

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane	ND	*+ F1	0.103	0.353	F1	ug/L		343	10 - 150	5	20
1,2-D bromoethane	ND	*+ F1	0.103	0.218	F1	ug/L		211	39 - 150	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*139*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____) 400-242724 COC

☐ 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: 8/29/2023
PO #	**GSAP Project ID**	PAGE: 1 of 2
60697537 – 3.3.2	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 – 3.3.2

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 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; loredana.filimon@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☐ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

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 8270LL
	TB-ROX-082923-8260-A	8/29/2023	0000	Water	2					2	X			
	TB-ROX-082923-8011-A	8/29/2023	0000	Water	2					2		X		
	MW26-ROX-082923	8/29/2023	0920	Water	6			2		8	X	X	X	X
	MW6C-ROX-082923	8/29/2023	1100	Water	6			2		8	X	X	X	X
	MW6C-ROX-082923-MS	8/29/2023	1100	Water	6			2		8	X	X	X	X
	MW6C-ROX-082923-MSD	8/29/2023	1100	Water	6			2		8	X	X	X	X
	MW6A-ROX-082923	8/29/2023	1220	Water	6			2		8	X	X	X	X
	MW6D-ROX-082923	8/29/2023	1330	Water	6			2		8	X	X	X	X

8-29-23

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
JOE MAYER	FEDEX: 6339 6594 5813, 6339 6594 5824	8/29/2023	1600
Relinquished by: (Signature)	Received by: (Signature)	Date: 8/30/23	Time: 0930
Relinquished by: (Signature)	Received by: (Signature)	Date	Time

CUSTODY SEALS: 1599768, 1599769, 1599770, 1599771

0.0°C IR8
2.1° IR8

Version: 10/2022

Page 88 of 94

9/22/2023

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: 8/29/2023
PO #	**GSAP Project ID**	PAGE: 2 of 2
60697537 – 3.3.2	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 – 3.3.2
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 :

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* Please include "J" values on Reports
* Please provide sample receipt upon login.
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☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

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-082923-8260-B	8/29/2023	0000	Water	2					2	X			
	TB-ROX-082923-8011-B	8/29/2023	0000	Water	2					2		X		
	MW1-ROX-082923-EB	8/29/2023	0810	Water	6			2		8	X	X	X	X
	MW1-ROX-082923	8/29/2023	0925	Water	6			2		8	X	X	X	X
	ROST4PZG-ROX-082923	8/29/2023	1035	Water	6			2		8	X	X	X	X
	P56-ROX-082923	8/29/2023	1250	Water	6			2		8	X	X	X	X
	P93A-ROX-082923	8/29/2023	1340	Water	6			2		8	X	X	X	X

8/29/23

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
MARY MASSA	FEDEX: See page 1	8/29/2023	1600
Relinquished by: (Signature)	Received by: (Signature)	Date: 8/30/23	Time: 0930
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

CUSTODY SEALS: See page 1

0,0°C IR8

Version: 13July23

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc. Job Number: 400-242724-1

Login Number: 242724 **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, 2.1°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").	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: 400-242724-1
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	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	12-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-23
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 Monthly August/September 2023 Data Review

Laboratory SDG: 400-242794-1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 10/4/2023

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

Sample Identification	Sample Identification
TB-ROX-083023-8260-A	TB-ROX-083023-8011-A
MW6B-ROX-083023	MW6B-ROX-083023-DUP
MW11-ROX-083023	MW28-ROX-083023
P54-ROX-083023	TB-ROX-083023-8260-B
TB-ROX-083023-8011-B	P93D-ROX-083023
ROST4PZC-ROX-083023	ROST4PZE-ROX-083023
MW12-ROX-083023-EB	MW12-ROX-083023
MW22-083023	--

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 in samples MW6B-ROX-083023-DUP, P54-ROX-083023, P93D-ROX-083023 and MW12-ROX-083023 were re-extracted outside extraction time criteria. LCS/LCSD recoveries and the LCS/LCSD RPD for benzenethiol were outside evaluation criteria. Several SVOC and VOC by 8011 surrogate recoveries were outside criteria in several investigative and quality control samples. MS/MSD recoveries for 2-chloroethyl vinyl ether were outside evaluation criteria in sample P93D-ROX-083023. VOCs in sample MW22-083023 were diluted to bring target analytes into calibration range of the instrument. The initial calibration verification (ICV) and the continuing calibration verification (CCV) for several analytes was outside evaluation criteria, biased low. The CCV for fluoranthene 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 sample receipt form indicated a discrepancy on the COC with respect to the sample label ID for sample MW6B-ROX-083023-DUP; the sample label was correctly used in processing and reporting the sample. No qualification of data was required.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

No, PAHs in samples MW6B-ROX-083023-DUP, P54-ROX-083023, P93D-ROX-083023 and MW12-ROX-083023 were re-extracted 7 days outside of extraction time criteria (7 days) and then re-analyzed 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 MW6B-ROX-083023-DUP, P54-ROX-083023, P93D-ROX-083023 and MW12-ROX-083023 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
MW6B-ROX-083023-DUP – RERA	PAHs	Dibenz(a,h)anthracene	**UJ**
MW6B-ROX-083023-DUP – RERA	PAHs	Fluoranthene	**UJ**
MW6B-ROX-083023-DUP – RERA	PAHs	Indeno[1,2,3-cd]pyrene	**UJ**
P54-ROX-083023 – RERA	PAHs	Acenaphthylene	**UJ**
P54-ROX-083023 – RERA	PAHs	Benzo[a]anthracene	**UJ**
P54-ROX-083023 – RERA	PAHs	Benzo[a]pyrene	**UJ**
P54-ROX-083023 – RERA	PAHs	Benzo[b]fluoranthene	**UJ**
P54-ROX-083023 – RERA	PAHs	Benzo[g,h,i]perylene	**UJ**
P54-ROX-083023 – RERA	PAHs	Benzo[k]fluoranthene	**UJ**
P54-ROX-083023 – RERA	PAHs	Chrysene	**UJ**
P54-ROX-083023 – RERA	PAHs	Dibenz(a,h)anthracene	**UJ**
P54-ROX-083023 – RERA	PAHs	Indeno[1,2,3-cd]pyrene	**UJ**
P93D-ROX-083023 – RERA	PAHs	Acenaphthylene	**UJ**
P93D-ROX-083023 – RERA	PAHs	Benzo[b]fluoranthene	**UJ**
P93D-ROX-083023 – RERA	PAHs	Benzo[k]fluoranthene	**UJ**
P93D-ROX-083023 – RERA	PAHs	Chrysene	**UJ**
P93D-ROX-083023 – RERA	PAHs	Dibenz(a,h)anthracene	**UJ**
P93D-ROX-083023 – RERA	PAHs	Fluoranthene	**UJ**
P93D-ROX-083023 – RERA	PAHs	Indeno[1,2,3-cd]pyrene	**UJ**
MW12-ROX-083023 – RERA	PAHs	Acenaphthylene	**UJ**
MW12-ROX-083023 – RERA	PAHs	Benzo[a]anthracene	**UJ**
MW12-ROX-083023 – RERA	PAHs	Benzo[a]pyrene	**UJ**
MW12-ROX-083023 – RERA	PAHs	Benzo[b]fluoranthene	**UJ**
MW12-ROX-083023 – RERA	PAHs	Benzo[g,h,i]perylene	**UJ**
MW12-ROX-083023 – RERA	PAHs	Benzo[k]fluoranthene	**UJ**
MW12-ROX-083023 – RERA	PAHs	Chrysene	**UJ**
MW12-ROX-083023 – RERA	PAHs	Dibenz(a,h)anthracene	**UJ**
MW12-ROX-083023 – RERA	PAHs	Indeno[1,2,3-cd]pyrene	**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 400-639760/14-A/15-A	SVOCs	Benzenethiol	**1**/64	**192**	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
MW6B-ROX-083023	SVOCs	Benzenethiol	**UJ**
MW6B-ROX-083023-DUP	SVOCs	Benzenethiol	**UJ**
MW11-ROX-083023	SVOCs	Benzenethiol	**UJ**
MW28-ROX-083023	SVOCs	Benzenethiol	**UJ**
P54-ROX-083023	SVOCs	Benzenethiol	**UJ**
P93D-ROX-083023	SVOCs	Benzenethiol	**UJ**
ROST4PZC-ROX-083023	SVOCs	Benzenethiol	**UJ**
ROST4PZE-ROX-083023	SVOCs	Benzenethiol	**UJ**
MW12-ROX-083023	SVOCs	Benzenethiol	**UJ**
MW22-083023	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW6B-ROX-083023-DUP	SVOCs	2-Fluorobiphenyl	**41**	46-124
MW28-ROX-083023	SVOCs	2-Fluorophenol	**10**	13-113
LCS 400-639897/2-A	VOCs by 8011	4-Bromofluorobenzene	**47**	51-149

Qualifications due to surrogate recoveries were not required if only one of three base/neutral and/or acid surrogate recoveries were outside evaluation criteria. Laboratory control samples 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?

Yes, sample P93D-ROX-083023 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
P93D-ROX-083023 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 the compound 2-chloroethyl vinyl ether due to acceptable LCS recoveries for this compound and to the acid reactive nature of 2-chloroethyl vinyl ether.

Sample ID	Parameter	Analyte	Qualification
P93D-ROX-083023	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
MW6B-ROX-083023	MW6B-ROX-083023-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 verification (ICV) for 4,6-dinitro-ortho-cresol and 3,3'-dichlorobenzidine, and the continuing calibration verification (CCV) for several analytes were outside evaluation criteria, biased low. The CCV for fluoranthene was outside evaluation criteria, biased high. Fluoranthene in sample MW6B-ROX-083023-DUP, has been previously qualified in Section 3.0 of this data review due to due to hold time exceedance; no further qualification of data is required. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
P93D-ROX-083023	VOCs	Dichlorodifluoromethane	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW22-083023	VOCs	Dichlorodifluoromethane	UJ
MW6B-ROX-083023	VOCs	Dichlorodifluoromethane	UJ
MW6B-ROX-083023-DUP	VOCs	Dichlorodifluoromethane	UJ
MW28-ROX-083023	VOCs	Dichlorodifluoromethane	UJ
P54-ROX-083023	VOCs	Dichlorodifluoromethane	UJ
ROST4PZC-ROX-083023	VOCs	Dichlorodifluoromethane	UJ
MW12-ROX-083023	VOCs	Dichlorodifluoromethane	UJ
MW11-ROX-083023	VOCs	Dichlorodifluoromethane	UJ
ROST4PZE-ROX-083023	VOCs	Dichlorodifluoromethane	UJ
MW11-ROX-083023	VOCs	2-Chloroethyl vinyl ether	UJ
ROST4PZE-ROX-083023	VOCs	2-Chloroethyl vinyl ether	UJ
MW6B-ROX-083023-DUP	SVOCs	4,6-Dinitro-ortho-cresol	UJ
MW6B-ROX-083023-DUP	SVOCs	3,3'-Dichlorobenzidine	UJ
MW11-ROX-083023	SVOCs	4,6-Dinitro-ortho-cresol	UJ
MW11-ROX-083023	SVOCs	3,3'-Dichlorobenzidine	UJ
MW28-ROX-083023	SVOCs	4,6-Dinitro-ortho-cresol	UJ
MW28-ROX-083023	SVOCs	3,3'-Dichlorobenzidine	UJ
P54-ROX-083023	SVOCs	4,6-Dinitro-ortho-cresol	UJ
P54-ROX-083023	SVOCs	3,3'-Dichlorobenzidine	UJ
ROST4PZC-ROX-083023	SVOCs	4,6-Dinitro-ortho-cresol	UJ
ROST4PZC-ROX-083023	SVOCs	3,3'-Dichlorobenzidine	UJ
ROST4PZE-ROX-083023	SVOCs	4,6-Dinitro-ortho-cresol	UJ
ROST4PZE-ROX-083023	SVOCs	3,3'-Dichlorobenzidine	UJ
MW12-ROX-083023	SVOCs	4,6-Dinitro-ortho-cresol	UJ
MW12-ROX-083023	SVOCs	3,3'-Dichlorobenzidine	UJ
MW22-083023	SVOCs	4,6-Dinitro-ortho-cresol	UJ
MW22-083023	SVOCs	3,3'-Dichlorobenzidine	UJ
MW6B-ROX-083023	SVOCs	4,6-Dinitro-ortho-cresol	UJ
MW6B-ROX-083023	SVOCs	3,3'-Dichlorobenzidine	UJ
MW6B-ROX-083023-DUP	SVOCs	Hexachlorocyclopentadiene	UJ
MW11-ROX-083023	SVOCs	Hexachlorocyclopentadiene	UJ
MW28-ROX-083023	SVOCs	Hexachlorocyclopentadiene	UJ
P54-ROX-083023	SVOCs	Hexachlorocyclopentadiene	UJ
ROST4PZC-ROX-083023	SVOCs	Hexachlorocyclopentadiene	UJ
ROST4PZE-ROX-083023	SVOCs	Hexachlorocyclopentadiene	UJ
MW12-ROX-083023	SVOCs	Hexachlorocyclopentadiene	UJ
MW22-083023	SVOCs	Hexachlorocyclopentadiene	UJ
MW6B-ROX-083023	SVOCs	Hexachlorocyclopentadiene	UJ
P93D-ROX-083023	SVOCs	Aniline	UJ
P93D-ROX-083023	SVOCs	Hexachlorocyclopentadiene	UJ
ROST4PZE-ROX-083023	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 9/18/2023 1:26:00 PM

JOB DESCRIPTION

ROXANA MONTHLY GW

JOB NUMBER

400-242794-1

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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Job ID: 400-242794-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-242794-1

Receipt
The samples were received on 8/31/2023 9:19 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 3.3°C and 5.3°C

Receipt Exceptions
COC says project is Roxana Monthly GW, there is no project with that description, picked the closest one.

The container label for the following sample(s) did not match the information listed on the Chain-of-Custody (COC):The container labels list MW6B-ROX-083023-DUP, while the COC lists MW6B-ROX-083023. Used the container labels to login because there is already a sample MW-6B.

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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-640361 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 400-640361 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-640361 recovered outside acceptance criteria, low biased, for 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 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-083023-8260-A (400-242794-1), MW6B-ROX-083023 (400-242794-3), MW6B-ROX-083023-DUP (400-242794-4), MW28-ROX-083023 (400-242794-6), P54-ROX-083023 (400-242794-7), TB-ROX-083023-8260-B (400-242794-8), P93D-ROX-083023 (400-242794-10), ROST4PZC-ROX-083023 (400-242794-11), MW12-ROX-083023-EB (400-242794-13), MW12-ROX-083023 (400-242794-14) and MW22-083023 (400-242795-1). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-640415 recovered outside acceptance criteria, low biased, for 2-Chloroethyl vinyl ether 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 400-640415 recovered above the upper control limit for 1-Chlorohexane and Hexachlorobutadiene. 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: MW11-ROX-083023 (400-242794-5) and ROST4PZE-ROX-083023 (400-242794-12). The requested target analyte list includes 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260D: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW22-083023 (400-242795-1). Elevated reporting limits (RLs) are provided.

Job ID: 400-242794-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

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 400-639760 and analytical batch 400-640111 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 initial calibration verification (ICV) analyzed in batch 400-639415 was outside method criteria for the following analyte(s): 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 400-639760 and analytical batch 400-640111 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-640527 recovered above the upper control limit for 2,4,5-Trichlorophenol, 2-Nitrophenol and 4-Chlorophenyl phenyl ether. 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 400-640527 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: The continuing calibration verification (CCV) associated with batch 400-640723 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: The continuing calibration verification (CCV) associated with batch 400-640672 recovered above the upper control limit for 2,4,5-Trichlorophenol, 2,4-Dinitrotoluene, 2-Nitrophenol, 4-Bromophenyl phenyl ether, 4-Chlorophenyl phenyl ether, 4-Nitrophenol, Dibenzofuran, Diethyl phthalate and Hexachlorobenzene. 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 400-640672 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: The initial calibration verification (ICV) analyzed in batch 400-637784 was outside method criteria for the following analyte(s): 3,3'-Dichlorobenzidine and 4,6-Dinitro-ortho-cresol. 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 400-640846 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene and Aniline. 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 initial calibration verification (ICV) analyzed in batch 400-633924 was outside method criteria for the following analyte(s): 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 400-640497 recovered above the upper control limit for Fluoranthene. The samples associated with this CCV were below the reporting limits (RL) for the affected analytes; therefore, the data have been reported.

Job ID: 400-242794-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

Method 8270E_SIM: The following samples were re-prepared outside of preparation holding time for verification: MW6B-ROX-083023-DUP (400-242794-4), P54-ROX-083023 (400-242794-7), P93D-ROX-083023 (400-242794-10) and MW12-ROX-083023 (400-242794-14). 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 400-639945 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8011: Surrogate recovery for (LCS 400-639897/2-A) was outside control limits. The spiked target analytes recovered within limits; therefore, the data has 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: 400-242794-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-242794-1	TB-ROX-083023-8260-A	Water	08/30/23 12:00	08/31/23 09:19
400-242794-2	TB-ROX-083023-8011-A	Water	08/30/23 12:00	08/31/23 09:19
400-242794-3	MW6B-ROX-083023	Water	08/30/23 09:20	08/31/23 09:19
400-242794-4	MW6B-ROX-083023-DUP	Water	08/30/23 09:20	08/31/23 09:19
400-242794-5	MW11-ROX-083023	Water	08/30/23 10:30	08/31/23 09:19
400-242794-6	MW28-ROX-083023	Water	08/30/23 11:45	08/31/23 09:19
400-242794-7	P54-ROX-083023	Water	08/30/23 13:35	08/31/23 09:19
400-242794-8	TB-ROX-083023-8260-B	Water	08/30/23 12:00	08/31/23 09:19
400-242794-9	TB-ROX-083023-8011-B	Water	08/30/23 12:00	08/31/23 09:19
400-242794-10	P93D-ROX-083023	Water	08/30/23 09:50	08/31/23 09:19
400-242794-11	ROST4PZC-ROX-083023	Water	08/30/23 10:15	08/31/23 09:19
400-242794-12	ROST4PZE-ROX-083023	Water	08/30/23 11:00	08/31/23 09:19
400-242794-13	MW12-ROX-083023-EB	Water	08/30/23 11:50	08/31/23 09:19
400-242794-14	MW12-ROX-083023	Water	08/30/23 12:20	08/31/23 09:19
400-242795-1	MW22-083023	Water	08/30/23 13:20	08/31/23 09:19

Detection Summary

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

Job ID: 400-242794-1

Client Sample ID: TB-ROX-083023-8260-A — Lab Sample ID: 400-242794-1

No Detections.

Client Sample ID: TB-ROX-083023-8011-A — Lab Sample ID: 400-242794-2

No Detections.

Client Sample ID: MW6B-ROX-083023 — Lab Sample ID: 400-242794-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.42	J	1.0	0.22	ug/L	1		8260D	Total/NA

Client Sample ID: MW6B-ROX-083023-DUP — Lab Sample ID: 400-242794-4

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
Dibenz(a,h)anthracene	0.049	J	0.20	0.047	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.090	J	0.20	0.033	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.058	J	0.20	0.033	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW11-ROX-083023 — Lab Sample ID: 400-242794-5

No Detections.

Client Sample ID: MW28-ROX-083023 — Lab Sample ID: 400-242794-6

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

Client Sample ID: P54-ROX-083023 — Lab Sample ID: 400-242794-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.069	J	0.20	0.044	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.063	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Benzo[a]pyrene	0.13	J	0.20	0.063	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.18	J	0.20	0.037	ug/L	1		8270E SIM	Total/NA
Benzo[g,h,i]perylene	0.15	J	0.20	0.027	ug/L	1		8270E SIM	Total/NA
Benzo[k]fluoranthene	0.069	J	0.20	0.061	ug/L	1		8270E SIM	Total/NA
Chrysene	0.068	J	0.20	0.033	ug/L	1		8270E SIM	Total/NA
Dibenz(a,h)anthracene	0.071	J	0.20	0.048	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.17	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA

Client Sample ID: TB-ROX-083023-8260-B — Lab Sample ID: 400-242794-8

No Detections.

Client Sample ID: TB-ROX-083023-8011-B — Lab Sample ID: 400-242794-9

No Detections.

Client Sample ID: P93D-ROX-083023 — Lab Sample ID: 400-242794-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.81	J	1.0	0.22	ug/L	1		8260D	Total/NA
Acenaphthylene	0.043	J	0.19	0.042	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.063	J	0.19	0.035	ug/L	1		8270E SIM	Total/NA
Benzo[k]fluoranthene	0.060	J	0.19	0.059	ug/L	1		8270E SIM	Total/NA
Chrysene	0.061	J	0.19	0.031	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

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 400-242794-1

Client Sample ID: P93D-ROX-083023 (Continued) — Lab Sample ID: 400-242794-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.10	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.10	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Butyl benzyl phthalate	0.40	J	9.5	0.18	ug/L	1		8270E	Total/NA

Client Sample ID: ROST4PZC-ROX-083023 — Lab Sample ID: 400-242794-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.6		1.0	0.50	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	11	J	25	2.6	ug/L	1		8260D	Total/NA
Ethylbenzene	1.9		1.0	0.50	ug/L	1		8260D	Total/NA
Isopropy benzene	4.2		1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	28		5.0	0.63	ug/L	1		8260D	Total/NA
Naphthalene	47		5.0	3.0	ug/L	1		8260D	Total/NA
N-Propylbenzene	6.7		1.0	0.69	ug/L	1		8260D	Total/NA
o-Xylene	2.0	J	5.0	0.60	ug/L	1		8260D	Total/NA
Toluene	5.9		1.0	0.90	ug/L	1		8260D	Total/NA
1,2,4-Trimethy benzene	5.0		1.0	0.82	ug/L	1		8260D	Total/NA
1,3,5-Trimethy benzene	1.1		1.0	0.56	ug/L	1		8260D	Total/NA
Xylenes, Total	30		10	1.6	ug/L	1		8260D	Total/NA
Acenaphthene	0.66		0.19	0.094	ug/L	1		8270E SIM	Total/NA
Anthracene	0.27		0.19	0.044	ug/L	1		8270E SIM	Total/NA
Fluorene	0.55		0.19	0.084	ug/L	1		8270E SIM	Total/NA
Phenanthrene	1.4		0.19	0.085	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	15		0.19	0.076	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	2.3		0.19	0.062	ug/L	1		8270E SIM	Total/NA

Client Sample ID: ROST4PZE-ROX-083023 — Lab Sample ID: 400-242794-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.0		1.0	0.50	ug/L	1		8260D	Total/NA
Ethylbenzene	7.7		1.0	0.50	ug/L	1		8260D	Total/NA
Isopropy benzene	1.8		1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	11		5.0	0.63	ug/L	1		8260D	Total/NA
Naphthalene	5.9		5.0	3.0	ug/L	1		8260D	Total/NA
N-Propylbenzene	1.8		1.0	0.69	ug/L	1		8260D	Total/NA
o-Xylene	2.1	J	5.0	0.60	ug/L	1		8260D	Total/NA
1,2,4-Trimethy benzene	29		1.0	0.82	ug/L	1		8260D	Total/NA
Xylenes, Total	13		10	1.6	ug/L	1		8260D	Total/NA
Acenaphthene	0.99		0.19	0.094	ug/L	1		8270E SIM	Total/NA
Anthracene	0.76		0.19	0.045	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.13	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Fluorene	1.0		0.19	0.085	ug/L	1		8270E SIM	Total/NA
Phenanthrene	3.6		0.19	0.086	ug/L	1		8270E SIM	Total/NA
Pyrene	0.052	J	0.19	0.037	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	12		0.19	0.076	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	1.6		0.19	0.063	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW12-ROX-083023-EB — Lab Sample ID: 400-242794-13

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: 400-242794-1

Client Sample ID: MW12-ROX-083023 — Lab Sample ID: 400-242794-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.13	J	0.19	0.042	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.046	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Benzo[a]pyrene	0.17	J	0.19	0.061	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.19		0.19	0.035	ug/L	1		8270E SIM	Total/NA
Benzo[g,h,i]perylene	0.17	J	0.19	0.026	ug/L	1		8270E SIM	Total/NA
Benzo[k]fluoranthene	0.082	J	0.19	0.059	ug/L	1		8270E SIM	Total/NA
Chrysene	0.045	J	0.19	0.031	ug/L	1		8270E SIM	Total/NA
Dibenz(a,h)anthracene	0.076	J	0.19	0.045	ug/L	1		8270E SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.22		0.19	0.032	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW22-083023 — Lab Sample ID: 400-242795-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	15		1.0	0.50	ug/L	1		8260D	Total/NA
Ethylbenzene	58		1.0	0.50	ug/L	1		8260D	Total/NA
Isopropy benzene	50		1.0	0.53	ug/L	1		8260D	Total/NA
Naphthalene	89		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	110		1.0	0.69	ug/L	1		8260D	Total/NA
p-Isopropyltoluene	7.3		1.0	0.71	ug/L	1		8260D	Total/NA
sec-Butylbenzene	6.4		1.0	0.70	ug/L	1		8260D	Total/NA
tert-Butylbenzene	14		1.0	0.63	ug/L	1		8260D	Total/NA
Toluene	23		1.0	0.90	ug/L	1		8260D	Total/NA
1,2,4-Trimethy benzene	240		1.0	0.82	ug/L	1		8260D	Total/NA
1,3,5-Trimethy benzene	140		1.0	0.56	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene - DL	400		10	1.3	ug/L	2		8260D	Total/NA
Xylenes, Total - DL	400		20	3.2	ug/L	2		8260D	Total/NA
1-Methylnaphthalene	5.9		0.19	0.076	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	6.6		0.19	0.062	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: 400-242794-1

Client Sample ID: TB-ROX-083023-8260-A
Date Collected: 08/30/23 12:00
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-1
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			09/09/23 09:30	1
Acrolein	ND		20	3.3	ug/L			09/09/23 09:30	1
Acrylonitrile	ND		10	2.8	ug/L			09/09/23 09:30	1
Benzene	ND		1.0	0.50	ug/L			09/09/23 09:30	1
Bromobenzene	ND		1.0	0.54	ug/L			09/09/23 09:30	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/09/23 09:30	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/09/23 09:30	1
Bromoform	ND		5.0	0.25	ug/L			09/09/23 09:30	1
Bromomethane	ND		1.0	0.98	ug/L			09/09/23 09:30	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/09/23 09:30	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/09/23 09:30	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/09/23 09:30	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/09/23 09:30	1
Chloroethane	ND		1.0	0.76	ug/L			09/09/23 09:30	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/09/23 09:30	1
Chloroform	ND		1.0	0.90	ug/L			09/09/23 09:30	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/09/23 09:30	1
Chloromethane	ND		1.0	0.90	ug/L			09/09/23 09:30	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/09/23 09:30	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/09/23 09:30	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/09/23 09:30	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/09/23 09:30	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/09/23 09:30	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/09/23 09:30	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/09/23 09:30	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/09/23 09:30	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/09/23 09:30	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 09:30	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 09:30	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 09:30	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 09:30	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/09/23 09:30	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/09/23 09:30	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/09/23 09:30	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/09/23 09:30	1
2-Hexanone	ND		25	1.4	ug/L			09/09/23 09:30	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/09/23 09:30	1
Methylene bromide	ND		5.0	0.22	ug/L			09/09/23 09:30	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/09/23 09:30	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/09/23 09:30	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/09/23 09:30	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/09/23 09:30	1
Naphthalene	ND		5.0	3.0	ug/L			09/09/23 09:30	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/09/23 09:30	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/09/23 09:30	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/09/23 09:30	1
o-Xylene	ND		5.0	0.60	ug/L			09/09/23 09:30	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/09/23 09:30	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/09/23 09:30	1

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

Job ID: 400-242794-1

Client Sample ID: TB-ROX-083023-8260-A
Date Collected: 08/30/23 12:00
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-1
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			09/09/23 09:30	1
Styrene	ND		1.0	1.0	ug/L			09/09/23 09:30	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/09/23 09:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/09/23 09:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/09/23 09:30	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/09/23 09:30	1
Toluene	ND		1.0	0.90	ug/L			09/09/23 09:30	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 09:30	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/09/23 09:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/09/23 09:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/09/23 09:30	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/09/23 09:30	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/09/23 09:30	1
Trichloroethene	ND		1.0	0.15	ug/L			09/09/23 09:30	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/09/23 09:30	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/09/23 09:30	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/09/23 09:30	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/09/23 09:30	1
Vinyl acetate	ND		25	0.93	ug/L			09/09/23 09:30	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/09/23 09:30	1
Xylenes, Total	ND		10	1.6	ug/L			09/09/23 09:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*09/09/23 09:30*	*1*
Dibromofluoromethane	*96*		*75 - 126*		*09/09/23 09:30*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*09/09/23 09:30*	*1*

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

Job ID: 400-242794-1

Client Sample ID: TB-ROX-083023-8011-A
Date Collected: 08/30/23 12:00
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-2
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-D bromo-3-Chloropropane	ND		0.029	0.017	ug/L		09/06/23 12:59	09/06/23 16:56	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/06/23 12:59	09/06/23 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*58*		*51 - 149*	*09/06/23 12:59*	*09/06/23 16:56*	*1*

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

Job ID: 400-242794-1

Client Sample ID: MW6B-ROX-083023
Date Collected: 08/30/23 09:20
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-3
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			09/09/23 13:23	1
Acrolein	ND		20	3.3	ug/L			09/09/23 13:23	1
Acrylonitrile	ND		10	2.8	ug/L			09/09/23 13:23	1
Benzene	ND		1.0	0.50	ug/L			09/09/23 13:23	1
Bromobenzene	ND		1.0	0.54	ug/L			09/09/23 13:23	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/09/23 13:23	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/09/23 13:23	1
Bromoform	ND		5.0	0.25	ug/L			09/09/23 13:23	1
Bromomethane	ND		1.0	0.98	ug/L			09/09/23 13:23	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/09/23 13:23	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/09/23 13:23	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/09/23 13:23	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/09/23 13:23	1
Chloroethane	ND		1.0	0.76	ug/L			09/09/23 13:23	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/09/23 13:23	1
Chloroform	ND		1.0	0.90	ug/L			09/09/23 13:23	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/09/23 13:23	1
Chloromethane	ND		1.0	0.90	ug/L			09/09/23 13:23	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/09/23 13:23	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/09/23 13:23	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/09/23 13:23	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/09/23 13:23	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/09/23 13:23	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/09/23 13:23	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/09/23 13:23	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/09/23 13:23	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/09/23 13:23	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 13:23	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 13:23	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 13:23	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 13:23	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/09/23 13:23	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/09/23 13:23	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/09/23 13:23	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/09/23 13:23	1
2-Hexanone	ND		25	1.4	ug/L			09/09/23 13:23	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/09/23 13:23	1
Methylene bromide	ND		5.0	0.22	ug/L			09/09/23 13:23	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/09/23 13:23	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/09/23 13:23	1
Methyl tert-butyl ether	**0.42**	**J**	1.0	0.22	ug/L			09/09/23 13:23	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/09/23 13:23	1
Naphthalene	ND		5.0	3.0	ug/L			09/09/23 13:23	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/09/23 13:23	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/09/23 13:23	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/09/23 13:23	1
o-Xylene	ND		5.0	0.60	ug/L			09/09/23 13:23	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/09/23 13:23	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/09/23 13:23	1

Client Sample ID: MW6B-ROX-083023
Date Collected: 08/30/23 09:20
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-3
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			09/09/23 13:23	1
Styrene	ND		1.0	1.0	ug/L			09/09/23 13:23	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/09/23 13:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/09/23 13:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/09/23 13:23	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/09/23 13:23	1
Toluene	ND		1.0	0.90	ug/L			09/09/23 13:23	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 13:23	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/09/23 13:23	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/09/23 13:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/09/23 13:23	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/09/23 13:23	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/09/23 13:23	1
Trichloroethene	ND		1.0	0.15	ug/L			09/09/23 13:23	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/09/23 13:23	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/09/23 13:23	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/09/23 13:23	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/09/23 13:23	1
Vinyl acetate	ND		25	0.93	ug/L			09/09/23 13:23	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/09/23 13:23	1
Xylenes, Total	ND		10	1.6	ug/L			09/09/23 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*72 - 130*		*09/09/23 13:23*	*1*
Dibromofluoromethane	*95*		*75 - 126*		*09/09/23 13:23*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*09/09/23 13:23*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		09/06/23 14:31	09/11/23 18:32	1
Acenaphthylene	ND		0.20	0.044	ug/L		09/06/23 14:31	09/11/23 18:32	1
Anthracene	ND		0.20	0.047	ug/L		09/06/23 14:31	09/11/23 18:32	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		09/06/23 14:31	09/11/23 18:32	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		09/06/23 14:31	09/11/23 18:32	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		09/06/23 14:31	09/11/23 18:32	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		09/06/23 14:31	09/11/23 18:32	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		09/06/23 14:31	09/11/23 18:32	1
Chrysene	ND		0.20	0.033	ug/L		09/06/23 14:31	09/11/23 18:32	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		09/06/23 14:31	09/11/23 18:32	1
Fluoranthene	ND		0.20	0.034	ug/L		09/06/23 14:31	09/11/23 18:32	1
Fluorene	ND		0.20	0.089	ug/L		09/06/23 14:31	09/11/23 18:32	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		09/06/23 14:31	09/11/23 18:32	1
Phenanthrene	ND		0.20	0.090	ug/L		09/06/23 14:31	09/11/23 18:32	1
Pyrene	ND		0.20	0.039	ug/L		09/06/23 14:31	09/11/23 18:32	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		09/06/23 14:31	09/11/23 18:32	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		09/06/23 14:31	09/11/23 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*55*		*18 - 147*	*09/06/23 14:31*	*09/11/23 18:32*	*1*
2-Fluorobiphenyl	*54*		*15 - 128*	*09/06/23 14:31*	*09/11/23 18:32*	*1*

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

Job ID: 400-242794-1

Client Sample ID: MW6B-ROX-083023

Date Collected: 08/30/23 09:20
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-3

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*	*09/06/23 14:31*	*09/11/23 18:32*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		09/06/23 14:31	09/12/23 16:19	1
Benzenethiol	ND	*1	10	1.7	ug/L		09/06/23 14:31	09/12/23 16:19	1
Benzoic acid	ND		30	7.3	ug/L		09/06/23 14:31	09/12/23 16:19	1
Benzyl alcohol	ND		10	2.0	ug/L		09/06/23 14:31	09/12/23 16:19	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		09/06/23 14:31	09/12/23 16:19	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		09/06/23 14:31	09/12/23 16:19	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		09/06/23 14:31	09/12/23 16:19	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		09/06/23 14:31	09/12/23 16:19	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		09/06/23 14:31	09/12/23 16:19	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		09/06/23 14:31	09/12/23 16:19	1
4-Chloroaniline	ND		10	3.4	ug/L		09/06/23 14:31	09/12/23 16:19	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		09/06/23 14:31	09/12/23 16:19	1
2-Chloronaphthalene	ND		10	0.14	ug/L		09/06/23 14:31	09/12/23 16:19	1
2-Chlorophenol	ND		10	2.2	ug/L		09/06/23 14:31	09/12/23 16:19	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		09/06/23 14:31	09/12/23 16:19	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		09/06/23 14:31	09/12/23 16:19	1
Dibenzofuran	ND		10	0.17	ug/L		09/06/23 14:31	09/12/23 16:19	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		09/06/23 14:31	09/12/23 16:19	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		09/06/23 14:31	09/12/23 16:19	1
Diethyl phthalate	ND		10	0.24	ug/L		09/06/23 14:31	09/12/23 16:19	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		09/06/23 14:31	09/12/23 16:19	1
Dimethyl phthalate	ND		10	0.17	ug/L		09/06/23 14:31	09/12/23 16:19	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		09/06/23 14:31	09/12/23 16:19	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		09/06/23 14:31	09/12/23 16:19	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		09/06/23 14:31	09/12/23 16:19	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		09/06/23 14:31	09/12/23 16:19	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		09/06/23 14:31	09/12/23 16:19	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		09/06/23 14:31	09/12/23 16:19	1
1,4-Dioxane	ND		10	1.0	ug/L		09/06/23 14:31	09/12/23 16:19	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		09/06/23 14:31	09/12/23 16:19	1
Hexachlorobenzene	ND		10	0.17	ug/L		09/06/23 14:31	09/12/23 16:19	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/06/23 14:31	09/12/23 16:19	1
Hexachloroethane	ND		10	4.2	ug/L		09/06/23 14:31	09/12/23 16:19	1
Indene	ND		10	1.0	ug/L		09/06/23 14:31	09/12/23 16:19	1
Isophorone	ND		10	0.14	ug/L		09/06/23 14:31	09/12/23 16:19	1
2-Methylphenol	ND		10	1.8	ug/L		09/06/23 14:31	09/12/23 16:19	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		09/06/23 14:31	09/12/23 16:19	1
2-Nitroaniline	ND		10	2.2	ug/L		09/06/23 14:31	09/12/23 16:19	1
3-Nitroaniline	ND		10	1.8	ug/L		09/06/23 14:31	09/12/23 16:19	1
4-Nitroaniline	ND		10	1.5	ug/L		09/06/23 14:31	09/12/23 16:19	1
Nitrobenzene	ND		10	0.13	ug/L		09/06/23 14:31	09/12/23 16:19	1
2-Nitrophenol	ND		10	5.2	ug/L		09/06/23 14:31	09/12/23 16:19	1
4-Nitrophenol	ND		10	2.1	ug/L		09/06/23 14:31	09/12/23 16:19	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		09/06/23 14:31	09/12/23 16:19	1

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

Job ID: 400-242794-1

Client Sample ID: MW6B-ROX-083023
Date Collected: 08/30/23 09:20
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-3
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		09/06/23 14:31	09/12/23 16:19	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		09/06/23 14:31	09/12/23 16:19	1
Pentachlorophenol	ND		20	1.4	ug/L		09/06/23 14:31	09/12/23 16:19	1
Phenol	ND		10	2.6	ug/L		09/06/23 14:31	09/12/23 16:19	1
Pyridine	ND		10	3.2	ug/L		09/06/23 14:31	09/12/23 16:19	1
Quinoline	ND		10	4.5	ug/L		09/06/23 14:31	09/12/23 16:19	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		09/06/23 14:31	09/12/23 16:19	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		09/06/23 14:31	09/12/23 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*46 - 124*	*09/06/23 14:31*	*09/12/23 16:19*	*1*
2-Fluorophenol	*24*		*13 - 113*	*09/06/23 14:31*	*09/12/23 16:19*	*1*
Nitrobenzene-d5	*47*		*36 - 126*	*09/06/23 14:31*	*09/12/23 16:19*	*1*
Phenol-d5	*38*		*17 - 127*	*09/06/23 14:31*	*09/12/23 16:19*	*1*
Terphenyl-d14	*67*		*44 - 149*	*09/06/23 14:31*	*09/12/23 16:19*	*1*
2,4,6-Tribromophenol	*59*		*26 - 150*	*09/06/23 14:31*	*09/12/23 16:19*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.031	0.018	ug/L		09/06/23 12:59	09/06/23 17:17	1
1,2-D bromoethane	ND		0.021	0.015	ug/L		09/06/23 12:59	09/06/23 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*73*		*51 - 149*	*09/06/23 12:59*	*09/06/23 17:17*	*1*

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

Job ID: 400-242794-1

Client Sample ID: MW6B-ROX-083023-DUP
Date Collected: 08/30/23 09:20
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-4
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			09/09/23 13:48	1
Acrolein	ND		20	3.3	ug/L			09/09/23 13:48	1
Acrylonitrile	ND		10	2.8	ug/L			09/09/23 13:48	1
Benzene	ND		1.0	0.50	ug/L			09/09/23 13:48	1
Bromobenzene	ND		1.0	0.54	ug/L			09/09/23 13:48	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/09/23 13:48	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/09/23 13:48	1
Bromoform	ND		5.0	0.25	ug/L			09/09/23 13:48	1
Bromomethane	ND		1.0	0.98	ug/L			09/09/23 13:48	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/09/23 13:48	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/09/23 13:48	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/09/23 13:48	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/09/23 13:48	1
Chloroethane	ND		1.0	0.76	ug/L			09/09/23 13:48	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/09/23 13:48	1
Chloroform	ND		1.0	0.90	ug/L			09/09/23 13:48	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/09/23 13:48	1
Chloromethane	ND		1.0	0.90	ug/L			09/09/23 13:48	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/09/23 13:48	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/09/23 13:48	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/09/23 13:48	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/09/23 13:48	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/09/23 13:48	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/09/23 13:48	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/09/23 13:48	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/09/23 13:48	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/09/23 13:48	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 13:48	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 13:48	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 13:48	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 13:48	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/09/23 13:48	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/09/23 13:48	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/09/23 13:48	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/09/23 13:48	1
2-Hexanone	ND		25	1.4	ug/L			09/09/23 13:48	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/09/23 13:48	1
Methylene bromide	ND		5.0	0.22	ug/L			09/09/23 13:48	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/09/23 13:48	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/09/23 13:48	1
Methyl tert-butyl ether	**0.47**	**J**	1.0	0.22	ug/L			09/09/23 13:48	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/09/23 13:48	1
Naphthalene	ND		5.0	3.0	ug/L			09/09/23 13:48	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/09/23 13:48	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/09/23 13:48	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/09/23 13:48	1
o-Xylene	ND		5.0	0.60	ug/L			09/09/23 13:48	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/09/23 13:48	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/09/23 13:48	1

Client Sample ID: MW6B-ROX-083023-DUP
Date Collected: 08/30/23 09:20
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-4
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			09/09/23 13:48	1
Styrene	ND		1.0	1.0	ug/L			09/09/23 13:48	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/09/23 13:48	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/09/23 13:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/09/23 13:48	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/09/23 13:48	1
Toluene	ND		1.0	0.90	ug/L			09/09/23 13:48	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 13:48	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/09/23 13:48	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/09/23 13:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/09/23 13:48	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/09/23 13:48	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/09/23 13:48	1
Trichloroethene	ND		1.0	0.15	ug/L			09/09/23 13:48	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/09/23 13:48	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/09/23 13:48	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/09/23 13:48	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/09/23 13:48	1
Vinyl acetate	ND		25	0.93	ug/L			09/09/23 13:48	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/09/23 13:48	1
Xylenes, Total	ND		10	1.6	ug/L			09/09/23 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 130*		*09/09/23 13:48*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*09/09/23 13:48*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/09/23 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		0.20	0.097	ug/L		09/06/23 14:31	09/11/23 18:53	1
Acenaphthylene	ND		0.20	0.043	ug/L		09/06/23 14:31	09/11/23 18:53	1
Anthracene	ND		0.20	0.046	ug/L		09/06/23 14:31	09/11/23 18:53	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		09/06/23 14:31	09/11/23 18:53	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		09/06/23 14:31	09/11/23 18:53	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		09/06/23 14:31	09/11/23 18:53	1
Benzo[g,h,i]perylene	ND		0.20	0.026	ug/L		09/06/23 14:31	09/11/23 18:53	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		09/06/23 14:31	09/11/23 18:53	1
Chrysene	ND		0.20	0.032	ug/L		09/06/23 14:31	09/11/23 18:53	1
Dibenz(a,h)anthracene	**0.049**	**J**	0.20	0.047	ug/L		09/06/23 14:31	09/11/23 18:53	1
Fluoranthene	**0.090**	**J**	0.20	0.033	ug/L		09/06/23 14:31	09/11/23 18:53	1
Fluorene	ND		0.20	0.087	ug/L		09/06/23 14:31	09/11/23 18:53	1
Indeno[1,2,3-cd]pyrene	**0.058**	**J**	0.20	0.033	ug/L		09/06/23 14:31	09/11/23 18:53	1
Phenanthrene	ND		0.20	0.088	ug/L		09/06/23 14:31	09/11/23 18:53	1
Pyrene	ND		0.20	0.038	ug/L		09/06/23 14:31	09/11/23 18:53	1
1-Methylnaphthalene	ND		0.20	0.078	ug/L		09/06/23 14:31	09/11/23 18:53	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		09/06/23 14:31	09/11/23 18:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*79*		*18 - 147*	*09/06/23 14:31*	*09/11/23 18:53*	*1*
2-Fluorobiphenyl	*72*		*15 - 128*	*09/06/23 14:31*	*09/11/23 18:53*	*1*

Client Sample ID: MW6B-ROX-083023-DUP

Lab Sample ID: 400-242794-4

Date Collected: 08/30/23 09:20

Matrix: Water

Date Received: 08/31/23 09:19

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	88		10 - 144	09/06/23 14:31	09/11/23 18:53	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	0.20	0.097	ug/L		09/13/23 10:04	09/15/23 17:22	1
Acenaphthylene	ND	H	0.20	0.043	ug/L		09/13/23 10:04	09/15/23 17:22	1
Anthracene	ND	H	0.20	0.046	ug/L		09/13/23 10:04	09/15/23 17:22	1
Benzo[a]anthracene	ND	H	0.20	0.033	ug/L		09/13/23 10:04	09/15/23 17:22	1
Benzo[a]pyrene	ND	H	0.20	0.062	ug/L		09/13/23 10:04	09/15/23 17:22	1
Benzo[b]fluoranthene	ND	H	0.20	0.036	ug/L		09/13/23 10:04	09/15/23 17:22	1
Benzo[g,h,i]perylene	ND	H	0.20	0.026	ug/L		09/13/23 10:04	09/15/23 17:22	1
Benzo[k]fluoranthene	ND	H	0.20	0.060	ug/L		09/13/23 10:04	09/15/23 17:22	1
Chrysene	ND	H	0.20	0.032	ug/L		09/13/23 10:04	09/15/23 17:22	1
Dibenz(a,h)anthracene	ND	H	0.20	0.047	ug/L		09/13/23 10:04	09/15/23 17:22	1
Fluoranthene	ND	H	0.20	0.033	ug/L		09/13/23 10:04	09/15/23 17:22	1
Fluorene	ND	H	0.20	0.087	ug/L		09/13/23 10:04	09/15/23 17:22	1
Indeno[1,2,3-cd]pyrene	ND	H	0.20	0.033	ug/L		09/13/23 10:04	09/15/23 17:22	1
Phenanthrene	ND	H	0.20	0.088	ug/L		09/13/23 10:04	09/15/23 17:22	1
Pyrene	ND	H	0.20	0.038	ug/L		09/13/23 10:04	09/15/23 17:22	1
1-Methylnaphthalene	ND	H	0.20	0.078	ug/L		09/13/23 10:04	09/15/23 17:22	1
2-Methylnaphthalene	ND	H	0.20	0.064	ug/L		09/13/23 10:04	09/15/23 17:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	78		18 - 147	09/13/23 10:04	09/15/23 17:22	1
2-Fluorobiphenyl	77		15 - 128	09/13/23 10:04	09/15/23 17:22	1
Nitrobenzene-d5	70		10 - 144	09/13/23 10:04	09/15/23 17:22	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		09/06/23 14:31	09/11/23 16:53	1
Benzenethiol	ND	*- *1	9.8	1.7	ug/L		09/06/23 14:31	09/11/23 16:53	1
Benzoic acid	ND		29	7.1	ug/L		09/06/23 14:31	09/11/23 16:53	1
Benzyl alcohol	ND		9.8	2.0	ug/L		09/06/23 14:31	09/11/23 16:53	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		09/06/23 14:31	09/11/23 16:53	1
Bis(2-chloroethyl)ether	ND		9.8	2.6	ug/L		09/06/23 14:31	09/11/23 16:53	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		09/06/23 14:31	09/11/23 16:53	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		09/06/23 14:31	09/11/23 16:53	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		09/06/23 14:31	09/11/23 16:53	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		09/06/23 14:31	09/11/23 16:53	1
4-Chloroaniline	ND		9.8	3.3	ug/L		09/06/23 14:31	09/11/23 16:53	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		09/06/23 14:31	09/11/23 16:53	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		09/06/23 14:31	09/11/23 16:53	1
2-Chlorophenol	ND		9.8	2.2	ug/L		09/06/23 14:31	09/11/23 16:53	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		09/06/23 14:31	09/11/23 16:53	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		09/06/23 14:31	09/11/23 16:53	1
Dibenzofuran	ND		9.8	0.17	ug/L		09/06/23 14:31	09/11/23 16:53	1
3,3'-Dichlorobenzidine	ND		9.8	2.5	ug/L		09/06/23 14:31	09/11/23 16:53	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		09/06/23 14:31	09/11/23 16:53	1
Diethyl phthalate	ND		9.8	0.23	ug/L		09/06/23 14:31	09/11/23 16:53	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		09/06/23 14:31	09/11/23 16:53	1

Client Sample ID: MW6B-ROX-083023-DUP
Date Collected: 08/30/23 09:20
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-4
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		9.8	0.17	ug/L		09/06/23 14:31	09/11/23 16:53	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		09/06/23 14:31	09/11/23 16:53	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		09/06/23 14:31	09/11/23 16:53	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/06/23 14:31	09/11/23 16:53	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		09/06/23 14:31	09/11/23 16:53	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		09/06/23 14:31	09/11/23 16:53	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		09/06/23 14:31	09/11/23 16:53	1
1,4-Dioxane	ND		9.8	0.98	ug/L		09/06/23 14:31	09/11/23 16:53	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		09/06/23 14:31	09/11/23 16:53	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		09/06/23 14:31	09/11/23 16:53	1
Hexachlorocyclopentadiene	ND		20	2.5	ug/L		09/06/23 14:31	09/11/23 16:53	1
Hexachloroethane	ND		9.8	4.1	ug/L		09/06/23 14:31	09/11/23 16:53	1
Indene	ND		9.8	0.98	ug/L		09/06/23 14:31	09/11/23 16:53	1
Isophorone	ND		9.8	0.14	ug/L		09/06/23 14:31	09/11/23 16:53	1
2-Methylphenol	ND		9.8	1.8	ug/L		09/06/23 14:31	09/11/23 16:53	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		09/06/23 14:31	09/11/23 16:53	1
2-Nitroaniline	ND		9.8	2.2	ug/L		09/06/23 14:31	09/11/23 16:53	1
3-Nitroaniline	ND		9.8	1.8	ug/L		09/06/23 14:31	09/11/23 16:53	1
4-Nitroaniline	ND		9.8	1.5	ug/L		09/06/23 14:31	09/11/23 16:53	1
Nitrobenzene	ND		9.8	0.13	ug/L		09/06/23 14:31	09/11/23 16:53	1
2-Nitrophenol	ND		9.8	5.1	ug/L		09/06/23 14:31	09/11/23 16:53	1
4-Nitrophenol	ND		9.8	2.1	ug/L		09/06/23 14:31	09/11/23 16:53	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		09/06/23 14:31	09/11/23 16:53	1
N-Nitrosodi-n-propylamine	ND		9.8	3.2	ug/L		09/06/23 14:31	09/11/23 16:53	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		09/06/23 14:31	09/11/23 16:53	1
Pentachlorophenol	ND		20	1.4	ug/L		09/06/23 14:31	09/11/23 16:53	1
Phenol	ND		9.8	2.5	ug/L		09/06/23 14:31	09/11/23 16:53	1
Pyridine	ND		9.8	3.1	ug/L		09/06/23 14:31	09/11/23 16:53	1
Quinoline	ND		9.8	4.4	ug/L		09/06/23 14:31	09/11/23 16:53	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		09/06/23 14:31	09/11/23 16:53	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		09/06/23 14:31	09/11/23 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*41*	*S1-*	*46 - 124*	*09/06/23 14:31*	*09/11/23 16:53*	*1*
2-Fluorophenol	*18*		*13 - 113*	*09/06/23 14:31*	*09/11/23 16:53*	*1*
Nitrobenzene-d5	*38*		*36 - 126*	*09/06/23 14:31*	*09/11/23 16:53*	*1*
Phenol-d5	*26*		*17 - 127*	*09/06/23 14:31*	*09/11/23 16:53*	*1*
Terphenyl-d14	*47*		*44 - 149*	*09/06/23 14:31*	*09/11/23 16:53*	*1*
2,4,6-Tribromophenol	*50*		*26 - 150*	*09/06/23 14:31*	*09/11/23 16:53*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.031	0.018	ug/L		09/06/23 12:59	09/06/23 17:37	1
1,2-D bromoethane	ND		0.021	0.015	ug/L		09/06/23 12:59	09/06/23 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*72*		*51 - 149*	*09/06/23 12:59*	*09/06/23 17:37*	*1*

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

Job ID: 400-242794-1

Client Sample ID: MW11-ROX-083023
Date Collected: 08/30/23 10:30
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-5
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			09/11/23 11:09	1
Acrolein	ND		20	3.3	ug/L			09/11/23 11:09	1
Acrylonitrile	ND		10	2.8	ug/L			09/11/23 11:09	1
Benzene	ND		1.0	0.50	ug/L			09/11/23 11:09	1
Bromobenzene	ND		1.0	0.54	ug/L			09/11/23 11:09	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/11/23 11:09	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/11/23 11:09	1
Bromoform	ND		5.0	0.25	ug/L			09/11/23 11:09	1
Bromomethane	ND		1.0	0.98	ug/L			09/11/23 11:09	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/11/23 11:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/11/23 11:09	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/11/23 11:09	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/11/23 11:09	1
Chloroethane	ND		1.0	0.76	ug/L			09/11/23 11:09	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/11/23 11:09	1
Chloroform	ND		1.0	0.90	ug/L			09/11/23 11:09	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/11/23 11:09	1
Chloromethane	ND		1.0	0.90	ug/L			09/11/23 11:09	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/11/23 11:09	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/11/23 11:09	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/11/23 11:09	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/11/23 11:09	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/11/23 11:09	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/11/23 11:09	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/11/23 11:09	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/11/23 11:09	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/11/23 11:09	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/11/23 11:09	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/11/23 11:09	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/11/23 11:09	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/11/23 11:09	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/11/23 11:09	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/11/23 11:09	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/11/23 11:09	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/11/23 11:09	1
2-Hexanone	ND		25	1.4	ug/L			09/11/23 11:09	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/11/23 11:09	1
Methylene bromide	ND		5.0	0.22	ug/L			09/11/23 11:09	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/11/23 11:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/11/23 11:09	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/11/23 11:09	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/11/23 11:09	1
Naphthalene	ND		5.0	3.0	ug/L			09/11/23 11:09	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/11/23 11:09	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/11/23 11:09	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/11/23 11:09	1
o-Xylene	ND		5.0	0.60	ug/L			09/11/23 11:09	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/11/23 11:09	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/11/23 11:09	1

Client Sample ID: MW11-ROX-083023
Date Collected: 08/30/23 10:30
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-5
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			09/11/23 11:09	1
Styrene	ND		1.0	1.0	ug/L			09/11/23 11:09	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/11/23 11:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/11/23 11:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/11/23 11:09	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/11/23 11:09	1
Toluene	ND		1.0	0.90	ug/L			09/11/23 11:09	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/11/23 11:09	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/11/23 11:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/11/23 11:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/11/23 11:09	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/11/23 11:09	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/11/23 11:09	1
Trichloroethene	ND		1.0	0.15	ug/L			09/11/23 11:09	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/11/23 11:09	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/11/23 11:09	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/11/23 11:09	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/11/23 11:09	1
Vinyl acetate	ND		25	0.93	ug/L			09/11/23 11:09	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/11/23 11:09	1
Xylenes, Total	ND		10	1.6	ug/L			09/11/23 11:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*72 - 130*		*09/11/23 11:09*	*1*
Dibromofluoromethane	*93*		*75 - 126*		*09/11/23 11:09*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/11/23 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		0.20	0.099	ug/L		09/06/23 14:31	09/11/23 19:14	1
Acenaphthylene	ND		0.20	0.044	ug/L		09/06/23 14:31	09/11/23 19:14	1
Anthracene	ND		0.20	0.047	ug/L		09/06/23 14:31	09/11/23 19:14	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		09/06/23 14:31	09/11/23 19:14	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		09/06/23 14:31	09/11/23 19:14	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		09/06/23 14:31	09/11/23 19:14	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		09/06/23 14:31	09/11/23 19:14	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		09/06/23 14:31	09/11/23 19:14	1
Chrysene	ND		0.20	0.033	ug/L		09/06/23 14:31	09/11/23 19:14	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		09/06/23 14:31	09/11/23 19:14	1
Fluoranthene	ND		0.20	0.034	ug/L		09/06/23 14:31	09/11/23 19:14	1
Fluorene	ND		0.20	0.089	ug/L		09/06/23 14:31	09/11/23 19:14	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		09/06/23 14:31	09/11/23 19:14	1
Phenanthrene	ND		0.20	0.090	ug/L		09/06/23 14:31	09/11/23 19:14	1
Pyrene	ND		0.20	0.039	ug/L		09/06/23 14:31	09/11/23 19:14	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		09/06/23 14:31	09/11/23 19:14	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		09/06/23 14:31	09/11/23 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*59*		*18 - 147*	*09/06/23 14:31*	*09/11/23 19:14*	*1*
2-Fluorobiphenyl	*57*		*15 - 128*	*09/06/23 14:31*	*09/11/23 19:14*	*1*

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

Job ID: 400-242794-1

Client Sample ID: MW11-ROX-083023
Date Collected: 08/30/23 10:30
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-5
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*	*09/06/23 14:31*	*09/11/23 19:14*	*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		09/06/23 14:31	09/11/23 17:15	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		09/06/23 14:31	09/11/23 17:15	1
Benzoic acid	ND		30	7.3	ug/L		09/06/23 14:31	09/11/23 17:15	1
Benzyl alcohol	ND		10	2.0	ug/L		09/06/23 14:31	09/11/23 17:15	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		09/06/23 14:31	09/11/23 17:15	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		09/06/23 14:31	09/11/23 17:15	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		09/06/23 14:31	09/11/23 17:15	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		09/06/23 14:31	09/11/23 17:15	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		09/06/23 14:31	09/11/23 17:15	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		09/06/23 14:31	09/11/23 17:15	1
4-Chloroaniline	ND		10	3.4	ug/L		09/06/23 14:31	09/11/23 17:15	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		09/06/23 14:31	09/11/23 17:15	1
2-Chloronaphthalene	ND		10	0.14	ug/L		09/06/23 14:31	09/11/23 17:15	1
2-Chlorophenol	ND		10	2.2	ug/L		09/06/23 14:31	09/11/23 17:15	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		09/06/23 14:31	09/13/23 02:40	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		09/06/23 14:31	09/11/23 17:15	1
Dibenzofuran	ND		10	0.17	ug/L		09/06/23 14:31	09/11/23 17:15	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		09/06/23 14:31	09/11/23 17:15	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		09/06/23 14:31	09/11/23 17:15	1
Diethyl phthalate	ND		10	0.24	ug/L		09/06/23 14:31	09/11/23 17:15	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		09/06/23 14:31	09/11/23 17:15	1
Dimethyl phthalate	ND		10	0.17	ug/L		09/06/23 14:31	09/11/23 17:15	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		09/06/23 14:31	09/11/23 17:15	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		09/06/23 14:31	09/11/23 17:15	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		09/06/23 14:31	09/11/23 17:15	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		09/06/23 14:31	09/11/23 17:15	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		09/06/23 14:31	09/11/23 17:15	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		09/06/23 14:31	09/11/23 17:15	1
1,4-Dioxane	ND		10	1.0	ug/L		09/06/23 14:31	09/11/23 17:15	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		09/06/23 14:31	09/11/23 17:15	1
Hexachlorobenzene	ND		10	0.17	ug/L		09/06/23 14:31	09/11/23 17:15	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/06/23 14:31	09/13/23 02:40	1
Hexachloroethane	ND		10	4.2	ug/L		09/06/23 14:31	09/11/23 17:15	1
Indene	ND		10	1.0	ug/L		09/06/23 14:31	09/11/23 17:15	1
Isophorone	ND		10	0.14	ug/L		09/06/23 14:31	09/11/23 17:15	1
2-Methylphenol	ND		10	1.8	ug/L		09/06/23 14:31	09/11/23 17:15	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		09/06/23 14:31	09/11/23 17:15	1
2-Nitroaniline	ND		10	2.2	ug/L		09/06/23 14:31	09/11/23 17:15	1
3-Nitroaniline	ND		10	1.8	ug/L		09/06/23 14:31	09/11/23 17:15	1
4-Nitroaniline	ND		10	1.5	ug/L		09/06/23 14:31	09/11/23 17:15	1
Nitrobenzene	ND		10	0.13	ug/L		09/06/23 14:31	09/11/23 17:15	1
2-Nitrophenol	ND		10	5.2	ug/L		09/06/23 14:31	09/13/23 02:40	1
4-Nitrophenol	ND		10	2.1	ug/L		09/06/23 14:31	09/11/23 17:15	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		09/06/23 14:31	09/11/23 17:15	1

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

Job ID: 400-242794-1

Client Sample ID: MW11-ROX-083023
Date Collected: 08/30/23 10:30
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-5
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	3.3	ug/L		09/06/23 14:31	09/11/23 17:15	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		09/06/23 14:31	09/11/23 17:15	1
Pentachlorophenol	ND		20	1.4	ug/L		09/06/23 14:31	09/11/23 17:15	1
Phenol	ND		10	2.6	ug/L		09/06/23 14:31	09/11/23 17:15	1
Pyridine	ND		10	3.2	ug/L		09/06/23 14:31	09/11/23 17:15	1
Quinoline	ND		10	4.5	ug/L		09/06/23 14:31	09/11/23 17:15	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		09/06/23 14:31	09/13/23 02:40	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		09/06/23 14:31	09/11/23 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*54*		*46 - 124*	*09/06/23 14:31*	*09/13/23 02:40*	*1*
2-Fluorophenol	*32*		*13 - 113*	*09/06/23 14:31*	*09/13/23 02:40*	*1*
Nitrobenzene-d5	*54*		*36 - 126*	*09/06/23 14:31*	*09/13/23 02:40*	*1*
Phenol-d5	*46*		*17 - 127*	*09/06/23 14:31*	*09/13/23 02:40*	*1*
Terphenyl-d14	*76*		*44 - 149*	*09/06/23 14:31*	*09/13/23 02:40*	*1*
2,4,6-Tribromophenol	*46*		*26 - 150*	*09/06/23 14:31*	*09/13/23 02:40*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.031	0.017	ug/L		09/06/23 12:59	09/06/23 17:57	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/06/23 12:59	09/06/23 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*69*		*51 - 149*	*09/06/23 12:59*	*09/06/23 17:57*	*1*

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

Job ID: 400-242794-1

Client Sample ID: MW28-ROX-083023
Date Collected: 08/30/23 11:45
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-6
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			09/09/23 14:37	1
Acrolein	ND		20	3.3	ug/L			09/09/23 14:37	1
Acrylonitrile	ND		10	2.8	ug/L			09/09/23 14:37	1
Benzene	ND		1.0	0.50	ug/L			09/09/23 14:37	1
Bromobenzene	ND		1.0	0.54	ug/L			09/09/23 14:37	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/09/23 14:37	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/09/23 14:37	1
Bromoform	ND		5.0	0.25	ug/L			09/09/23 14:37	1
Bromomethane	ND		1.0	0.98	ug/L			09/09/23 14:37	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/09/23 14:37	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/09/23 14:37	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/09/23 14:37	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/09/23 14:37	1
Chloroethane	ND		1.0	0.76	ug/L			09/09/23 14:37	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/09/23 14:37	1
Chloroform	ND		1.0	0.90	ug/L			09/09/23 14:37	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/09/23 14:37	1
Chloromethane	ND		1.0	0.90	ug/L			09/09/23 14:37	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/09/23 14:37	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/09/23 14:37	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/09/23 14:37	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/09/23 14:37	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/09/23 14:37	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/09/23 14:37	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/09/23 14:37	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/09/23 14:37	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/09/23 14:37	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 14:37	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 14:37	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 14:37	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 14:37	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/09/23 14:37	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/09/23 14:37	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/09/23 14:37	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/09/23 14:37	1
2-Hexanone	ND		25	1.4	ug/L			09/09/23 14:37	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/09/23 14:37	1
Methylene bromide	ND		5.0	0.22	ug/L			09/09/23 14:37	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/09/23 14:37	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/09/23 14:37	1
Methyl tert-butyl ether	**1.7**		1.0	0.22	ug/L			09/09/23 14:37	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/09/23 14:37	1
Naphthalene	ND		5.0	3.0	ug/L			09/09/23 14:37	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/09/23 14:37	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/09/23 14:37	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/09/23 14:37	1
o-Xylene	ND		5.0	0.60	ug/L			09/09/23 14:37	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/09/23 14:37	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/09/23 14:37	1

Client Sample ID: MW28-ROX-083023
Date Collected: 08/30/23 11:45
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-6
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			09/09/23 14:37	1
Styrene	ND		1.0	1.0	ug/L			09/09/23 14:37	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/09/23 14:37	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/09/23 14:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/09/23 14:37	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/09/23 14:37	1
Toluene	ND		1.0	0.90	ug/L			09/09/23 14:37	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 14:37	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/09/23 14:37	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/09/23 14:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/09/23 14:37	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/09/23 14:37	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/09/23 14:37	1
Trichloroethene	ND		1.0	0.15	ug/L			09/09/23 14:37	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/09/23 14:37	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/09/23 14:37	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/09/23 14:37	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/09/23 14:37	1
Vinyl acetate	ND		25	0.93	ug/L			09/09/23 14:37	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/09/23 14:37	1
Xylenes, Total	ND		10	1.6	ug/L			09/09/23 14:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 130*		*09/09/23 14:37*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*09/09/23 14:37*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/09/23 14:37*	*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		09/06/23 14:31	09/11/23 19:35	1
Acenaphthylene	ND		0.19	0.043	ug/L		09/06/23 14:31	09/11/23 19:35	1
Anthracene	ND		0.19	0.046	ug/L		09/06/23 14:31	09/11/23 19:35	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		09/06/23 14:31	09/11/23 19:35	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		09/06/23 14:31	09/11/23 19:35	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		09/06/23 14:31	09/11/23 19:35	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/06/23 14:31	09/11/23 19:35	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		09/06/23 14:31	09/11/23 19:35	1
Chrysene	ND		0.19	0.032	ug/L		09/06/23 14:31	09/11/23 19:35	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		09/06/23 14:31	09/11/23 19:35	1
Fluoranthene	ND		0.19	0.033	ug/L		09/06/23 14:31	09/11/23 19:35	1
Fluorene	ND		0.19	0.086	ug/L		09/06/23 14:31	09/11/23 19:35	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		09/06/23 14:31	09/11/23 19:35	1
Phenanthrene	ND		0.19	0.087	ug/L		09/06/23 14:31	09/11/23 19:35	1
Pyrene	ND		0.19	0.038	ug/L		09/06/23 14:31	09/11/23 19:35	1
1-Methylnaphthalene	ND		0.19	0.078	ug/L		09/06/23 14:31	09/11/23 19:35	1
2-Methylnaphthalene	ND		0.19	0.064	ug/L		09/06/23 14:31	09/11/23 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*58*		*18 - 147*	*09/06/23 14:31*	*09/11/23 19:35*	*1*
2-Fluorobiphenyl	*56*		*15 - 128*	*09/06/23 14:31*	*09/11/23 19:35*	*1*

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

Job ID: 400-242794-1

Client Sample ID: MW28-ROX-083023

Date Collected: 08/30/23 11:45
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-6

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*66*		*10 - 144*	*09/06/23 14:31*	*09/11/23 19:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	3.7	ug/L		09/06/23 14:31	09/11/23 17:36	1
Benzenethiol	ND	*- *1	9.7	1.6	ug/L		09/06/23 14:31	09/11/23 17:36	1
Benzoic acid	ND		29	7.1	ug/L		09/06/23 14:31	09/11/23 17:36	1
Benzyl alcohol	ND		9.7	1.9	ug/L		09/06/23 14:31	09/11/23 17:36	1
Bis(2-chloroethoxy)methane	ND		9.7	0.16	ug/L		09/06/23 14:31	09/11/23 17:36	1
Bis(2-chloroethyl)ether	ND		9.7	2.6	ug/L		09/06/23 14:31	09/11/23 17:36	1
bis (2-chloroisopropyl) ether	ND		9.7	0.16	ug/L		09/06/23 14:31	09/11/23 17:36	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.8	ug/L		09/06/23 14:31	09/11/23 17:36	1
4-Bromophenyl phenyl ether	ND		9.7	0.19	ug/L		09/06/23 14:31	09/11/23 17:36	1
Butyl benzyl phthalate	ND		9.7	0.18	ug/L		09/06/23 14:31	09/11/23 17:36	1
4-Chloroaniline	ND		9.7	3.3	ug/L		09/06/23 14:31	09/11/23 17:36	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		09/06/23 14:31	09/11/23 17:36	1
2-Chloronaphthalene	ND		9.7	0.14	ug/L		09/06/23 14:31	09/11/23 17:36	1
2-Chlorophenol	ND		9.7	2.1	ug/L		09/06/23 14:31	09/11/23 17:36	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		09/06/23 14:31	09/11/23 17:36	1
Dibenz[a,h]acridine	ND		9.7	0.97	ug/L		09/06/23 14:31	09/11/23 17:36	1
Dibenzofuran	ND		9.7	0.16	ug/L		09/06/23 14:31	09/11/23 17:36	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		09/06/23 14:31	09/11/23 17:36	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		09/06/23 14:31	09/11/23 17:36	1
Diethyl phthalate	ND		9.7	0.23	ug/L		09/06/23 14:31	09/11/23 17:36	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		09/06/23 14:31	09/11/23 17:36	1
Dimethyl phthalate	ND		9.7	0.16	ug/L		09/06/23 14:31	09/11/23 17:36	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		09/06/23 14:31	09/11/23 17:36	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.6	ug/L		09/06/23 14:31	09/11/23 17:36	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/06/23 14:31	09/11/23 17:36	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		09/06/23 14:31	09/11/23 17:36	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		09/06/23 14:31	09/11/23 17:36	1
Di-n-octyl phthalate	ND		9.7	0.16	ug/L		09/06/23 14:31	09/11/23 17:36	1
1,4-Dioxane	ND		9.7	0.97	ug/L		09/06/23 14:31	09/11/23 17:36	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		09/06/23 14:31	09/11/23 17:36	1
Hexachlorobenzene	ND		9.7	0.16	ug/L		09/06/23 14:31	09/11/23 17:36	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/06/23 14:31	09/11/23 17:36	1
Hexachloroethane	ND		9.7	4.1	ug/L		09/06/23 14:31	09/11/23 17:36	1
Indene	ND		9.7	0.97	ug/L		09/06/23 14:31	09/11/23 17:36	1
Isophorone	ND		9.7	0.14	ug/L		09/06/23 14:31	09/11/23 17:36	1
2-Methylphenol	ND		9.7	1.7	ug/L		09/06/23 14:31	09/11/23 17:36	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		09/06/23 14:31	09/11/23 17:36	1
2-Nitroaniline	ND		9.7	2.1	ug/L		09/06/23 14:31	09/11/23 17:36	1
3-Nitroaniline	ND		9.7	1.7	ug/L		09/06/23 14:31	09/11/23 17:36	1
4-Nitroaniline	ND		9.7	1.5	ug/L		09/06/23 14:31	09/11/23 17:36	1
Nitrobenzene	ND		9.7	0.13	ug/L		09/06/23 14:31	09/11/23 17:36	1
2-Nitrophenol	ND		9.7	5.0	ug/L		09/06/23 14:31	09/11/23 17:36	1
4-Nitrophenol	ND		9.7	2.0	ug/L		09/06/23 14:31	09/11/23 17:36	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		09/06/23 14:31	09/11/23 17:36	1

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

Job ID: 400-242794-1

Client Sample ID: MW28-ROX-083023

Date Collected: 08/30/23 11:45
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-6

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		9.7	3.2	ug/L		09/06/23 14:31	09/11/23 17:36	1
N-Nitrosodiphenylamine	ND		9.7	0.17	ug/L		09/06/23 14:31	09/11/23 17:36	1
Pentachlorophenol	ND		19	1.4	ug/L		09/06/23 14:31	09/11/23 17:36	1
Phenol	ND		9.7	2.5	ug/L		09/06/23 14:31	09/11/23 17:36	1
Pyridine	ND		9.7	3.1	ug/L		09/06/23 14:31	09/11/23 17:36	1
Quinoline	ND		9.7	4.4	ug/L		09/06/23 14:31	09/11/23 17:36	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		09/06/23 14:31	09/11/23 17:36	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		09/06/23 14:31	09/11/23 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*46 - 124*	*09/06/23 14:31*	*09/11/23 17:36*	*1*
2-Fluorophenol	*10*	*S1-*	*13 - 113*	*09/06/23 14:31*	*09/11/23 17:36*	*1*
Nitrobenzene-d5	*61*		*36 - 126*	*09/06/23 14:31*	*09/11/23 17:36*	*1*
Phenol-d5	*27*		*17 - 127*	*09/06/23 14:31*	*09/11/23 17:36*	*1*
Terphenyl-d14	*81*		*44 - 149*	*09/06/23 14:31*	*09/11/23 17:36*	*1*
2,4,6-Tribromophenol	*54*		*26 - 150*	*09/06/23 14:31*	*09/11/23 17:36*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.029	0.017	ug/L		09/06/23 12:59	09/06/23 18:18	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/06/23 12:59	09/06/23 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*70*		*51 - 149*	*09/06/23 12:59*	*09/06/23 18:18*	*1*

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

Job ID: 400-242794-1

Client Sample ID: P54-ROX-083023
Date Collected: 08/30/23 13:35
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-7
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			09/09/23 15:02	1
Acrolein	ND		20	3.3	ug/L			09/09/23 15:02	1
Acrylonitrile	ND		10	2.8	ug/L			09/09/23 15:02	1
Benzene	ND		1.0	0.50	ug/L			09/09/23 15:02	1
Bromobenzene	ND		1.0	0.54	ug/L			09/09/23 15:02	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/09/23 15:02	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/09/23 15:02	1
Bromoform	ND		5.0	0.25	ug/L			09/09/23 15:02	1
Bromomethane	ND		1.0	0.98	ug/L			09/09/23 15:02	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/09/23 15:02	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/09/23 15:02	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/09/23 15:02	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/09/23 15:02	1
Chloroethane	ND		1.0	0.76	ug/L			09/09/23 15:02	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/09/23 15:02	1
Chloroform	ND		1.0	0.90	ug/L			09/09/23 15:02	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/09/23 15:02	1
Chloromethane	ND		1.0	0.90	ug/L			09/09/23 15:02	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/09/23 15:02	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/09/23 15:02	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/09/23 15:02	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/09/23 15:02	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/09/23 15:02	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/09/23 15:02	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/09/23 15:02	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/09/23 15:02	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/09/23 15:02	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 15:02	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 15:02	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 15:02	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 15:02	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/09/23 15:02	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/09/23 15:02	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/09/23 15:02	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/09/23 15:02	1
2-Hexanone	ND		25	1.4	ug/L			09/09/23 15:02	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/09/23 15:02	1
Methylene bromide	ND		5.0	0.22	ug/L			09/09/23 15:02	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/09/23 15:02	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/09/23 15:02	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/09/23 15:02	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/09/23 15:02	1
Naphthalene	ND		5.0	3.0	ug/L			09/09/23 15:02	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/09/23 15:02	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/09/23 15:02	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/09/23 15:02	1
o-Xylene	ND		5.0	0.60	ug/L			09/09/23 15:02	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/09/23 15:02	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/09/23 15:02	1

Client Sample ID: P54-ROX-083023

Date Collected: 08/30/23 13:35
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-7

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			09/09/23 15:02	1
Styrene	ND		1.0	1.0	ug/L			09/09/23 15:02	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/09/23 15:02	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/09/23 15:02	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/09/23 15:02	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/09/23 15:02	1
Toluene	ND		1.0	0.90	ug/L			09/09/23 15:02	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 15:02	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/09/23 15:02	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/09/23 15:02	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/09/23 15:02	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/09/23 15:02	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/09/23 15:02	1
Trichloroethene	ND		1.0	0.15	ug/L			09/09/23 15:02	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/09/23 15:02	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/09/23 15:02	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/09/23 15:02	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/09/23 15:02	1
Vinyl acetate	ND		25	0.93	ug/L			09/09/23 15:02	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/09/23 15:02	1
Xylenes, Total	ND		10	1.6	ug/L			09/09/23 15:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*72 - 130*		*09/09/23 15:02*	*1*
Dibromofluoromethane	*95*		*75 - 126*		*09/09/23 15:02*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*09/09/23 15:02*	*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	0.098	ug/L		09/06/23 14:31	09/11/23 19:56	1
Acenaphthylene	**0.069**	**J**	0.20	0.044	ug/L		09/06/23 14:31	09/11/23 19:56	1
Anthracene	ND		0.20	0.047	ug/L		09/06/23 14:31	09/11/23 19:56	1
Benzo[a]anthracene	**0.063**	**J**	0.20	0.034	ug/L		09/06/23 14:31	09/11/23 19:56	1
Benzo[a]pyrene	**0.13**	**J**	0.20	0.063	ug/L		09/06/23 14:31	09/11/23 19:56	1
Benzo[b]fluoranthene	**0.18**	**J**	0.20	0.037	ug/L		09/06/23 14:31	09/11/23 19:56	1
Benzo[g,h,i]perylene	**0.15**	**J**	0.20	0.027	ug/L		09/06/23 14:31	09/11/23 19:56	1
Benzo[k]fluoranthene	**0.069**	**J**	0.20	0.061	ug/L		09/06/23 14:31	09/11/23 19:56	1
Chrysene	**0.068**	**J**	0.20	0.033	ug/L		09/06/23 14:31	09/11/23 19:56	1
Dibenz(a,h)anthracene	**0.071**	**J**	0.20	0.048	ug/L		09/06/23 14:31	09/11/23 19:56	1
Fluoranthene	ND		0.20	0.034	ug/L		09/06/23 14:31	09/11/23 19:56	1
Fluorene	ND		0.20	0.088	ug/L		09/06/23 14:31	09/11/23 19:56	1
Indeno[1,2,3-cd]pyrene	**0.17**	**J**	0.20	0.034	ug/L		09/06/23 14:31	09/11/23 19:56	1
Phenanthrene	ND		0.20	0.089	ug/L		09/06/23 14:31	09/11/23 19:56	1
Pyrene	ND		0.20	0.039	ug/L		09/06/23 14:31	09/11/23 19:56	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		09/06/23 14:31	09/11/23 19:56	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		09/06/23 14:31	09/11/23 19:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*119*		*18 - 147*	*09/06/23 14:31*	*09/11/23 19:56*	*1*
2-Fluorobiphenyl	*116*		*15 - 128*	*09/06/23 14:31*	*09/11/23 19:56*	*1*

Client Sample ID: P54-ROX-083023
Date Collected: 08/30/23 13:35
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-7
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*143*		*10 - 144*	*09/06/23 14:31*	*09/11/23 19:56*	*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		09/13/23 10:04	09/15/23 17:44	1
Acenaphthylene	ND	H	0.20	0.043	ug/L		09/13/23 10:04	09/15/23 17:44	1
Anthracene	ND	H	0.20	0.046	ug/L		09/13/23 10:04	09/15/23 17:44	1
Benzo[a]anthracene	ND	H	0.20	0.033	ug/L		09/13/23 10:04	09/15/23 17:44	1
Benzo[a]pyrene	ND	H	0.20	0.063	ug/L		09/13/23 10:04	09/15/23 17:44	1
Benzo[b]fluoranthene	ND	H	0.20	0.036	ug/L		09/13/23 10:04	09/15/23 17:44	1
Benzo[g,h,i]perylene	ND	H	0.20	0.027	ug/L		09/13/23 10:04	09/15/23 17:44	1
Benzo[k]fluoranthene	ND	H	0.20	0.061	ug/L		09/13/23 10:04	09/15/23 17:44	1
Chrysene	ND	H	0.20	0.032	ug/L		09/13/23 10:04	09/15/23 17:44	1
Dibenz(a,h)anthracene	ND	H	0.20	0.047	ug/L		09/13/23 10:04	09/15/23 17:44	1
Fluoranthene	ND	H	0.20	0.033	ug/L		09/13/23 10:04	09/15/23 17:44	1
Fluorene	ND	H	0.20	0.088	ug/L		09/13/23 10:04	09/15/23 17:44	1
Indeno[1,2,3-cd]pyrene	ND	H	0.20	0.033	ug/L		09/13/23 10:04	09/15/23 17:44	1
Phenanthrene	ND	H	0.20	0.089	ug/L		09/13/23 10:04	09/15/23 17:44	1
Pyrene	ND	H	0.20	0.038	ug/L		09/13/23 10:04	09/15/23 17:44	1
1-Methylnaphthalene	ND	H	0.20	0.079	ug/L		09/13/23 10:04	09/15/23 17:44	1
2-Methylnaphthalene	ND	H	0.20	0.065	ug/L		09/13/23 10:04	09/15/23 17:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*93*		*18 - 147*	*09/13/23 10:04*	*09/15/23 17:44*	*1*
2-Fluorobiphenyl	*83*		*15 - 128*	*09/13/23 10:04*	*09/15/23 17:44*	*1*
Nitrobenzene-d5	*76*		*10 - 144*	*09/13/23 10:04*	*09/15/23 17:44*	*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		09/06/23 14:31	09/11/23 17:57	1
Benzenethiol	ND	*- *1	9.9	1.7	ug/L		09/06/23 14:31	09/11/23 17:57	1
Benzoic acid	ND		30	7.2	ug/L		09/06/23 14:31	09/11/23 17:57	1
Benzyl alcohol	ND		9.9	2.0	ug/L		09/06/23 14:31	09/11/23 17:57	1
Bis(2-chloroethoxy)methane	ND		9.9	0.16	ug/L		09/06/23 14:31	09/11/23 17:57	1
Bis(2-chloroethyl)ether	ND		9.9	2.7	ug/L		09/06/23 14:31	09/11/23 17:57	1
bis (2-chloroisopropyl) ether	ND		9.9	0.16	ug/L		09/06/23 14:31	09/11/23 17:57	1
Bis(2-ethylhexyl) phthalate	ND		9.9	5.0	ug/L		09/06/23 14:31	09/11/23 17:57	1
4-Bromophenyl phenyl ether	ND		9.9	0.20	ug/L		09/06/23 14:31	09/11/23 17:57	1
Butyl benzyl phthalate	ND		9.9	0.19	ug/L		09/06/23 14:31	09/11/23 17:57	1
4-Chloroaniline	ND		9.9	3.4	ug/L		09/06/23 14:31	09/11/23 17:57	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		09/06/23 14:31	09/11/23 17:57	1
2-Chloronaphthalene	ND		9.9	0.14	ug/L		09/06/23 14:31	09/11/23 17:57	1
2-Chlorophenol	ND		9.9	2.2	ug/L		09/06/23 14:31	09/11/23 17:57	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		09/06/23 14:31	09/11/23 17:57	1
Dibenz[a,h]acridine	ND		9.9	0.99	ug/L		09/06/23 14:31	09/11/23 17:57	1
Dibenzofuran	ND		9.9	0.17	ug/L		09/06/23 14:31	09/11/23 17:57	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		09/06/23 14:31	09/11/23 17:57	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		09/06/23 14:31	09/11/23 17:57	1
Diethyl phthalate	ND		9.9	0.24	ug/L		09/06/23 14:31	09/11/23 17:57	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		09/06/23 14:31	09/11/23 17:57	1

Client Sample ID: P54-ROX-083023
Date Collected: 08/30/23 13:35
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-7
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		9.9	0.17	ug/L		09/06/23 14:31	09/11/23 17:57	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		09/06/23 14:31	09/11/23 17:57	1
4,6-Dinitro-ortho-cresol	ND		9.9	1.6	ug/L		09/06/23 14:31	09/11/23 17:57	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		09/06/23 14:31	09/11/23 17:57	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		09/06/23 14:31	09/11/23 17:57	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		09/06/23 14:31	09/11/23 17:57	1
Di-n-octyl phthalate	ND		9.9	0.17	ug/L		09/06/23 14:31	09/11/23 17:57	1
1,4-Dioxane	ND		9.9	0.99	ug/L		09/06/23 14:31	09/11/23 17:57	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		09/06/23 14:31	09/11/23 17:57	1
Hexachlorobenzene	ND		9.9	0.17	ug/L		09/06/23 14:31	09/11/23 17:57	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/06/23 14:31	09/11/23 17:57	1
Hexachloroethane	ND		9.9	4.2	ug/L		09/06/23 14:31	09/11/23 17:57	1
Indene	ND		9.9	0.99	ug/L		09/06/23 14:31	09/11/23 17:57	1
Isophorone	ND		9.9	0.14	ug/L		09/06/23 14:31	09/11/23 17:57	1
2-Methylphenol	ND		9.9	1.8	ug/L		09/06/23 14:31	09/11/23 17:57	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		09/06/23 14:31	09/11/23 17:57	1
2-Nitroaniline	ND		9.9	2.2	ug/L		09/06/23 14:31	09/11/23 17:57	1
3-Nitroaniline	ND		9.9	1.8	ug/L		09/06/23 14:31	09/11/23 17:57	1
4-Nitroaniline	ND		9.9	1.5	ug/L		09/06/23 14:31	09/11/23 17:57	1
Nitrobenzene	ND		9.9	0.13	ug/L		09/06/23 14:31	09/11/23 17:57	1
2-Nitrophenol	ND		9.9	5.2	ug/L		09/06/23 14:31	09/11/23 17:57	1
4-Nitrophenol	ND		9.9	2.1	ug/L		09/06/23 14:31	09/11/23 17:57	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		09/06/23 14:31	09/11/23 17:57	1
N-Nitrosodi-n-propylamine	ND		9.9	3.3	ug/L		09/06/23 14:31	09/11/23 17:57	1
N-Nitrosodiphenylamine	ND		9.9	0.18	ug/L		09/06/23 14:31	09/11/23 17:57	1
Pentachlorophenol	ND		20	1.4	ug/L		09/06/23 14:31	09/11/23 17:57	1
Phenol	ND		9.9	2.6	ug/L		09/06/23 14:31	09/11/23 17:57	1
Pyridine	ND		9.9	3.2	ug/L		09/06/23 14:31	09/11/23 17:57	1
Quinoline	ND		9.9	4.5	ug/L		09/06/23 14:31	09/11/23 17:57	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		09/06/23 14:31	09/11/23 17:57	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		09/06/23 14:31	09/11/23 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*93*		*46 - 124*	*09/06/23 14:31*	*09/11/23 17:57*	*1*
2-Fluorophenol	*61*		*13 - 113*	*09/06/23 14:31*	*09/11/23 17:57*	*1*
Nitrobenzene-d5	*84*		*36 - 126*	*09/06/23 14:31*	*09/11/23 17:57*	*1*
Phenol-d5	*77*		*17 - 127*	*09/06/23 14:31*	*09/11/23 17:57*	*1*
Terphenyl-d14	*103*		*44 - 149*	*09/06/23 14:31*	*09/11/23 17:57*	*1*
2,4,6-Tribromophenol	*77*		*26 - 150*	*09/06/23 14:31*	*09/11/23 17:57*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/06/23 12:59	09/06/23 18:38	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/06/23 12:59	09/06/23 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*71*		*51 - 149*	*09/06/23 12:59*	*09/06/23 18:38*	*1*

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

Job ID: 400-242794-1

Client Sample ID: TB-ROX-083023-8260-B
Date Collected: 08/30/23 12:00
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-8
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			09/09/23 12:59	1
Acrolein	ND		20	3.3	ug/L			09/09/23 12:59	1
Acrylonitrile	ND		10	2.8	ug/L			09/09/23 12:59	1
Benzene	ND		1.0	0.50	ug/L			09/09/23 12:59	1
Bromobenzene	ND		1.0	0.54	ug/L			09/09/23 12:59	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/09/23 12:59	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/09/23 12:59	1
Bromoform	ND		5.0	0.25	ug/L			09/09/23 12:59	1
Bromomethane	ND		1.0	0.98	ug/L			09/09/23 12:59	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/09/23 12:59	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/09/23 12:59	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/09/23 12:59	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/09/23 12:59	1
Chloroethane	ND		1.0	0.76	ug/L			09/09/23 12:59	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/09/23 12:59	1
Chloroform	ND		1.0	0.90	ug/L			09/09/23 12:59	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/09/23 12:59	1
Chloromethane	ND		1.0	0.90	ug/L			09/09/23 12:59	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/09/23 12:59	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/09/23 12:59	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/09/23 12:59	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/09/23 12:59	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/09/23 12:59	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/09/23 12:59	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/09/23 12:59	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/09/23 12:59	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/09/23 12:59	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 12:59	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 12:59	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 12:59	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 12:59	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/09/23 12:59	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/09/23 12:59	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/09/23 12:59	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/09/23 12:59	1
2-Hexanone	ND		25	1.4	ug/L			09/09/23 12:59	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/09/23 12:59	1
Methylene bromide	ND		5.0	0.22	ug/L			09/09/23 12:59	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/09/23 12:59	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/09/23 12:59	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/09/23 12:59	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/09/23 12:59	1
Naphthalene	ND		5.0	3.0	ug/L			09/09/23 12:59	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/09/23 12:59	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/09/23 12:59	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/09/23 12:59	1
o-Xylene	ND		5.0	0.60	ug/L			09/09/23 12:59	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/09/23 12:59	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/09/23 12:59	1

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

Job ID: 400-242794-1

Client Sample ID: TB-ROX-083023-8260-B
Date Collected: 08/30/23 12:00
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-8
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			09/09/23 12:59	1
Styrene	ND		1.0	1.0	ug/L			09/09/23 12:59	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/09/23 12:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/09/23 12:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/09/23 12:59	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/09/23 12:59	1
Toluene	ND		1.0	0.90	ug/L			09/09/23 12:59	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 12:59	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/09/23 12:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/09/23 12:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/09/23 12:59	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/09/23 12:59	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/09/23 12:59	1
Trichloroethene	ND		1.0	0.15	ug/L			09/09/23 12:59	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/09/23 12:59	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/09/23 12:59	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/09/23 12:59	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/09/23 12:59	1
Vinyl acetate	ND		25	0.93	ug/L			09/09/23 12:59	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/09/23 12:59	1
Xylenes, Total	ND		10	1.6	ug/L			09/09/23 12:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*72 - 130*		*09/09/23 12:59*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*09/09/23 12:59*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/09/23 12:59*	*1*

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

Job ID: 400-242794-1

Client Sample ID: TB-ROX-083023-8011-B
Date Collected: 08/30/23 12:00
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-9
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-D bromo-3-Chloropropane	ND		0.031	0.018	ug/L		09/06/23 12:59	09/06/23 18:58	1
1,2-D bromoethane	ND		0.021	0.016	ug/L		09/06/23 12:59	09/06/23 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*63*		*51 - 149*	*09/06/23 12:59*	*09/06/23 18:58*	*1*

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

Job ID: 400-242794-1

Client Sample ID: P93D-ROX-083023
Date Collected: 08/30/23 09:50
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-10
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			09/09/23 09:54	1
Acrolein	ND		20	3.3	ug/L			09/09/23 09:54	1
Acrylonitrile	ND		10	2.8	ug/L			09/09/23 09:54	1
Benzene	ND		1.0	0.50	ug/L			09/09/23 09:54	1
Bromobenzene	ND		1.0	0.54	ug/L			09/09/23 09:54	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/09/23 09:54	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/09/23 09:54	1
Bromoform	ND		5.0	0.25	ug/L			09/09/23 09:54	1
Bromomethane	ND		1.0	0.98	ug/L			09/09/23 09:54	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/09/23 09:54	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/09/23 09:54	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/09/23 09:54	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/09/23 09:54	1
Chloroethane	ND		1.0	0.76	ug/L			09/09/23 09:54	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			09/09/23 09:54	1
Chloroform	ND		1.0	0.90	ug/L			09/09/23 09:54	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/09/23 09:54	1
Chloromethane	ND		1.0	0.90	ug/L			09/09/23 09:54	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/09/23 09:54	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/09/23 09:54	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/09/23 09:54	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/09/23 09:54	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/09/23 09:54	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/09/23 09:54	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/09/23 09:54	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/09/23 09:54	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/09/23 09:54	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 09:54	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 09:54	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 09:54	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 09:54	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/09/23 09:54	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/09/23 09:54	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/09/23 09:54	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/09/23 09:54	1
2-Hexanone	ND		25	1.4	ug/L			09/09/23 09:54	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/09/23 09:54	1
Methylene bromide	ND		5.0	0.22	ug/L			09/09/23 09:54	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/09/23 09:54	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/09/23 09:54	1
Methyl tert-butyl ether	**0.81**	**J**	1.0	0.22	ug/L			09/09/23 09:54	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/09/23 09:54	1
Naphthalene	ND		5.0	3.0	ug/L			09/09/23 09:54	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/09/23 09:54	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/09/23 09:54	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/09/23 09:54	1
o-Xylene	ND		5.0	0.60	ug/L			09/09/23 09:54	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/09/23 09:54	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/09/23 09:54	1

Client Sample ID: P93D-ROX-083023
Date Collected: 08/30/23 09:50
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-10
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			09/09/23 09:54	1
Styrene	ND		1.0	1.0	ug/L			09/09/23 09:54	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/09/23 09:54	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/09/23 09:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/09/23 09:54	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/09/23 09:54	1
Toluene	ND		1.0	0.90	ug/L			09/09/23 09:54	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 09:54	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/09/23 09:54	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/09/23 09:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/09/23 09:54	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/09/23 09:54	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/09/23 09:54	1
Trichloroethene	ND		1.0	0.15	ug/L			09/09/23 09:54	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/09/23 09:54	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/09/23 09:54	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/09/23 09:54	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/09/23 09:54	1
Vinyl acetate	ND		25	0.93	ug/L			09/09/23 09:54	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/09/23 09:54	1
Xylenes, Total	ND		10	1.6	ug/L			09/09/23 09:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*72 - 130*		*09/09/23 09:54*	*1*
Dibromofluoromethane	*96*		*75 - 126*		*09/09/23 09:54*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*09/09/23 09:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.094	ug/L		09/06/23 14:31	09/11/23 18:11	1
Acenaphthylene	**0.043**	**J**	0.19	0.042	ug/L		09/06/23 14:31	09/11/23 18:11	1
Anthracene	ND		0.19	0.044	ug/L		09/06/23 14:31	09/11/23 18:11	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		09/06/23 14:31	09/11/23 18:11	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		09/06/23 14:31	09/11/23 18:11	1
Benzo[b]fluoranthene	**0.063**	**J**	0.19	0.035	ug/L		09/06/23 14:31	09/11/23 18:11	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/06/23 14:31	09/11/23 18:11	1
Benzo[k]fluoranthene	**0.060**	**J**	0.19	0.059	ug/L		09/06/23 14:31	09/11/23 18:11	1
Chrysene	**0.061**	**J**	0.19	0.031	ug/L		09/06/23 14:31	09/11/23 18:11	1
Dibenz(a,h)anthracene	**0.10**	**J**	0.19	0.045	ug/L		09/06/23 14:31	09/11/23 18:11	1
Fluoranthene	**0.10**	**J**	0.19	0.032	ug/L		09/06/23 14:31	09/11/23 18:11	1
Fluorene	ND		0.19	0.084	ug/L		09/06/23 14:31	09/11/23 18:11	1
Indeno[1,2,3-cd]pyrene	**0.10**	**J**	0.19	0.032	ug/L		09/06/23 14:31	09/11/23 18:11	1
Phenanthrene	ND		0.19	0.085	ug/L		09/06/23 14:31	09/11/23 18:11	1
Pyrene	ND		0.19	0.037	ug/L		09/06/23 14:31	09/11/23 18:11	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		09/06/23 14:31	09/11/23 18:11	1
2-Methylnaphthalene	ND		0.19	0.062	ug/L		09/06/23 14:31	09/11/23 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*46*		*18 - 147*	*09/06/23 14:31*	*09/11/23 18:11*	*1*
2-Fluorobiphenyl	*45*		*15 - 128*	*09/06/23 14:31*	*09/11/23 18:11*	*1*

Client Sample ID: P93D-ROX-083023

Date Collected: 08/30/23 09:50
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-10

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*	*09/06/23 14:31*	*09/11/23 18:11*	*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		09/13/23 10:04	09/15/23 17:01	1
Acenaphthylene	ND	H	0.19	0.042	ug/L		09/13/23 10:04	09/15/23 17:01	1
Anthracene	ND	H	0.19	0.044	ug/L		09/13/23 10:04	09/15/23 17:01	1
Benzo[a]anthracene	ND	H	0.19	0.032	ug/L		09/13/23 10:04	09/15/23 17:01	1
Benzo[a]pyrene	ND	H	0.19	0.060	ug/L		09/13/23 10:04	09/15/23 17:01	1
Benzo[b]fluoranthene	ND	H	0.19	0.035	ug/L		09/13/23 10:04	09/15/23 17:01	1
Benzo[g,h,i]perylene	ND	H	0.19	0.025	ug/L		09/13/23 10:04	09/15/23 17:01	1
Benzo[k]fluoranthene	ND	H	0.19	0.058	ug/L		09/13/23 10:04	09/15/23 17:01	1
Chrysene	ND	H	0.19	0.031	ug/L		09/13/23 10:04	09/15/23 17:01	1
Dibenz(a,h)anthracene	ND	H	0.19	0.045	ug/L		09/13/23 10:04	09/15/23 17:01	1
Fluoranthene	ND	H	0.19	0.032	ug/L		09/13/23 10:04	09/15/23 17:01	1
Fluorene	ND	H	0.19	0.084	ug/L		09/13/23 10:04	09/15/23 17:01	1
Indeno[1,2,3-cd]pyrene	ND	H	0.19	0.032	ug/L		09/13/23 10:04	09/15/23 17:01	1
Phenanthrene	ND	H	0.19	0.085	ug/L		09/13/23 10:04	09/15/23 17:01	1
Pyrene	ND	H	0.19	0.037	ug/L		09/13/23 10:04	09/15/23 17:01	1
1-Methylnaphthalene	ND	H	0.19	0.075	ug/L		09/13/23 10:04	09/15/23 17:01	1
2-Methylnaphthalene	ND	H	0.19	0.062	ug/L		09/13/23 10:04	09/15/23 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*85*		*18 - 147*	*09/13/23 10:04*	*09/15/23 17:01*	*1*
2-Fluorobiphenyl	*82*		*15 - 128*	*09/13/23 10:04*	*09/15/23 17:01*	*1*
Nitrobenzene-d5	*76*		*10 - 144*	*09/13/23 10:04*	*09/15/23 17:01*	*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		09/06/23 14:31	09/13/23 17:46	1
Benzenethiol	ND	*1	9.5	1.6	ug/L		09/06/23 14:31	09/12/23 15:58	1
Benzoic acid	ND		28	6.9	ug/L		09/06/23 14:31	09/12/23 15:58	1
Benzyl alcohol	ND		9.5	1.9	ug/L		09/06/23 14:31	09/13/23 17:46	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		09/06/23 14:31	09/13/23 17:46	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		09/06/23 14:31	09/13/23 17:46	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		09/06/23 14:31	09/13/23 17:46	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		09/06/23 14:31	09/13/23 17:46	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		09/06/23 14:31	09/13/23 17:46	1
Butyl benzyl phthalate	**0.40**	**J**	9.5	0.18	ug/L		09/06/23 14:31	09/13/23 17:46	1
4-Chloroaniline	ND		9.5	3.2	ug/L		09/06/23 14:31	09/13/23 17:46	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		09/06/23 14:31	09/13/23 17:46	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		09/06/23 14:31	09/13/23 17:46	1
2-Chlorophenol	ND		9.5	2.1	ug/L		09/06/23 14:31	09/13/23 17:46	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		09/06/23 14:31	09/13/23 17:46	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		09/06/23 14:31	09/13/23 17:46	1
Dibenzofuran	ND		9.5	0.16	ug/L		09/06/23 14:31	09/13/23 17:46	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		09/06/23 14:31	09/13/23 17:46	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		09/06/23 14:31	09/13/23 17:46	1
Diethyl phthalate	ND		9.5	0.23	ug/L		09/06/23 14:31	09/13/23 17:46	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		09/06/23 14:31	09/13/23 17:46	1

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

Job ID: 400-242794-1

Client Sample ID: P93D-ROX-083023
Date Collected: 08/30/23 09:50
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-10
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		9.5	0.16	ug/L		09/06/23 14:31	09/13/23 17:46	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		09/06/23 14:31	09/13/23 17:46	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		09/06/23 14:31	09/13/23 17:46	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		09/06/23 14:31	09/13/23 17:46	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		09/06/23 14:31	09/13/23 17:46	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		09/06/23 14:31	09/13/23 17:46	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		09/06/23 14:31	09/13/23 17:46	1
1,4-Dioxane	ND		9.5	0.95	ug/L		09/06/23 14:31	09/13/23 17:46	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		09/06/23 14:31	09/13/23 17:46	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		09/06/23 14:31	09/13/23 17:46	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/06/23 14:31	09/13/23 17:46	1
Hexachloroethane	ND		9.5	4.0	ug/L		09/06/23 14:31	09/13/23 17:46	1
Indene	ND	F1	9.5	0.95	ug/L		09/06/23 14:31	09/12/23 15:58	1
Isophorone	ND		9.5	0.13	ug/L		09/06/23 14:31	09/13/23 17:46	1
2-Methylphenol	ND		9.5	1.7	ug/L		09/06/23 14:31	09/13/23 17:46	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/06/23 14:31	09/13/23 17:46	1
2-Nitroaniline	ND		9.5	2.1	ug/L		09/06/23 14:31	09/13/23 17:46	1
3-Nitroaniline	ND		9.5	1.7	ug/L		09/06/23 14:31	09/13/23 17:46	1
4-Nitroaniline	ND		9.5	1.4	ug/L		09/06/23 14:31	09/13/23 17:46	1
Nitrobenzene	ND		9.5	0.12	ug/L		09/06/23 14:31	09/13/23 17:46	1
2-Nitrophenol	ND		9.5	4.9	ug/L		09/06/23 14:31	09/13/23 17:46	1
4-Nitrophenol	ND		9.5	2.0	ug/L		09/06/23 14:31	09/13/23 17:46	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		09/06/23 14:31	09/13/23 17:46	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		09/06/23 14:31	09/13/23 17:46	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		09/06/23 14:31	09/13/23 17:46	1
Pentachlorophenol	ND		19	1.3	ug/L		09/06/23 14:31	09/13/23 17:46	1
Phenol	ND		9.5	2.5	ug/L		09/06/23 14:31	09/13/23 17:46	1
Pyridine	ND		9.5	3.0	ug/L		09/06/23 14:31	09/13/23 17:46	1
Quinoline	ND		9.5	4.3	ug/L		09/06/23 14:31	09/13/23 17:46	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		09/06/23 14:31	09/13/23 17:46	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		09/06/23 14:31	09/13/23 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*46 - 124*	*09/06/23 14:31*	*09/13/23 17:46*	*1*
2-Fluorophenol	*34*		*13 - 113*	*09/06/23 14:31*	*09/13/23 17:46*	*1*
Nitrobenzene-d5	*56*		*36 - 126*	*09/06/23 14:31*	*09/13/23 17:46*	*1*
Phenol-d5	*49*		*17 - 127*	*09/06/23 14:31*	*09/13/23 17:46*	*1*
Terphenyl-d14	*74*		*44 - 149*	*09/06/23 14:31*	*09/13/23 17:46*	*1*
2,4,6-Tribromophenol	*69*		*26 - 150*	*09/06/23 14:31*	*09/13/23 17:46*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/06/23 12:59	09/06/23 19:39	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/06/23 12:59	09/06/23 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*69*		*51 - 149*	*09/06/23 12:59*	*09/06/23 19:39*	*1*

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

Job ID: 400-242794-1

Client Sample ID: ROST4PZC-ROX-083023
Date Collected: 08/30/23 10:15
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-11
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			09/09/23 15:26	1
Acrolein	ND		20	3.3	ug/L			09/09/23 15:26	1
Acrylonitrile	ND		10	2.8	ug/L			09/09/23 15:26	1
Benzene	**2.6**		1.0	0.50	ug/L			09/09/23 15:26	1
Bromobenzene	ND		1.0	0.54	ug/L			09/09/23 15:26	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/09/23 15:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/09/23 15:26	1
Bromoform	ND		5.0	0.25	ug/L			09/09/23 15:26	1
Bromomethane	ND		1.0	0.98	ug/L			09/09/23 15:26	1
2-Butanone (MEK)	**11**	**J**	25	2.6	ug/L			09/09/23 15:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/09/23 15:26	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/09/23 15:26	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/09/23 15:26	1
Chloroethane	ND		1.0	0.76	ug/L			09/09/23 15:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/09/23 15:26	1
Chloroform	ND		1.0	0.90	ug/L			09/09/23 15:26	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/09/23 15:26	1
Chloromethane	ND		1.0	0.90	ug/L			09/09/23 15:26	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/09/23 15:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/09/23 15:26	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/09/23 15:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/09/23 15:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/09/23 15:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/09/23 15:26	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/09/23 15:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/09/23 15:26	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/09/23 15:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 15:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 15:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 15:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 15:26	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/09/23 15:26	1
Ethylbenzene	**1.9**		1.0	0.50	ug/L			09/09/23 15:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/09/23 15:26	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/09/23 15:26	1
2-Hexanone	ND		25	1.4	ug/L			09/09/23 15:26	1
Isopropylbenzene	**4.2**		1.0	0.53	ug/L			09/09/23 15:26	1
Methylene bromide	ND		5.0	0.22	ug/L			09/09/23 15:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/09/23 15:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/09/23 15:26	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/09/23 15:26	1
m-Xylene & p-Xylene	**28**		5.0	0.63	ug/L			09/09/23 15:26	1
Naphthalene	**47**		5.0	3.0	ug/L			09/09/23 15:26	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/09/23 15:26	1
N-Propylbenzene	**6.7**		1.0	0.69	ug/L			09/09/23 15:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/09/23 15:26	1
o-Xylene	**2.0**	**J**	5.0	0.60	ug/L			09/09/23 15:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/09/23 15:26	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/09/23 15:26	1

Client Sample ID: ROST4PZC-ROX-083023
Date Collected: 08/30/23 10:15
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-11
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			09/09/23 15:26	1
Styrene	ND		1.0	1.0	ug/L			09/09/23 15:26	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/09/23 15:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/09/23 15:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/09/23 15:26	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/09/23 15:26	1
Toluene	**5.9**		1.0	0.90	ug/L			09/09/23 15:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 15:26	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/09/23 15:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/09/23 15:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/09/23 15:26	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/09/23 15:26	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/09/23 15:26	1
Trichloroethene	ND		1.0	0.15	ug/L			09/09/23 15:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/09/23 15:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/09/23 15:26	1
1,2,4-Trimethylbenzene	**5.0**		1.0	0.82	ug/L			09/09/23 15:26	1
1,3,5-Trimethylbenzene	**1.1**		1.0	0.56	ug/L			09/09/23 15:26	1
Vinyl acetate	ND		25	0.93	ug/L			09/09/23 15:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/09/23 15:26	1
Xylenes, Total	**30**		10	1.6	ug/L			09/09/23 15:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 130*		*09/09/23 15:26*	*1*
Dibromofluoromethane	*93*		*75 - 126*		*09/09/23 15:26*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*09/09/23 15:26*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.66**		0.19	0.094	ug/L		09/06/23 14:31	09/11/23 20:17	1
Acenaphthylene	ND		0.19	0.042	ug/L		09/06/23 14:31	09/11/23 20:17	1
Anthracene	**0.27**		0.19	0.044	ug/L		09/06/23 14:31	09/11/23 20:17	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		09/06/23 14:31	09/11/23 20:17	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		09/06/23 14:31	09/11/23 20:17	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		09/06/23 14:31	09/11/23 20:17	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/06/23 14:31	09/11/23 20:17	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		09/06/23 14:31	09/11/23 20:17	1
Chrysene	ND		0.19	0.031	ug/L		09/06/23 14:31	09/11/23 20:17	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		09/06/23 14:31	09/11/23 20:17	1
Fluoranthene	ND		0.19	0.032	ug/L		09/06/23 14:31	09/11/23 20:17	1
Fluorene	**0.55**		0.19	0.084	ug/L		09/06/23 14:31	09/11/23 20:17	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		09/06/23 14:31	09/11/23 20:17	1
Phenanthrene	**1.4**		0.19	0.085	ug/L		09/06/23 14:31	09/11/23 20:17	1
Pyrene	ND		0.19	0.037	ug/L		09/06/23 14:31	09/11/23 20:17	1
1-Methylnaphthalene	**15**		0.19	0.076	ug/L		09/06/23 14:31	09/11/23 20:17	1
2-Methylnaphthalene	**2.3**		0.19	0.062	ug/L		09/06/23 14:31	09/11/23 20:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*115*		*18 - 147*	*09/06/23 14:31*	*09/11/23 20:17*	*1*
2-Fluorobiphenyl	*89*		*15 - 128*	*09/06/23 14:31*	*09/11/23 20:17*	*1*

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

Job ID: 400-242794-1

Client Sample ID: ROST4PZC-ROX-083023
Date Collected: 08/30/23 10:15
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-11
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*139*		*10 - 144*	*09/06/23 14:31*	*09/11/23 20:17*	*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		09/06/23 14:31	09/11/23 18:18	1
Benzenethiol	ND	*- *1	9.5	1.6	ug/L		09/06/23 14:31	09/11/23 18:18	1
Benzoic acid	ND		28	6.9	ug/L		09/06/23 14:31	09/11/23 18:18	1
Benzyl alcohol	ND		9.5	1.9	ug/L		09/06/23 14:31	09/11/23 18:18	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		09/06/23 14:31	09/11/23 18:18	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		09/06/23 14:31	09/11/23 18:18	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		09/06/23 14:31	09/11/23 18:18	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		09/06/23 14:31	09/11/23 18:18	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		09/06/23 14:31	09/11/23 18:18	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		09/06/23 14:31	09/11/23 18:18	1
4-Chloroaniline	ND		9.5	3.2	ug/L		09/06/23 14:31	09/11/23 18:18	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		09/06/23 14:31	09/11/23 18:18	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		09/06/23 14:31	09/11/23 18:18	1
2-Chlorophenol	ND		9.5	2.1	ug/L		09/06/23 14:31	09/11/23 18:18	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		09/06/23 14:31	09/11/23 18:18	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		09/06/23 14:31	09/11/23 18:18	1
Dibenzofuran	ND		9.5	0.16	ug/L		09/06/23 14:31	09/11/23 18:18	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		09/06/23 14:31	09/11/23 18:18	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		09/06/23 14:31	09/11/23 18:18	1
Diethyl phthalate	ND		9.5	0.23	ug/L		09/06/23 14:31	09/11/23 18:18	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		09/06/23 14:31	09/11/23 18:18	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		09/06/23 14:31	09/11/23 18:18	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		09/06/23 14:31	09/11/23 18:18	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		09/06/23 14:31	09/11/23 18:18	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		09/06/23 14:31	09/11/23 18:18	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		09/06/23 14:31	09/11/23 18:18	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		09/06/23 14:31	09/11/23 18:18	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		09/06/23 14:31	09/11/23 18:18	1
1,4-Dioxane	ND		9.5	0.95	ug/L		09/06/23 14:31	09/11/23 18:18	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		09/06/23 14:31	09/11/23 18:18	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		09/06/23 14:31	09/11/23 18:18	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/06/23 14:31	09/11/23 18:18	1
Hexachloroethane	ND		9.5	4.0	ug/L		09/06/23 14:31	09/11/23 18:18	1
Indene	ND		9.5	0.95	ug/L		09/06/23 14:31	09/11/23 18:18	1
Isophorone	ND		9.5	0.13	ug/L		09/06/23 14:31	09/11/23 18:18	1
2-Methylphenol	ND		9.5	1.7	ug/L		09/06/23 14:31	09/11/23 18:18	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/06/23 14:31	09/11/23 18:18	1
2-Nitroaniline	ND		9.5	2.1	ug/L		09/06/23 14:31	09/11/23 18:18	1
3-Nitroaniline	ND		9.5	1.7	ug/L		09/06/23 14:31	09/11/23 18:18	1
4-Nitroaniline	ND		9.5	1.4	ug/L		09/06/23 14:31	09/11/23 18:18	1
Nitrobenzene	ND		9.5	0.12	ug/L		09/06/23 14:31	09/11/23 18:18	1
2-Nitrophenol	ND		9.5	4.9	ug/L		09/06/23 14:31	09/11/23 18:18	1
4-Nitrophenol	ND		9.5	2.0	ug/L		09/06/23 14:31	09/11/23 18:18	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		09/06/23 14:31	09/11/23 18:18	1

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

Job ID: 400-242794-1

Client Sample ID: ROST4PZC-ROX-083023
Date Collected: 08/30/23 10:15
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-11
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	3.1	ug/L		09/06/23 14:31	09/11/23 18:18	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		09/06/23 14:31	09/11/23 18:18	1
Pentachlorophenol	ND		19	1.3	ug/L		09/06/23 14:31	09/11/23 18:18	1
Phenol	ND		9.5	2.5	ug/L		09/06/23 14:31	09/11/23 18:18	1
Pyridine	ND		9.5	3.0	ug/L		09/06/23 14:31	09/11/23 18:18	1
Quinoline	ND		9.5	4.3	ug/L		09/06/23 14:31	09/11/23 18:18	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		09/06/23 14:31	09/11/23 18:18	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		09/06/23 14:31	09/11/23 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*46 - 124*	*09/06/23 14:31*	*09/11/23 18:18*	*1*
2-Fluorophenol	*53*		*13 - 113*	*09/06/23 14:31*	*09/11/23 18:18*	*1*
Nitrobenzene-d5	*79*		*36 - 126*	*09/06/23 14:31*	*09/11/23 18:18*	*1*
Phenol-d5	*76*		*17 - 127*	*09/06/23 14:31*	*09/11/23 18:18*	*1*
Terphenyl-d14	*96*		*44 - 149*	*09/06/23 14:31*	*09/11/23 18:18*	*1*
2,4,6-Tribromophenol	*84*		*26 - 150*	*09/06/23 14:31*	*09/11/23 18:18*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/06/23 12:59	09/06/23 20:40	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/06/23 12:59	09/06/23 20:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*69*		*51 - 149*	*09/06/23 12:59*	*09/06/23 20:40*	*1*

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

Job ID: 400-242794-1

Client Sample ID: ROST4PZE-ROX-083023

Date Collected: 08/30/23 11:00
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-12

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			09/11/23 11:34	1
Acrolein	ND		20	3.3	ug/L			09/11/23 11:34	1
Acrylonitrile	ND		10	2.8	ug/L			09/11/23 11:34	1
Benzene	**2.0**		1.0	0.50	ug/L			09/11/23 11:34	1
Bromobenzene	ND		1.0	0.54	ug/L			09/11/23 11:34	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/11/23 11:34	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/11/23 11:34	1
Bromoform	ND		5.0	0.25	ug/L			09/11/23 11:34	1
Bromomethane	ND		1.0	0.98	ug/L			09/11/23 11:34	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/11/23 11:34	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/11/23 11:34	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/11/23 11:34	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/11/23 11:34	1
Chloroethane	ND		1.0	0.76	ug/L			09/11/23 11:34	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/11/23 11:34	1
Chloroform	ND		1.0	0.90	ug/L			09/11/23 11:34	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/11/23 11:34	1
Chloromethane	ND		1.0	0.90	ug/L			09/11/23 11:34	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/11/23 11:34	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/11/23 11:34	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/11/23 11:34	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/11/23 11:34	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/11/23 11:34	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/11/23 11:34	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/11/23 11:34	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/11/23 11:34	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/11/23 11:34	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/11/23 11:34	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/11/23 11:34	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/11/23 11:34	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/11/23 11:34	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/11/23 11:34	1
Ethylbenzene	**7.7**		1.0	0.50	ug/L			09/11/23 11:34	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/11/23 11:34	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/11/23 11:34	1
2-Hexanone	ND		25	1.4	ug/L			09/11/23 11:34	1
Isopropylbenzene	**1.8**		1.0	0.53	ug/L			09/11/23 11:34	1
Methylene bromide	ND		5.0	0.22	ug/L			09/11/23 11:34	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/11/23 11:34	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/11/23 11:34	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/11/23 11:34	1
m-Xylene & p-Xylene	**11**		5.0	0.63	ug/L			09/11/23 11:34	1
Naphthalene	**5.9**		5.0	3.0	ug/L			09/11/23 11:34	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/11/23 11:34	1
N-Propylbenzene	**1.8**		1.0	0.69	ug/L			09/11/23 11:34	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/11/23 11:34	1
o-Xylene	**2.1**	**J**	5.0	0.60	ug/L			09/11/23 11:34	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/11/23 11:34	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/11/23 11:34	1

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

Job ID: 400-242794-1

Client Sample ID: ROST4PZE-ROX-083023
Date Collected: 08/30/23 11:00
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-12
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			09/11/23 11:34	1
Styrene	ND		1.0	1.0	ug/L			09/11/23 11:34	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/11/23 11:34	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/11/23 11:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/11/23 11:34	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/11/23 11:34	1
Toluene	ND		1.0	0.90	ug/L			09/11/23 11:34	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/11/23 11:34	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/11/23 11:34	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/11/23 11:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/11/23 11:34	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/11/23 11:34	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/11/23 11:34	1
Trichloroethene	ND		1.0	0.15	ug/L			09/11/23 11:34	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/11/23 11:34	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/11/23 11:34	1
1,2,4-Trimethylbenzene	**29**		1.0	0.82	ug/L			09/11/23 11:34	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/11/23 11:34	1
Vinyl acetate	ND		25	0.93	ug/L			09/11/23 11:34	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/11/23 11:34	1
Xylenes, Total	**13**		10	1.6	ug/L			09/11/23 11:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*72 - 130*		*09/11/23 11:34*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*09/11/23 11:34*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*09/11/23 11:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.99**		0.19	0.094	ug/L		09/06/23 14:31	09/11/23 20:38	1
Acenaphthylene	ND		0.19	0.042	ug/L		09/06/23 14:31	09/11/23 20:38	1
Anthracene	**0.76**		0.19	0.045	ug/L		09/06/23 14:31	09/11/23 20:38	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		09/06/23 14:31	09/11/23 20:38	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		09/06/23 14:31	09/11/23 20:38	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		09/06/23 14:31	09/11/23 20:38	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/06/23 14:31	09/11/23 20:38	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		09/06/23 14:31	09/11/23 20:38	1
Chrysene	ND		0.19	0.031	ug/L		09/06/23 14:31	09/11/23 20:38	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		09/06/23 14:31	09/11/23 20:38	1
Fluoranthene	**0.13**	**J**	0.19	0.032	ug/L		09/06/23 14:31	09/11/23 20:38	1
Fluorene	**1.0**		0.19	0.085	ug/L		09/06/23 14:31	09/11/23 20:38	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		09/06/23 14:31	09/11/23 20:38	1
Phenanthrene	**3.6**		0.19	0.086	ug/L		09/06/23 14:31	09/11/23 20:38	1
Pyrene	**0.052**	**J**	0.19	0.037	ug/L		09/06/23 14:31	09/11/23 20:38	1
1-Methylnaphthalene	**12**		0.19	0.076	ug/L		09/06/23 14:31	09/11/23 20:38	1
2-Methylnaphthalene	**1.6**		0.19	0.063	ug/L		09/06/23 14:31	09/11/23 20:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*98*		*18 - 147*	*09/06/23 14:31*	*09/11/23 20:38*	*1*
2-Fluorobiphenyl	*116*		*15 - 128*	*09/06/23 14:31*	*09/11/23 20:38*	*1*

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

Job ID: 400-242794-1

Client Sample ID: ROST4PZE-ROX-083023
Date Collected: 08/30/23 11:00
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-12
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*139*		*10 - 144*	*09/06/23 14:31*	*09/11/23 20:38*	*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		09/06/23 14:31	09/11/23 18:40	1
Benzenethiol	ND	*- *1	9.5	1.6	ug/L		09/06/23 14:31	09/11/23 18:40	1
Benzoic acid	ND		29	6.9	ug/L		09/06/23 14:31	09/11/23 18:40	1
Benzyl alcohol	ND		9.5	1.9	ug/L		09/06/23 14:31	09/11/23 18:40	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		09/06/23 14:31	09/11/23 18:40	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		09/06/23 14:31	09/11/23 18:40	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		09/06/23 14:31	09/11/23 18:40	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		09/06/23 14:31	09/11/23 18:40	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		09/06/23 14:31	09/11/23 18:40	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		09/06/23 14:31	09/11/23 18:40	1
4-Chloroaniline	ND		9.5	3.2	ug/L		09/06/23 14:31	09/11/23 18:40	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		09/06/23 14:31	09/11/23 18:40	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		09/06/23 14:31	09/11/23 18:40	1
2-Chlorophenol	ND		9.5	2.1	ug/L		09/06/23 14:31	09/11/23 18:40	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		09/06/23 14:31	09/11/23 18:40	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		09/06/23 14:31	09/11/23 18:40	1
Dibenzofuran	ND		9.5	0.16	ug/L		09/06/23 14:31	09/11/23 18:40	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		09/06/23 14:31	09/11/23 18:40	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		09/06/23 14:31	09/11/23 18:40	1
Diethyl phthalate	ND		9.5	0.23	ug/L		09/06/23 14:31	09/11/23 18:40	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		09/06/23 14:31	09/11/23 18:40	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		09/06/23 14:31	09/11/23 18:40	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		09/06/23 14:31	09/11/23 18:40	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		09/06/23 14:31	09/11/23 18:40	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		09/06/23 14:31	09/11/23 18:40	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		09/06/23 14:31	09/11/23 18:40	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		09/06/23 14:31	09/11/23 18:40	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		09/06/23 14:31	09/11/23 18:40	1
1,4-Dioxane	ND		9.5	0.95	ug/L		09/06/23 14:31	09/11/23 18:40	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		09/06/23 14:31	09/11/23 18:40	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		09/06/23 14:31	09/11/23 18:40	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/06/23 14:31	09/11/23 18:40	1
Hexachloroethane	ND		9.5	4.0	ug/L		09/06/23 14:31	09/11/23 18:40	1
Indene	ND		9.5	0.95	ug/L		09/06/23 14:31	09/11/23 18:40	1
Isophorone	ND		9.5	0.13	ug/L		09/06/23 14:31	09/11/23 18:40	1
2-Methylphenol	ND		9.5	1.7	ug/L		09/06/23 14:31	09/11/23 18:40	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/06/23 14:31	09/11/23 18:40	1
2-Nitroaniline	ND		9.5	2.1	ug/L		09/06/23 14:31	09/11/23 18:40	1
3-Nitroaniline	ND		9.5	1.7	ug/L		09/06/23 14:31	09/11/23 18:40	1
4-Nitroaniline	ND		9.5	1.4	ug/L		09/06/23 14:31	09/11/23 18:40	1
Nitrobenzene	ND		9.5	0.12	ug/L		09/06/23 14:31	09/11/23 18:40	1
2-Nitrophenol	ND		9.5	4.9	ug/L		09/06/23 14:31	09/11/23 18:40	1
4-Nitrophenol	ND		9.5	2.0	ug/L		09/06/23 14:31	09/11/23 18:40	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		09/06/23 14:31	09/11/23 18:40	1

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

Job ID: 400-242794-1

Client Sample ID: ROST4PZE-ROX-083023
Date Collected: 08/30/23 11:00
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-12
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		9.5	3.1	ug/L		09/06/23 14:31	09/11/23 18:40	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		09/06/23 14:31	09/11/23 18:40	1
Pentachlorophenol	ND		19	1.3	ug/L		09/06/23 14:31	09/11/23 18:40	1
Phenol	ND		9.5	2.5	ug/L		09/06/23 14:31	09/11/23 18:40	1
Pyridine	ND		9.5	3.0	ug/L		09/06/23 14:31	09/11/23 18:40	1
Quinoline	ND		9.5	4.3	ug/L		09/06/23 14:31	09/11/23 18:40	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		09/06/23 14:31	09/11/23 18:40	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		09/06/23 14:31	09/11/23 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*87*		*46 - 124*	*09/06/23 14:31*	*09/11/23 18:40*	*1*
2-Fluorophenol	*63*		*13 - 113*	*09/06/23 14:31*	*09/11/23 18:40*	*1*
Nitrobenzene-d5	*80*		*36 - 126*	*09/06/23 14:31*	*09/11/23 18:40*	*1*
Phenol-d5	*77*		*17 - 127*	*09/06/23 14:31*	*09/11/23 18:40*	*1*
Terphenyl-d14	*94*		*44 - 149*	*09/06/23 14:31*	*09/11/23 18:40*	*1*
2,4,6-Tribromophenol	*89*		*26 - 150*	*09/06/23 14:31*	*09/11/23 18:40*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/06/23 12:59	09/06/23 21:00	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/06/23 12:59	09/06/23 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*51 - 149*	*09/06/23 12:59*	*09/06/23 21:00*	*1*

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

Job ID: 400-242794-1

Client Sample ID: MW12-ROX-083023-EB
Date Collected: 08/30/23 11:50
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-13
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			09/09/23 09:08	1
Acrolein	ND		20	3.3	ug/L			09/09/23 09:08	1
Acrylonitrile	ND		10	2.8	ug/L			09/09/23 09:08	1
Benzene	ND		1.0	0.50	ug/L			09/09/23 09:08	1
Bromobenzene	ND		1.0	0.54	ug/L			09/09/23 09:08	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/09/23 09:08	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/09/23 09:08	1
Bromoform	ND		5.0	0.25	ug/L			09/09/23 09:08	1
Bromomethane	ND		1.0	0.98	ug/L			09/09/23 09:08	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/09/23 09:08	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/09/23 09:08	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/09/23 09:08	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/09/23 09:08	1
Chloroethane	ND		1.0	0.76	ug/L			09/09/23 09:08	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/09/23 09:08	1
Chloroform	ND		1.0	0.90	ug/L			09/09/23 09:08	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/09/23 09:08	1
Chloromethane	ND		1.0	0.90	ug/L			09/09/23 09:08	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/09/23 09:08	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/09/23 09:08	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/09/23 09:08	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/09/23 09:08	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/09/23 09:08	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/09/23 09:08	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/09/23 09:08	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/09/23 09:08	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/09/23 09:08	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 09:08	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 09:08	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 09:08	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 09:08	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/09/23 09:08	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/09/23 09:08	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/09/23 09:08	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/09/23 09:08	1
2-Hexanone	ND		25	1.4	ug/L			09/09/23 09:08	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/09/23 09:08	1
Methylene bromide	ND		5.0	0.22	ug/L			09/09/23 09:08	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/09/23 09:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/09/23 09:08	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/09/23 09:08	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/09/23 09:08	1
Naphthalene	ND		5.0	3.0	ug/L			09/09/23 09:08	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/09/23 09:08	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/09/23 09:08	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/09/23 09:08	1
o-Xylene	ND		5.0	0.60	ug/L			09/09/23 09:08	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/09/23 09:08	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/09/23 09:08	1

Client Sample ID: MW12-ROX-083023-EB

Lab Sample ID: 400-242794-13

Date Collected: 08/30/23 11:50

Matrix: Water

Date Received: 08/31/23 09:19

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			09/09/23 09:08	1
Styrene	ND		1.0	1.0	ug/L			09/09/23 09:08	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/09/23 09:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/09/23 09:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/09/23 09:08	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/09/23 09:08	1
Toluene	ND		1.0	0.90	ug/L			09/09/23 09:08	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 09:08	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/09/23 09:08	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/09/23 09:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/09/23 09:08	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/09/23 09:08	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/09/23 09:08	1
Trichloroethene	ND		1.0	0.15	ug/L			09/09/23 09:08	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/09/23 09:08	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/09/23 09:08	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/09/23 09:08	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/09/23 09:08	1
Vinyl acetate	ND		25	0.93	ug/L			09/09/23 09:08	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/09/23 09:08	1
Xylenes, Total	ND		10	1.6	ug/L			09/09/23 09:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 130*		*09/09/23 09:08*	*1*
Dibromofluoromethane	*95*		*75 - 126*		*09/09/23 09:08*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*09/09/23 09:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.093	ug/L		09/06/23 14:31	09/11/23 20:59	1
Acenaphthylene	ND		0.19	0.041	ug/L		09/06/23 14:31	09/11/23 20:59	1
Anthracene	ND		0.19	0.044	ug/L		09/06/23 14:31	09/11/23 20:59	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		09/06/23 14:31	09/11/23 20:59	1
Benzo[a]pyrene	ND		0.19	0.060	ug/L		09/06/23 14:31	09/11/23 20:59	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		09/06/23 14:31	09/11/23 20:59	1
Benzo[g,h,i]perylene	ND		0.19	0.025	ug/L		09/06/23 14:31	09/11/23 20:59	1
Benzo[k]fluoranthene	ND		0.19	0.058	ug/L		09/06/23 14:31	09/11/23 20:59	1
Chrysene	ND		0.19	0.031	ug/L		09/06/23 14:31	09/11/23 20:59	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		09/06/23 14:31	09/11/23 20:59	1
Fluoranthene	ND		0.19	0.032	ug/L		09/06/23 14:31	09/11/23 20:59	1
Fluorene	ND		0.19	0.084	ug/L		09/06/23 14:31	09/11/23 20:59	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		09/06/23 14:31	09/11/23 20:59	1
Phenanthrene	ND		0.19	0.085	ug/L		09/06/23 14:31	09/11/23 20:59	1
Pyrene	ND		0.19	0.037	ug/L		09/06/23 14:31	09/11/23 20:59	1
1-Methylnaphthalene	ND		0.19	0.075	ug/L		09/06/23 14:31	09/11/23 20:59	1
2-Methylnaphthalene	ND		0.19	0.062	ug/L		09/06/23 14:31	09/11/23 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*64*		*18 - 147*	*09/06/23 14:31*	*09/11/23 20:59*	*1*
2-Fluorobiphenyl	*61*		*15 - 128*	*09/06/23 14:31*	*09/11/23 20:59*	*1*

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

Job ID: 400-242794-1

Client Sample ID: MW12-ROX-083023-EB

Date Collected: 08/30/23 11:50
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-13

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*	*09/06/23 14:31*	*09/11/23 20:59*	*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		09/06/23 14:31	09/11/23 19:01	1
Benzenethiol	ND	*1	9.4	1.6	ug/L		09/06/23 14:31	09/11/23 19:01	1
Benzoic acid	ND		28	6.9	ug/L		09/06/23 14:31	09/11/23 19:01	1
Benzyl alcohol	ND		9.4	1.9	ug/L		09/06/23 14:31	09/11/23 19:01	1
Bis(2-chloroethoxy)methane	ND		9.4	0.15	ug/L		09/06/23 14:31	09/11/23 19:01	1
Bis(2-chloroethyl)ether	ND		9.4	2.5	ug/L		09/06/23 14:31	09/11/23 19:01	1
bis (2-chloroisopropyl) ether	ND		9.4	0.15	ug/L		09/06/23 14:31	09/11/23 19:01	1
Bis(2-ethylhexyl) phthalate	ND		9.4	4.7	ug/L		09/06/23 14:31	09/12/23 16:40	1
4-Bromophenyl phenyl ether	ND		9.4	0.19	ug/L		09/06/23 14:31	09/11/23 19:01	1
Butyl benzyl phthalate	ND		9.4	0.18	ug/L		09/06/23 14:31	09/11/23 19:01	1
4-Chloroaniline	ND		9.4	3.2	ug/L		09/06/23 14:31	09/11/23 19:01	1
4-Chloro-3-methylphenol	ND		9.4	3.6	ug/L		09/06/23 14:31	09/11/23 19:01	1
2-Chloronaphthalene	ND		9.4	0.13	ug/L		09/06/23 14:31	09/11/23 19:01	1
2-Chlorophenol	ND		9.4	2.1	ug/L		09/06/23 14:31	09/11/23 19:01	1
4-Chlorophenyl phenyl ether	ND		9.4	1.9	ug/L		09/06/23 14:31	09/11/23 19:01	1
Dibenz[a,h]acridine	ND		9.4	0.94	ug/L		09/06/23 14:31	09/11/23 19:01	1
Dibenzofuran	ND		9.4	0.16	ug/L		09/06/23 14:31	09/11/23 19:01	1
3,3'-Dichlorobenzidine	ND		9.4	2.5	ug/L		09/06/23 14:31	09/11/23 19:01	1
2,4-Dichlorophenol	ND		9.4	2.8	ug/L		09/06/23 14:31	09/11/23 19:01	1
Diethyl phthalate	ND		9.4	0.23	ug/L		09/06/23 14:31	09/11/23 19:01	1
2,4-Dimethylphenol	ND		9.4	3.3	ug/L		09/06/23 14:31	09/11/23 19:01	1
Dimethyl phthalate	ND		9.4	0.16	ug/L		09/06/23 14:31	09/11/23 19:01	1
Di-n-butyl phthalate	ND		9.4	2.5	ug/L		09/06/23 14:31	09/11/23 19:01	1
4,6-Dinitro-ortho-cresol	ND		9.4	1.5	ug/L		09/06/23 14:31	09/11/23 19:01	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		09/06/23 14:31	09/11/23 19:01	1
2,4-Dinitrotoluene	ND		9.4	1.8	ug/L		09/06/23 14:31	09/11/23 19:01	1
2,6-Dinitrotoluene	ND		9.4	1.8	ug/L		09/06/23 14:31	09/11/23 19:01	1
Di-n-octyl phthalate	ND		9.4	0.16	ug/L		09/06/23 14:31	09/11/23 19:01	1
1,4-Dioxane	ND		9.4	0.94	ug/L		09/06/23 14:31	09/11/23 19:01	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	0.94	ug/L		09/06/23 14:31	09/11/23 19:01	1
Hexachlorobenzene	ND		9.4	0.16	ug/L		09/06/23 14:31	09/11/23 19:01	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/06/23 14:31	09/11/23 19:01	1
Hexachloroethane	ND		9.4	4.0	ug/L		09/06/23 14:31	09/11/23 19:01	1
Indene	ND		9.4	0.94	ug/L		09/06/23 14:31	09/11/23 19:01	1
Isophorone	ND		9.4	0.13	ug/L		09/06/23 14:31	09/11/23 19:01	1
2-Methylphenol	ND		9.4	1.7	ug/L		09/06/23 14:31	09/11/23 19:01	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/06/23 14:31	09/11/23 19:01	1
2-Nitroaniline	ND		9.4	2.1	ug/L		09/06/23 14:31	09/11/23 19:01	1
3-Nitroaniline	ND		9.4	1.7	ug/L		09/06/23 14:31	09/11/23 19:01	1
4-Nitroaniline	ND		9.4	1.4	ug/L		09/06/23 14:31	09/11/23 19:01	1
Nitrobenzene	ND		9.4	0.12	ug/L		09/06/23 14:31	09/11/23 19:01	1
2-Nitrophenol	ND		9.4	4.9	ug/L		09/06/23 14:31	09/11/23 19:01	1
4-Nitrophenol	ND		9.4	2.0	ug/L		09/06/23 14:31	09/11/23 19:01	1
N-Nitrosodimethylamine	ND		9.4	3.3	ug/L		09/06/23 14:31	09/11/23 19:01	1

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

Job ID: 400-242794-1

Client Sample ID: MW12-ROX-083023-EB

Lab Sample ID: 400-242794-13

Date Collected: 08/30/23 11:50

Matrix: Water

Date Received: 08/31/23 09:19

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		09/06/23 14:31	09/11/23 19:01	1
N-Nitrosodiphenylamine	ND		9.4	0.17	ug/L		09/06/23 14:31	09/11/23 19:01	1
Pentachlorophenol	ND		19	1.3	ug/L		09/06/23 14:31	09/11/23 19:01	1
Phenol	ND		9.4	2.5	ug/L		09/06/23 14:31	09/11/23 19:01	1
Pyridine	ND		9.4	3.0	ug/L		09/06/23 14:31	09/11/23 19:01	1
Quinoline	ND		9.4	4.2	ug/L		09/06/23 14:31	09/11/23 19:01	1
2,4,5-Trichlorophenol	ND		9.4	3.5	ug/L		09/06/23 14:31	09/11/23 19:01	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		09/06/23 14:31	09/11/23 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*46 - 124*	*09/06/23 14:31*	*09/11/23 19:01*	*1*
2-Fluorophenol	*48*		*13 - 113*	*09/06/23 14:31*	*09/11/23 19:01*	*1*
Nitrobenzene-d5	*70*		*36 - 126*	*09/06/23 14:31*	*09/11/23 19:01*	*1*
Phenol-d5	*67*		*17 - 127*	*09/06/23 14:31*	*09/11/23 19:01*	*1*
Terphenyl-d14	*99*		*44 - 149*	*09/06/23 14:31*	*09/11/23 19:01*	*1*
2,4,6-Tribromophenol	*61*		*26 - 150*	*09/06/23 14:31*	*09/11/23 19:01*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.029	0.016	ug/L		09/06/23 12:59	09/06/23 21:20	1
1,2-D bromoethane	ND		0.019	0.014	ug/L		09/06/23 12:59	09/06/23 21:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*63*		*51 - 149*	*09/06/23 12:59*	*09/06/23 21:20*	*1*

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

Job ID: 400-242794-1

Client Sample ID: MW12-ROX-083023
Date Collected: 08/30/23 12:20
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			09/09/23 16:15	1
Acrolein	ND		20	3.3	ug/L			09/09/23 16:15	1
Acrylonitrile	ND		10	2.8	ug/L			09/09/23 16:15	1
Benzene	ND		1.0	0.50	ug/L			09/09/23 16:15	1
Bromobenzene	ND		1.0	0.54	ug/L			09/09/23 16:15	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/09/23 16:15	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/09/23 16:15	1
Bromoform	ND		5.0	0.25	ug/L			09/09/23 16:15	1
Bromomethane	ND		1.0	0.98	ug/L			09/09/23 16:15	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/09/23 16:15	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/09/23 16:15	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/09/23 16:15	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/09/23 16:15	1
Chloroethane	ND		1.0	0.76	ug/L			09/09/23 16:15	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/09/23 16:15	1
Chloroform	ND		1.0	0.90	ug/L			09/09/23 16:15	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/09/23 16:15	1
Chloromethane	ND		1.0	0.90	ug/L			09/09/23 16:15	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/09/23 16:15	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/09/23 16:15	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/09/23 16:15	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/09/23 16:15	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/09/23 16:15	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/09/23 16:15	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/09/23 16:15	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/09/23 16:15	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/09/23 16:15	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 16:15	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 16:15	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 16:15	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 16:15	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/09/23 16:15	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/09/23 16:15	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/09/23 16:15	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/09/23 16:15	1
2-Hexanone	ND		25	1.4	ug/L			09/09/23 16:15	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/09/23 16:15	1
Methylene bromide	ND		5.0	0.22	ug/L			09/09/23 16:15	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/09/23 16:15	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/09/23 16:15	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/09/23 16:15	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/09/23 16:15	1
Naphthalene	ND		5.0	3.0	ug/L			09/09/23 16:15	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/09/23 16:15	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/09/23 16:15	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/09/23 16:15	1
o-Xylene	ND		5.0	0.60	ug/L			09/09/23 16:15	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/09/23 16:15	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/09/23 16:15	1

Client Sample ID: MW12-ROX-083023
Date Collected: 08/30/23 12:20
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-14
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			09/09/23 16:15	1
Styrene	ND		1.0	1.0	ug/L			09/09/23 16:15	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/09/23 16:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/09/23 16:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/09/23 16:15	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/09/23 16:15	1
Toluene	ND		1.0	0.90	ug/L			09/09/23 16:15	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 16:15	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/09/23 16:15	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/09/23 16:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/09/23 16:15	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/09/23 16:15	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/09/23 16:15	1
Trichloroethene	ND		1.0	0.15	ug/L			09/09/23 16:15	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/09/23 16:15	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/09/23 16:15	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/09/23 16:15	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/09/23 16:15	1
Vinyl acetate	ND		25	0.93	ug/L			09/09/23 16:15	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/09/23 16:15	1
Xylenes, Total	ND		10	1.6	ug/L			09/09/23 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 130*		*09/09/23 16:15*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*09/09/23 16:15*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*09/09/23 16:15*	*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		09/06/23 14:31	09/11/23 21:20	1
Acenaphthylene	**0.13**	**J**	0.19	0.042	ug/L		09/06/23 14:31	09/11/23 21:20	1
Anthracene	ND		0.19	0.045	ug/L		09/06/23 14:31	09/11/23 21:20	1
Benzo[a]anthracene	**0.046**	**J**	0.19	0.032	ug/L		09/06/23 14:31	09/11/23 21:20	1
Benzo[a]pyrene	**0.17**	**J**	0.19	0.061	ug/L		09/06/23 14:31	09/11/23 21:20	1
Benzo[b]fluoranthene	**0.19**		0.19	0.035	ug/L		09/06/23 14:31	09/11/23 21:20	1
Benzo[g,h,i]perylene	**0.17**	**J**	0.19	0.026	ug/L		09/06/23 14:31	09/11/23 21:20	1
Benzo[k]fluoranthene	**0.082**	**J**	0.19	0.059	ug/L		09/06/23 14:31	09/11/23 21:20	1
Chrysene	**0.045**	**J**	0.19	0.031	ug/L		09/06/23 14:31	09/11/23 21:20	1
Dibenz(a,h)anthracene	**0.076**	**J**	0.19	0.045	ug/L		09/06/23 14:31	09/11/23 21:20	1
Fluoranthene	ND		0.19	0.032	ug/L		09/06/23 14:31	09/11/23 21:20	1
Fluorene	ND		0.19	0.084	ug/L		09/06/23 14:31	09/11/23 21:20	1
Indeno[1,2,3-cd]pyrene	**0.22**		0.19	0.032	ug/L		09/06/23 14:31	09/11/23 21:20	1
Phenanthrene	ND		0.19	0.085	ug/L		09/06/23 14:31	09/11/23 21:20	1
Pyrene	ND		0.19	0.037	ug/L		09/06/23 14:31	09/11/23 21:20	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		09/06/23 14:31	09/11/23 21:20	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		09/06/23 14:31	09/11/23 21:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*64*		*18 - 147*	*09/06/23 14:31*	*09/11/23 21:20*	*1*
2-Fluorobiphenyl	*61*		*15 - 128*	*09/06/23 14:31*	*09/11/23 21:20*	*1*

Client Sample ID: MW12-ROX-083023

Lab Sample ID: 400-242794-14

Date Collected: 08/30/23 12:20

Matrix: Water

Date Received: 08/31/23 09:19

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*75*		*10 - 144*	*09/06/23 14:31*	*09/11/23 21:20*	*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	0.19	0.095	ug/L		09/13/23 10:04	09/15/23 18:05	1
Acenaphthylene	ND	H	0.19	0.042	ug/L		09/13/23 10:04	09/15/23 18:05	1
Anthracene	ND	H	0.19	0.045	ug/L		09/13/23 10:04	09/15/23 18:05	1
Benzo[a]anthracene	ND	H	0.19	0.033	ug/L		09/13/23 10:04	09/15/23 18:05	1
Benzo[a]pyrene	ND	H	0.19	0.061	ug/L		09/13/23 10:04	09/15/23 18:05	1
Benzo[b]fluoranthene	ND	H	0.19	0.035	ug/L		09/13/23 10:04	09/15/23 18:05	1
Benzo[g,h,i]perylene	ND	H	0.19	0.026	ug/L		09/13/23 10:04	09/15/23 18:05	1
Benzo[k]fluoranthene	ND	H	0.19	0.059	ug/L		09/13/23 10:04	09/15/23 18:05	1
Chrysene	ND	H	0.19	0.032	ug/L		09/13/23 10:04	09/15/23 18:05	1
Dibenz(a,h)anthracene	ND	H	0.19	0.046	ug/L		09/13/23 10:04	09/15/23 18:05	1
Fluoranthene	ND	H	0.19	0.033	ug/L		09/13/23 10:04	09/15/23 18:05	1
Fluorene	ND	H	0.19	0.085	ug/L		09/13/23 10:04	09/15/23 18:05	1
Indeno[1,2,3-cd]pyrene	ND	H	0.19	0.033	ug/L		09/13/23 10:04	09/15/23 18:05	1
Phenanthrene	ND	H	0.19	0.086	ug/L		09/13/23 10:04	09/15/23 18:05	1
Pyrene	ND	H	0.19	0.037	ug/L		09/13/23 10:04	09/15/23 18:05	1
1-Methylnaphthalene	ND	H	0.19	0.077	ug/L		09/13/23 10:04	09/15/23 18:05	1
2-Methylnaphthalene	ND	H	0.19	0.063	ug/L		09/13/23 10:04	09/15/23 18:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*82*		*18 - 147*	*09/13/23 10:04*	*09/15/23 18:05*	*1*
2-Fluorobiphenyl	*78*		*15 - 128*	*09/13/23 10:04*	*09/15/23 18:05*	*1*
Nitrobenzene-d5	*74*		*10 - 144*	*09/13/23 10:04*	*09/15/23 18:05*	*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		09/06/23 14:31	09/11/23 19:22	1
Benzenethiol	ND	*1	9.5	1.6	ug/L		09/06/23 14:31	09/11/23 19:22	1
Benzoic acid	ND		28	6.9	ug/L		09/06/23 14:31	09/11/23 19:22	1
Benzyl alcohol	ND		9.5	1.9	ug/L		09/06/23 14:31	09/11/23 19:22	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		09/06/23 14:31	09/11/23 19:22	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		09/06/23 14:31	09/11/23 19:22	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		09/06/23 14:31	09/11/23 19:22	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		09/06/23 14:31	09/11/23 19:22	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		09/06/23 14:31	09/11/23 19:22	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		09/06/23 14:31	09/11/23 19:22	1
4-Chloroaniline	ND		9.5	3.2	ug/L		09/06/23 14:31	09/11/23 19:22	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		09/06/23 14:31	09/11/23 19:22	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		09/06/23 14:31	09/11/23 19:22	1
2-Chlorophenol	ND		9.5	2.1	ug/L		09/06/23 14:31	09/11/23 19:22	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		09/06/23 14:31	09/11/23 19:22	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		09/06/23 14:31	09/11/23 19:22	1
Dibenzofuran	ND		9.5	0.16	ug/L		09/06/23 14:31	09/11/23 19:22	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		09/06/23 14:31	09/11/23 19:22	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		09/06/23 14:31	09/11/23 19:22	1
Diethyl phthalate	ND		9.5	0.23	ug/L		09/06/23 14:31	09/11/23 19:22	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		09/06/23 14:31	09/11/23 19:22	1

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

Job ID: 400-242794-1

Client Sample ID: MW12-ROX-083023
Date Collected: 08/30/23 12:20
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-14
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		09/06/23 14:31	09/11/23 19:22	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		09/06/23 14:31	09/11/23 19:22	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		09/06/23 14:31	09/11/23 19:22	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		09/06/23 14:31	09/11/23 19:22	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		09/06/23 14:31	09/11/23 19:22	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		09/06/23 14:31	09/11/23 19:22	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		09/06/23 14:31	09/11/23 19:22	1
1,4-Dioxane	ND		9.5	0.95	ug/L		09/06/23 14:31	09/11/23 19:22	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		09/06/23 14:31	09/11/23 19:22	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		09/06/23 14:31	09/11/23 19:22	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/06/23 14:31	09/11/23 19:22	1
Hexachloroethane	ND		9.5	4.0	ug/L		09/06/23 14:31	09/11/23 19:22	1
Indene	ND		9.5	0.95	ug/L		09/06/23 14:31	09/11/23 19:22	1
Isophorone	ND		9.5	0.13	ug/L		09/06/23 14:31	09/11/23 19:22	1
2-Methylphenol	ND		9.5	1.7	ug/L		09/06/23 14:31	09/11/23 19:22	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/06/23 14:31	09/11/23 19:22	1
2-Nitroaniline	ND		9.5	2.1	ug/L		09/06/23 14:31	09/11/23 19:22	1
3-Nitroaniline	ND		9.5	1.7	ug/L		09/06/23 14:31	09/11/23 19:22	1
4-Nitroaniline	ND		9.5	1.4	ug/L		09/06/23 14:31	09/11/23 19:22	1
Nitrobenzene	ND		9.5	0.12	ug/L		09/06/23 14:31	09/11/23 19:22	1
2-Nitrophenol	ND		9.5	4.9	ug/L		09/06/23 14:31	09/11/23 19:22	1
4-Nitrophenol	ND		9.5	2.0	ug/L		09/06/23 14:31	09/11/23 19:22	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		09/06/23 14:31	09/11/23 19:22	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		09/06/23 14:31	09/11/23 19:22	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		09/06/23 14:31	09/11/23 19:22	1
Pentachlorophenol	ND		19	1.3	ug/L		09/06/23 14:31	09/11/23 19:22	1
Phenol	ND		9.5	2.5	ug/L		09/06/23 14:31	09/11/23 19:22	1
Pyridine	ND		9.5	3.0	ug/L		09/06/23 14:31	09/11/23 19:22	1
Quinoline	ND		9.5	4.3	ug/L		09/06/23 14:31	09/11/23 19:22	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		09/06/23 14:31	09/11/23 19:22	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		09/06/23 14:31	09/11/23 19:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*48*		*46 - 124*	*09/06/23 14:31*	*09/11/23 19:22*	*1*
2-Fluorophenol	*27*		*13 - 113*	*09/06/23 14:31*	*09/11/23 19:22*	*1*
Nitrobenzene-d5	*44*		*36 - 126*	*09/06/23 14:31*	*09/11/23 19:22*	*1*
Phenol-d5	*38*		*17 - 127*	*09/06/23 14:31*	*09/11/23 19:22*	*1*
Terphenyl-d14	*54*		*44 - 149*	*09/06/23 14:31*	*09/11/23 19:22*	*1*
2,4,6-Tribromophenol	*38*		*26 - 150*	*09/06/23 14:31*	*09/11/23 19:22*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.031	0.018	ug/L		09/06/23 12:59	09/06/23 21:40	1
1,2-D bromoethane	ND		0.021	0.016	ug/L		09/06/23 12:59	09/06/23 21:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*51 - 149*	*09/06/23 12:59*	*09/06/23 21:40*	*1*

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

Job ID: 400-242794-1

Client Sample ID: MW22-083023
Date Collected: 08/30/23 13:20
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242795-1
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			09/09/23 10:17	1
Acrolein	ND		20	3.3	ug/L			09/09/23 10:17	1
Acrylonitrile	ND		10	2.8	ug/L			09/09/23 10:17	1
Benzene	**15**		1.0	0.50	ug/L			09/09/23 10:17	1
Bromobenzene	ND		1.0	0.54	ug/L			09/09/23 10:17	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/09/23 10:17	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/09/23 10:17	1
Bromoform	ND		5.0	0.25	ug/L			09/09/23 10:17	1
Bromomethane	ND		1.0	0.98	ug/L			09/09/23 10:17	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/09/23 10:17	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/09/23 10:17	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/09/23 10:17	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/09/23 10:17	1
Chloroethane	ND		1.0	0.76	ug/L			09/09/23 10:17	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/09/23 10:17	1
Chloroform	ND		1.0	0.90	ug/L			09/09/23 10:17	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/09/23 10:17	1
Chloromethane	ND		1.0	0.90	ug/L			09/09/23 10:17	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/09/23 10:17	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/09/23 10:17	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/09/23 10:17	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/09/23 10:17	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/09/23 10:17	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/09/23 10:17	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/09/23 10:17	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/09/23 10:17	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/09/23 10:17	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 10:17	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 10:17	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 10:17	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 10:17	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/09/23 10:17	1
Ethylbenzene	**58**		1.0	0.50	ug/L			09/09/23 10:17	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/09/23 10:17	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/09/23 10:17	1
2-Hexanone	ND		25	1.4	ug/L			09/09/23 10:17	1
Isopropylbenzene	**50**		1.0	0.53	ug/L			09/09/23 10:17	1
Methylene bromide	ND		5.0	0.22	ug/L			09/09/23 10:17	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/09/23 10:17	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/09/23 10:17	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/09/23 10:17	1
Naphthalene	**89**		5.0	3.0	ug/L			09/09/23 10:17	1
n-Butylbenzene	**11**		1.0	0.76	ug/L			09/09/23 10:17	1
N-Propylbenzene	**110**		1.0	0.69	ug/L			09/09/23 10:17	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/09/23 10:17	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/09/23 10:17	1
p-Isopropyltoluene	**7.3**		1.0	0.71	ug/L			09/09/23 10:17	1
sec-Butylbenzene	**6.4**		1.0	0.70	ug/L			09/09/23 10:17	1
Styrene	ND		1.0	1.0	ug/L			09/09/23 10:17	1

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

Job ID: 400-242794-1

Client Sample ID: MW22-083023
Date Collected: 08/30/23 13:20
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242795-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	**14**		1.0	0.63	ug/L			09/09/23 10:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/09/23 10:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/09/23 10:17	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/09/23 10:17	1
Toluene	**23**		1.0	0.90	ug/L			09/09/23 10:17	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 10:17	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/09/23 10:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/09/23 10:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/09/23 10:17	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/09/23 10:17	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/09/23 10:17	1
Trichloroethene	ND		1.0	0.15	ug/L			09/09/23 10:17	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/09/23 10:17	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/09/23 10:17	1
1,2,4-Trimethylbenzene	**240**		1.0	0.82	ug/L			09/09/23 10:17	1
1,3,5-Trimethylbenzene	**140**		1.0	0.56	ug/L			09/09/23 10:17	1
Vinyl acetate	ND		25	0.93	ug/L			09/09/23 10:17	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/09/23 10:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*72 - 130*		*09/09/23 10:17*	*1*
Dibromofluoromethane	*93*		*75 - 126*		*09/09/23 10:17*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*09/09/23 10:17*	*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	**400**		10	1.3	ug/L			09/11/23 14:45	2
o-Xylene	ND		10	1.2	ug/L			09/11/23 14:45	2
Xylenes, Total	**400**		20	3.2	ug/L			09/11/23 14:45	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*72 - 130*		*09/11/23 14:45*	*2*
Dibromofluoromethane	*92*		*75 - 126*		*09/11/23 14:45*	*2*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/11/23 14:45*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.094	ug/L		09/06/23 14:31	09/11/23 21:41	1
Acenaphthylene	ND		0.19	0.042	ug/L		09/06/23 14:31	09/11/23 21:41	1
Anthracene	ND		0.19	0.044	ug/L		09/06/23 14:31	09/11/23 21:41	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		09/06/23 14:31	09/11/23 21:41	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		09/06/23 14:31	09/11/23 21:41	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		09/06/23 14:31	09/11/23 21:41	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/06/23 14:31	09/11/23 21:41	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		09/06/23 14:31	09/11/23 21:41	1
Chrysene	ND		0.19	0.031	ug/L		09/06/23 14:31	09/11/23 21:41	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		09/06/23 14:31	09/11/23 21:41	1
Fluoranthene	ND		0.19	0.032	ug/L		09/06/23 14:31	09/11/23 21:41	1
Fluorene	ND		0.19	0.084	ug/L		09/06/23 14:31	09/11/23 21:41	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		09/06/23 14:31	09/11/23 21:41	1

Client Sample ID: MW22-083023
Date Collected: 08/30/23 13:20
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242795-1
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	0.085	ug/L		09/06/23 14:31	09/11/23 21:41	1
Pyrene	ND		0.19	0.037	ug/L		09/06/23 14:31	09/11/23 21:41	1
1-Methylnaphthalene	**5.9**		0.19	0.076	ug/L		09/06/23 14:31	09/11/23 21:41	1
2-Methylnaphthalene	**6.6**		0.19	0.062	ug/L		09/06/23 14:31	09/11/23 21:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*54*		*18 - 147*	*09/06/23 14:31*	*09/11/23 21:41*	*1*
2-Fluorobiphenyl	*42*		*15 - 128*	*09/06/23 14:31*	*09/11/23 21:41*	*1*
Nitrobenzene-d5	*61*		*10 - 144*	*09/06/23 14:31*	*09/11/23 21:41*	*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		09/06/23 14:31	09/11/23 19:44	1
Benzenethiol	ND	*1	9.5	1.6	ug/L		09/06/23 14:31	09/11/23 19:44	1
Benzoic acid	ND		28	6.9	ug/L		09/06/23 14:31	09/11/23 19:44	1
Benzyl alcohol	ND		9.5	1.9	ug/L		09/06/23 14:31	09/11/23 19:44	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		09/06/23 14:31	09/11/23 19:44	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		09/06/23 14:31	09/11/23 19:44	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		09/06/23 14:31	09/11/23 19:44	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		09/06/23 14:31	09/11/23 19:44	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		09/06/23 14:31	09/11/23 19:44	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		09/06/23 14:31	09/11/23 19:44	1
4-Chloroaniline	ND		9.5	3.2	ug/L		09/06/23 14:31	09/11/23 19:44	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		09/06/23 14:31	09/11/23 19:44	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		09/06/23 14:31	09/11/23 19:44	1
2-Chlorophenol	ND		9.5	2.1	ug/L		09/06/23 14:31	09/11/23 19:44	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		09/06/23 14:31	09/11/23 19:44	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		09/06/23 14:31	09/11/23 19:44	1
Dibenzofuran	ND		9.5	0.16	ug/L		09/06/23 14:31	09/11/23 19:44	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		09/06/23 14:31	09/11/23 19:44	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		09/06/23 14:31	09/11/23 19:44	1
Diethyl phthalate	ND		9.5	0.23	ug/L		09/06/23 14:31	09/11/23 19:44	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		09/06/23 14:31	09/11/23 19:44	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		09/06/23 14:31	09/11/23 19:44	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		09/06/23 14:31	09/11/23 19:44	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		09/06/23 14:31	09/11/23 19:44	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		09/06/23 14:31	09/11/23 19:44	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		09/06/23 14:31	09/11/23 19:44	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		09/06/23 14:31	09/11/23 19:44	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		09/06/23 14:31	09/11/23 19:44	1
1,4-Dioxane	ND		9.5	0.95	ug/L		09/06/23 14:31	09/11/23 19:44	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		09/06/23 14:31	09/11/23 19:44	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		09/06/23 14:31	09/11/23 19:44	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/06/23 14:31	09/11/23 19:44	1
Hexachloroethane	ND		9.5	4.0	ug/L		09/06/23 14:31	09/11/23 19:44	1
Indene	ND		9.5	0.95	ug/L		09/06/23 14:31	09/11/23 19:44	1
Isophorone	ND		9.5	0.13	ug/L		09/06/23 14:31	09/11/23 19:44	1
2-Methylphenol	ND		9.5	1.7	ug/L		09/06/23 14:31	09/11/23 19:44	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/06/23 14:31	09/11/23 19:44	1

Client Sample ID: MW22-083023
Date Collected: 08/30/23 13:20
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242795-1
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		09/06/23 14:31	09/11/23 19:44	1
3-Nitroaniline	ND		9.5	1.7	ug/L		09/06/23 14:31	09/11/23 19:44	1
4-Nitroaniline	ND		9.5	1.4	ug/L		09/06/23 14:31	09/11/23 19:44	1
Nitrobenzene	ND		9.5	0.12	ug/L		09/06/23 14:31	09/11/23 19:44	1
2-Nitrophenol	ND		9.5	4.9	ug/L		09/06/23 14:31	09/11/23 19:44	1
4-Nitrophenol	ND		9.5	2.0	ug/L		09/06/23 14:31	09/11/23 19:44	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		09/06/23 14:31	09/11/23 19:44	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		09/06/23 14:31	09/11/23 19:44	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		09/06/23 14:31	09/11/23 19:44	1
Pentachlorophenol	ND		19	1.3	ug/L		09/06/23 14:31	09/11/23 19:44	1
Phenol	ND		9.5	2.5	ug/L		09/06/23 14:31	09/11/23 19:44	1
Pyridine	ND		9.5	3.0	ug/L		09/06/23 14:31	09/11/23 19:44	1
Quinoline	ND		9.5	4.3	ug/L		09/06/23 14:31	09/11/23 19:44	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		09/06/23 14:31	09/11/23 19:44	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		09/06/23 14:31	09/11/23 19:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*46 - 124*	*09/06/23 14:31*	*09/11/23 19:44*	*1*
2-Fluorophenol	*46*		*13 - 113*	*09/06/23 14:31*	*09/11/23 19:44*	*1*
Nitrobenzene-d5	*61*		*36 - 126*	*09/06/23 14:31*	*09/11/23 19:44*	*1*
Phenol-d5	*59*		*17 - 127*	*09/06/23 14:31*	*09/11/23 19:44*	*1*
Terphenyl-d14	*80*		*44 - 149*	*09/06/23 14:31*	*09/11/23 19:44*	*1*
2,4,6-Tribromophenol	*60*		*26 - 150*	*09/06/23 14:31*	*09/11/23 19:44*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.031	0.018	ug/L		09/06/23 12:59	09/06/23 22:01	1
1,2-D bromoethane	ND		0.021	0.016	ug/L		09/06/23 12:59	09/06/23 22:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*51 - 149*	*09/06/23 12:59*	*09/06/23 22:01*	*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.
F1	MS and/or MSD recovery 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.

GC Semi VOA

Qualifier	Qualifier Description
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: 400-242794-1

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)
400-242794-1	TB-ROX-083023-8260-A	106	96	99
400-242794-3	MW6B-ROX-083023	110	95	100
400-242794-4	MW6B-ROX-083023-DUP	109	94	101
400-242794-5	MW11-ROX-083023	112	93	101
400-242794-6	MW28-ROX-083023	107	94	101
400-242794-7	P54-ROX-083023	110	95	102
400-242794-8	TB-ROX-083023-8260-B	108	94	101
400-242794-10	P93D-ROX-083023	110	96	99
400-242794-10 MS	P93D-ROX-083023	106	92	101
400-242794-10 MSD	P93D-ROX-083023	104	90	100
400-242794-11	ROST4PZC-ROX-083023	109	93	100
400-242794-12	ROST4PZE-ROX-083023	108	94	99
400-242794-13	MW12-ROX-083023-EB	109	95	102
400-242794-14	MW12-ROX-083023	107	94	100
400-242795-1	MW22-083023	111	93	103
400-242795-1 - DL	MW22-083023	108	92	101
LCS 400-640361/1002	Lab Control Sample	104	91	100
LCS 400-640415/1002	Lab Control Sample	107	92	101
MB 400-640361/4	Method Blank	107	95	101
MB 400-640415/4	Method Blank	108	94	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)
400-242794-3	MW6B-ROX-083023	57	24	47	38	67	59
400-242794-4	MW6B-ROX-083023-DUP	41 S1-	18	38	26	47	50
400-242794-5	MW11-ROX-083023	54	32	54	46	76	46
400-242794-6	MW28-ROX-083023	68	10 S1-	61	27	81	54
400-242794-7	P54-ROX-083023	93	61	84	77	103	77
400-242794-10	P93D-ROX-083023	69	34	56	49	74	69
400-242794-10 MS	P93D-ROX-083023	73	53	71	64	74	83
400-242794-10 MSD	P93D-ROX-083023	76	55	71	64	76	82
400-242794-11	ROST4PZC-ROX-083023	86	53	79	76	96	84
400-242794-12	ROST4PZE-ROX-083023	87	63	80	77	94	89
400-242794-13	MW12-ROX-083023-EB	81	48	70	67	99	61
400-242794-14	MW12-ROX-083023	48	27	44	38	54	38
400-242795-1	MW22-083023	69	46	61	59	80	60
LCS 400-639760/14-A	Lab Control Sample	66	30	59	47	77	51
LCS 400-639760/2-A	Lab Control Sample	83	64	76	75	87	76
LCSD 400-639760/15-A	Lab Control Sample Dup	84	69	76	81	98	69
MB 400-639760/1-A	Method Blank	80	48	73	69	89	61

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)
400-242794-3	MW6B-ROX-083023	55	54	67
400-242794-4	MW6B-ROX-083023-DUP	79	72	88
400-242794-4 - RERA	MW6B-ROX-083023-DUP	78	77	70
400-242794-5	MW11-ROX-083023	59	57	71
400-242794-6	MW28-ROX-083023	58	56	66
400-242794-7	P54-ROX-083023	119	116	143
400-242794-7 - RERA	P54-ROX-083023	93	83	76
400-242794-10	P93D-ROX-083023	46	45	55
400-242794-10 - RERA	P93D-ROX-083023	85	82	76
400-242794-10 MS	P93D-ROX-083023	65	68	80
400-242794-10 MSD	P93D-ROX-083023	68	72	89
400-242794-11	ROST4PZC-ROX-083023	115	89	139
400-242794-12	ROST4PZE-ROX-083023	98	116	139
400-242794-13	MW12-ROX-083023-EB	64	61	73
400-242794-14	MW12-ROX-083023	64	61	75
400-242794-14 - RERA	MW12-ROX-083023	82	78	74
400-242795-1	MW22-083023	54	42	61
LCS 400-639760/16-A	Lab Control Sample	84	76	61
LCS 400-640651/19-A	Lab Control Sample	112	91	66
LCSD 400-639760/17-A	Lab Control Sample Dup	84	73	58
LCSD 400-640651/20-A	Lab Control Sample Dup	112	94	67
MB 400-639760/1-A	Method Blank	96	83	63
MB 400-640651/1-A	Method Blank	94	75	69

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)
400-242794-2	TB-ROX-083023-8011-A	58
400-242794-3	MW6B-ROX-083023	73
400-242794-4	MW6B-ROX-083023-DUP	72
400-242794-5	MW11-ROX-083023	69
400-242794-6	MW28-ROX-083023	70
400-242794-7	P54-ROX-083023	71
400-242794-9	TB-ROX-083023-8011-B	63
400-242794-10	P93D-ROX-083023	69
400-242794-10 MS	P93D-ROX-083023	70

Surrogate Summary

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

Job ID: 400-242794-1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	BFB2 (51-149)						
400-242794-10 MSD	P93D-ROX-083023	66						
400-242794-11	ROST4PZC-ROX-083023	69						
400-242794-12	ROST4PZE-ROX-083023	79						
400-242794-13	MW12-ROX-083023-EB	63						
400-242794-14	MW12-ROX-083023	78						
400-242795-1	MW22-083023	81						
LCS 400-639897/2-A	Lab Control Sample	47 S1-						
LCSD 400-639897/3-A	Lab Control Sample Dup	55						
MB 400-639897/1-A	Method Blank	70						

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-242794-1

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

Client Sample ID: TB-ROX-083023-8260-A
Lab Sample ID: 400-242794-1
Date Collected: 08/30/23 12:00
Matrix: Water
Date Received: 08/31/23 09:19

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	640361	09/09/23 09:30	WPD	EET PEN

Client Sample ID: TB-ROX-083023-8011-A
Lab Sample ID: 400-242794-2
Date Collected: 08/30/23 12:00
Matrix: Water
Date Received: 08/31/23 09:19

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	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 16:56	PG	EET PEN

Client Sample ID: MW6B-ROX-083023
Lab Sample ID: 400-242794-3
Date Collected: 08/30/23 09:20
Matrix: Water
Date Received: 08/31/23 09:19

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	640361	09/09/23 13:23	WPD	EET PEN
Total/NA	Prep	3520C			250.4 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 16:19	S1B	EET PEN
Total/NA	Prep	3520C			250.4 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640497	09/11/23 18:32	TH	EET PEN
Total/NA	Prep	8011			33.9 mL	35 mL	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 17:17	PG	EET PEN

Client Sample ID: MW6B-ROX-083023-DUP
Lab Sample ID: 400-242794-4
Date Collected: 08/30/23 09:20
Matrix: Water
Date Received: 08/31/23 09:19

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	640361	09/09/23 13:48	WPD	EET PEN
Total/NA	Prep	3520C			255.4 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640527	09/11/23 16:53	S1B	EET PEN
Total/NA	Prep	3520C			255.4 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640497	09/11/23 18:53	TH	EET PEN
Total/NA	Prep	3520C	RERA		256.2 mL	1 mL	640651	09/13/23 10:04	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	641154	09/15/23 17:22	KJA	EET PEN
Total/NA	Prep	8011			34 mL	35 mL	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 17:37	PG	EET PEN

Client Sample ID: MW11-ROX-083023
Lab Sample ID: 400-242794-5
Date Collected: 08/30/23 10:30
Matrix: Water
Date Received: 08/31/23 09:19

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	640415	09/11/23 11:09	WPD	EET PEN

Lab Chronicle

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

Job ID: 400-242794-1

Client Sample ID: MW11-ROX-083023
Date Collected: 08/30/23 10:30
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-5
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			250.8 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640723	09/13/23 02:40	S1B	EET PEN
Total/NA	Prep	3520C			250.8 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640527	09/11/23 17:15	S1B	EET PEN
Total/NA	Prep	3520C			250.8 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640497	09/11/23 19:14	TH	EET PEN
Total/NA	Prep	8011			34.2 mL	35 mL	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 17:57	PG	EET PEN

Client Sample ID: MW28-ROX-083023
Date Collected: 08/30/23 11:45
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-6
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	640361	09/09/23 14:37	WPD	EET PEN
Total/NA	Prep	3520C			258 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640527	09/11/23 17:36	S1B	EET PEN
Total/NA	Prep	3520C			258 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640497	09/11/23 19:35	TH	EET PEN
Total/NA	Prep	8011			35.8 mL	35 mL	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 18:18	PG	EET PEN

Client Sample ID: P54-ROX-083023
Date Collected: 08/30/23 13:35
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-7
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	640361	09/09/23 15:02	WPD	EET PEN
Total/NA	Prep	3520C			252.2 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640527	09/11/23 17:57	S1B	EET PEN
Total/NA	Prep	3520C			252.2 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640497	09/11/23 19:56	TH	EET PEN
Total/NA	Prep	3520C	RERA		254 mL	1 mL	640651	09/13/23 10:04	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	641154	09/15/23 17:44	KJA	EET PEN
Total/NA	Prep	8011			34.7 mL	35 mL	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 18:38	PG	EET PEN

Client Sample ID: TB-ROX-083023-8260-B
Date Collected: 08/30/23 12:00
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-8
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	640361	09/09/23 12:59	WPD	EET PEN

Client Sample ID: TB-ROX-083023-8011-B

Lab Sample ID: 400-242794-9

Date Collected: 08/30/23 12:00

Matrix: Water

Date Received: 08/31/23 09:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			33.4 mL	35 mL	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 18:58	PG	EET PEN

Client Sample ID: P93D-ROX-083023

Lab Sample ID: 400-242794-10

Date Collected: 08/30/23 09:50

Matrix: Water

Date Received: 08/31/23 09:19

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	640361	09/09/23 09:54	WPD	EET PEN
Total/NA	Prep	3520C			264.2 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 15:58	S1B	EET PEN
Total/NA	Prep	3520C			264.2 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640846	09/13/23 17:46	S1B	EET PEN
Total/NA	Prep	3520C			264.2 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640497	09/11/23 18:11	TH	EET PEN
Total/NA	Prep	3520C	RERA		265 mL	1 mL	640651	09/13/23 10:04	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	641154	09/15/23 17:01	KJA	EET PEN
Total/NA	Prep	8011			34.7 mL	35 mL	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 19:39	PG	EET PEN

Client Sample ID: ROST4PZC-ROX-083023

Lab Sample ID: 400-242794-11

Date Collected: 08/30/23 10:15

Matrix: Water

Date Received: 08/31/23 09:19

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	640361	09/09/23 15:26	WPD	EET PEN
Total/NA	Prep	3520C			264.4 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640527	09/11/23 18:18	S1B	EET PEN
Total/NA	Prep	3520C			264.4 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640497	09/11/23 20:17	TH	EET PEN
Total/NA	Prep	8011			35.1 mL	35 mL	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 20:40	PG	EET PEN

Client Sample ID: ROST4PZE-ROX-083023

Lab Sample ID: 400-242794-12

Date Collected: 08/30/23 11:00

Matrix: Water

Date Received: 08/31/23 09:19

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	640415	09/11/23 11:34	WPD	EET PEN
Total/NA	Prep	3520C			262.8 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640527	09/11/23 18:40	S1B	EET PEN
Total/NA	Prep	3520C			262.8 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640497	09/11/23 20:38	TH	EET PEN
Total/NA	Prep	8011			34.9 mL	35 mL	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 21:00	PG	EET PEN

Client Sample ID: MW12-ROX-083023-EB

Lab Sample ID: 400-242794-13

Date Collected: 08/30/23 11:50

Matrix: Water

Date Received: 08/31/23 09:19

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	640361	09/09/23 09:08	WPD	EET PEN
Total/NA	Prep	3520C			265.2 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640527	09/11/23 19:01	S1B	EET PEN
Total/NA	Prep	3520C			265.2 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 16:40	S1B	EET PEN
Total/NA	Prep	3520C			265.2 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640497	09/11/23 20:59	TH	EET PEN
Total/NA	Prep	8011			36.3 mL	35 mL	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 21:20	PG	EET PEN

Client Sample ID: MW12-ROX-083023

Lab Sample ID: 400-242794-14

Date Collected: 08/30/23 12:20

Matrix: Water

Date Received: 08/31/23 09:19

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	640361	09/09/23 16:15	WPD	EET PEN
Total/NA	Prep	3520C			263.8 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640527	09/11/23 19:22	S1B	EET PEN
Total/NA	Prep	3520C			263.8 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640497	09/11/23 21:20	TH	EET PEN
Total/NA	Prep	3520C	RERA		261 mL	1 mL	640651	09/13/23 10:04	BKL	EET PEN
Total/NA	Analysis	8270E SIM	RERA	1	0.4 mL	0.4 mL	641154	09/15/23 18:05	KJA	EET PEN
Total/NA	Prep	8011			33.5 mL	35 mL	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 21:40	PG	EET PEN

Client Sample ID: MW22-083023

Lab Sample ID: 400-242795-1

Date Collected: 08/30/23 13:20

Matrix: Water

Date Received: 08/31/23 09:19

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	640361	09/09/23 10:17	WPD	EET PEN
Total/NA	Analysis	8260D	DL	2	5 mL	5 mL	640415	09/11/23 14:45	WPD	EET PEN
Total/NA	Prep	3520C			264.4 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640527	09/11/23 19:44	S1B	EET PEN
Total/NA	Prep	3520C			264.4 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640497	09/11/23 21:41	TH	EET PEN
Total/NA	Prep	8011			33.4 mL	35 mL	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 22:01	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-639760/1-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	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640111	09/07/23 18:36	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640207	09/08/23 15:52	S1B	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-639897/1-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	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 15:55	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-640361/4
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	640361	09/09/23 08:23	WPD	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-640415/4
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	640415	09/11/23 10:45	WPD	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-640651/1-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	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641154	09/15/23 16:40	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-639760/14-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	639760	09/05/23 14:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640111	09/07/23 18:57	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-242794-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-639760/16-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	3520C			250 mL	1 mL	639760	09/05/23 14:56	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640207	09/08/23 17:36	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-639760/2-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	639760	09/05/23 14:55	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640111	09/07/23 19:40	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-639897/2-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	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 16:16	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640361/1002
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	640361	09/09/23 07:39	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640415/1002
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	640415	09/11/23 09:58	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640651/19-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	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641090	09/14/23 20:05	TH	EET PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-639760/15-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	3520C			250 mL	1 mL	639760	09/05/23 14:56	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640111	09/07/23 19:19	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-639760/17-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/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	639760	09/05/23 14:56	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640207	09/08/23 17:57	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-639897/3-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	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 16:36	PG	EET PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-640651/20-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	640651	09/12/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641090	09/14/23 20:25	TH	EET PEN

Client Sample ID: P93D-ROX-083023 — **Lab Sample ID: 400-242794-10 MS**
Date Collected: 08/30/23 09:50 — **Matrix: Water**
Date Received: 08/31/23 09:19

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	640361	09/09/23 11:45	WPD	EET PEN
Total/NA	Prep	3520C			263.2 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640846	09/13/23 16:54	S1B	EET PEN
Total/NA	Prep	3520C			263.2 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	640497	09/11/23 17:29	TH	EET PEN
Total/NA	Prep	8011			35.2 mL	35 mL	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 19:59	PG	EET PEN

Client Sample ID: P93D-ROX-083023 — **Lab Sample ID: 400-242794-10 MSD**
Date Collected: 08/30/23 09:50 — **Matrix: Water**
Date Received: 08/31/23 09:19

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	640361	09/09/23 12:09	WPD	EET PEN

Lab Chronicle

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

Job ID: 400-242794-1

Client Sample ID: P93D-ROX-083023

Date Collected: 08/30/23 09:50
Date Received: 08/31/23 09:19

Lab Sample ID: 400-242794-10 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	3520C			262 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640846	09/13/23 17:20	S1B	EET PEN
Total/NA	Prep	3520C			262 mL	1 mL	639760	09/06/23 14:31	BKL	EET PEN
Total/NA	Analysis	8270E SIM		20	0.4 mL	0.4 mL	640497	09/11/23 17:50	TH	EET PEN
Total/NA	Prep	8011			35.8 mL	35 mL	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 20:19	PG	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 640361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242794-1	TB-ROX-083023-8260-A	Total/NA	Water	8260D	
400-242794-3	MW6B-ROX-083023	Total/NA	Water	8260D	
400-242794-4	MW6B-ROX-083023-DUP	Total/NA	Water	8260D	
400-242794-6	MW28-ROX-083023	Total/NA	Water	8260D	
400-242794-7	P54-ROX-083023	Total/NA	Water	8260D	
400-242794-8	TB-ROX-083023-8260-B	Total/NA	Water	8260D	
400-242794-10	P93D-ROX-083023	Total/NA	Water	8260D	
400-242794-11	ROST4PZC-ROX-083023	Total/NA	Water	8260D	
400-242794-13	MW12-ROX-083023-EB	Total/NA	Water	8260D	
400-242794-14	MW12-ROX-083023	Total/NA	Water	8260D	
400-242795-1	MW22-083023	Total/NA	Water	8260D	
MB 400-640361/4	Method Blank	Total/NA	Water	8260D	
LCS 400-640361/1002	Lab Control Sample	Total/NA	Water	8260D	
400-242794-10 MS	P93D-ROX-083023	Total/NA	Water	8260D	
400-242794-10 MSD	P93D-ROX-083023	Total/NA	Water	8260D	

Analysis Batch: 640415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242794-5	MW11-ROX-083023	Total/NA	Water	8260D	
400-242794-12	ROST4PZE-ROX-083023	Total/NA	Water	8260D	
400-242795-1 - DL	MW22-083023	Total/NA	Water	8260D	
MB 400-640415/4	Method Blank	Total/NA	Water	8260D	
LCS 400-640415/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 639760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242794-3	MW6B-ROX-083023	Total/NA	Water	3520C	
400-242794-4	MW6B-ROX-083023-DUP	Total/NA	Water	3520C	
400-242794-5	MW11-ROX-083023	Total/NA	Water	3520C	
400-242794-6	MW28-ROX-083023	Total/NA	Water	3520C	
400-242794-7	P54-ROX-083023	Total/NA	Water	3520C	
400-242794-10	P93D-ROX-083023	Total/NA	Water	3520C	
400-242794-11	ROST4PZC-ROX-083023	Total/NA	Water	3520C	
400-242794-12	ROST4PZE-ROX-083023	Total/NA	Water	3520C	
400-242794-13	MW12-ROX-083023-EB	Total/NA	Water	3520C	
400-242794-14	MW12-ROX-083023	Total/NA	Water	3520C	
400-242795-1	MW22-083023	Total/NA	Water	3520C	
MB 400-639760/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-639760/14-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-639760/16-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-639760/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-639760/15-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-639760/17-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-242794-10 MS	P93D-ROX-083023	Total/NA	Water	3520C	
400-242794-10 MSD	P93D-ROX-083023	Total/NA	Water	3520C	

Analysis Batch: 640111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-639760/1-A	Method Blank	Total/NA	Water	8270E	639760

GC/MS Semi VOA (Continued)

Analysis Batch: 640111 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-639760/14-A	Lab Control Sample	Total/NA	Water	8270E	639760
LCS 400-639760/2-A	Lab Control Sample	Total/NA	Water	8270E	639760
LCSD 400-639760/15-A	Lab Control Sample Dup	Total/NA	Water	8270E	639760

Analysis Batch: 640207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-639760/1-A	Method Blank	Total/NA	Water	8270E SIM	639760
LCS 400-639760/16-A	Lab Control Sample	Total/NA	Water	8270E SIM	639760
LCSD 400-639760/17-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	639760

Analysis Batch: 640497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242794-3	MW6B-ROX-083023	Total/NA	Water	8270E SIM	639760
400-242794-4	MW6B-ROX-083023-DUP	Total/NA	Water	8270E SIM	639760
400-242794-5	MW11-ROX-083023	Total/NA	Water	8270E SIM	639760
400-242794-6	MW28-ROX-083023	Total/NA	Water	8270E SIM	639760
400-242794-7	P54-ROX-083023	Total/NA	Water	8270E SIM	639760
400-242794-10	P93D-ROX-083023	Total/NA	Water	8270E SIM	639760
400-242794-11	ROST4PZC-ROX-083023	Total/NA	Water	8270E SIM	639760
400-242794-12	ROST4PZE-ROX-083023	Total/NA	Water	8270E SIM	639760
400-242794-13	MW12-ROX-083023-EB	Total/NA	Water	8270E SIM	639760
400-242794-14	MW12-ROX-083023	Total/NA	Water	8270E SIM	639760
400-242795-1	MW22-083023	Total/NA	Water	8270E SIM	639760
400-242794-10 MS	P93D-ROX-083023	Total/NA	Water	8270E SIM	639760
400-242794-10 MSD	P93D-ROX-083023	Total/NA	Water	8270E SIM	639760

Analysis Batch: 640527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242794-4	MW6B-ROX-083023-DUP	Total/NA	Water	8270E	639760
400-242794-5	MW11-ROX-083023	Total/NA	Water	8270E	639760
400-242794-6	MW28-ROX-083023	Total/NA	Water	8270E	639760
400-242794-7	P54-ROX-083023	Total/NA	Water	8270E	639760
400-242794-11	ROST4PZC-ROX-083023	Total/NA	Water	8270E	639760
400-242794-12	ROST4PZE-ROX-083023	Total/NA	Water	8270E	639760
400-242794-13	MW12-ROX-083023-EB	Total/NA	Water	8270E	639760
400-242794-14	MW12-ROX-083023	Total/NA	Water	8270E	639760
400-242795-1	MW22-083023	Total/NA	Water	8270E	639760

Prep Batch: 640651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242794-4 - RERA	MW6B-ROX-083023-DUP	Total/NA	Water	3520C	
400-242794-7 - RERA	P54-ROX-083023	Total/NA	Water	3520C	
400-242794-10 - RERA	P93D-ROX-083023	Total/NA	Water	3520C	
400-242794-14 - RERA	MW12-ROX-083023	Total/NA	Water	3520C	
MB 400-640651/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-640651/19-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-640651/20-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 640672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242794-3	MW6B-ROX-083023	Total/NA	Water	8270E	639760

GC/MS Semi VOA (Continued)

Analysis Batch: 640672 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242794-10	P93D-ROX-083023	Total/NA	Water	8270E	639760
400-242794-13	MW12-ROX-083023-EB	Total/NA	Water	8270E	639760

Analysis Batch: 640723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242794-5	MW11-ROX-083023	Total/NA	Water	8270E	639760

Analysis Batch: 640846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242794-10	P93D-ROX-083023	Total/NA	Water	8270E	639760
400-242794-10 MS	P93D-ROX-083023	Total/NA	Water	8270E	639760
400-242794-10 MSD	P93D-ROX-083023	Total/NA	Water	8270E	639760

Analysis Batch: 641090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-640651/19-A	Lab Control Sample	Total/NA	Water	8270E SIM	640651
LCSD 400-640651/20-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	640651

Analysis Batch: 641154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242794-4 - RERA	MW6B-ROX-083023-DUP	Total/NA	Water	8270E SIM	640651
400-242794-7 - RERA	P54-ROX-083023	Total/NA	Water	8270E SIM	640651
400-242794-10 - RERA	P93D-ROX-083023	Total/NA	Water	8270E SIM	640651
400-242794-14 - RERA	MW12-ROX-083023	Total/NA	Water	8270E SIM	640651
MB 400-640651/1-A	Method Blank	Total/NA	Water	8270E SIM	640651

GC Semi VOA

Prep Batch: 639897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242794-2	TB-ROX-083023-8011-A	Total/NA	Water	8011	
400-242794-3	MW6B-ROX-083023	Total/NA	Water	8011	
400-242794-4	MW6B-ROX-083023-DUP	Total/NA	Water	8011	
400-242794-5	MW11-ROX-083023	Total/NA	Water	8011	
400-242794-6	MW28-ROX-083023	Total/NA	Water	8011	
400-242794-7	P54-ROX-083023	Total/NA	Water	8011	
400-242794-9	TB-ROX-083023-8011-B	Total/NA	Water	8011	
400-242794-10	P93D-ROX-083023	Total/NA	Water	8011	
400-242794-11	ROST4PZC-ROX-083023	Total/NA	Water	8011	
400-242794-12	ROST4PZE-ROX-083023	Total/NA	Water	8011	
400-242794-13	MW12-ROX-083023-EB	Total/NA	Water	8011	
400-242794-14	MW12-ROX-083023	Total/NA	Water	8011	
400-242795-1	MW22-083023	Total/NA	Water	8011	
MB 400-639897/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-639897/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-639897/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-242794-10 MS	P93D-ROX-083023	Total/NA	Water	8011	
400-242794-10 MSD	P93D-ROX-083023	Total/NA	Water	8011	

QC Association Summary

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

Job ID: 400-242794-1

GC Semi VOA

Analysis Batch: 639945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242794-2	TB-ROX-083023-8011-A	Total/NA	Water	8011	639897
400-242794-3	MW6B-ROX-083023	Total/NA	Water	8011	639897
400-242794-4	MW6B-ROX-083023-DUP	Total/NA	Water	8011	639897
400-242794-5	MW11-ROX-083023	Total/NA	Water	8011	639897
400-242794-6	MW28-ROX-083023	Total/NA	Water	8011	639897
400-242794-7	P54-ROX-083023	Total/NA	Water	8011	639897
400-242794-9	TB-ROX-083023-8011-B	Total/NA	Water	8011	639897
400-242794-10	P93D-ROX-083023	Total/NA	Water	8011	639897
400-242794-11	ROST4PZC-ROX-083023	Total/NA	Water	8011	639897
400-242794-12	ROST4PZE-ROX-083023	Total/NA	Water	8011	639897
400-242794-13	MW12-ROX-083023-EB	Total/NA	Water	8011	639897
400-242794-14	MW12-ROX-083023	Total/NA	Water	8011	639897
400-242795-1	MW22-083023	Total/NA	Water	8011	639897
MB 400-639897/1-A	Method Blank	Total/NA	Water	8011	639897
LCS 400-639897/2-A	Lab Control Sample	Total/NA	Water	8011	639897
LCSD 400-639897/3-A	Lab Control Sample Dup	Total/NA	Water	8011	639897
400-242794-10 MS	P93D-ROX-083023	Total/NA	Water	8011	639897
400-242794-10 MSD	P93D-ROX-083023	Total/NA	Water	8011	639897

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

Lab Sample ID: MB 400-640361/4
Matrix: Water
Analysis Batch: 640361

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			09/09/23 08:23	1
Acrolein	ND		20	3.3	ug/L			09/09/23 08:23	1
Acrylonitrile	ND		10	2.8	ug/L			09/09/23 08:23	1
Benzene	ND		1.0	0.50	ug/L			09/09/23 08:23	1
Bromobenzene	ND		1.0	0.54	ug/L			09/09/23 08:23	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/09/23 08:23	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/09/23 08:23	1
Bromoform	ND		5.0	0.25	ug/L			09/09/23 08:23	1
Bromomethane	ND		1.0	0.98	ug/L			09/09/23 08:23	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/09/23 08:23	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/09/23 08:23	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/09/23 08:23	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/09/23 08:23	1
Chloroethane	ND		1.0	0.76	ug/L			09/09/23 08:23	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/09/23 08:23	1
Chloroform	ND		1.0	0.90	ug/L			09/09/23 08:23	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/09/23 08:23	1
Chloromethane	ND		1.0	0.90	ug/L			09/09/23 08:23	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/09/23 08:23	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/09/23 08:23	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/09/23 08:23	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/09/23 08:23	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/09/23 08:23	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/09/23 08:23	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/09/23 08:23	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/09/23 08:23	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/09/23 08:23	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 08:23	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 08:23	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 08:23	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/09/23 08:23	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/09/23 08:23	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/09/23 08:23	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/09/23 08:23	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/09/23 08:23	1
2-Hexanone	ND		25	1.4	ug/L			09/09/23 08:23	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/09/23 08:23	1
Methylene bromide	ND		5.0	0.22	ug/L			09/09/23 08:23	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/09/23 08:23	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/09/23 08:23	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/09/23 08:23	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/09/23 08:23	1
Naphthalene	ND		5.0	3.0	ug/L			09/09/23 08:23	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/09/23 08:23	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/09/23 08:23	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/09/23 08:23	1
o-Xylene	ND		5.0	0.60	ug/L			09/09/23 08:23	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/09/23 08:23	1

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

Lab Sample ID: MB 400-640361/4
Matrix: Water
Analysis Batch: 640361

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			09/09/23 08:23	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			09/09/23 08:23	1
Styrene	ND		1.0	1.0	ug/L			09/09/23 08:23	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/09/23 08:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/09/23 08:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/09/23 08:23	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/09/23 08:23	1
Toluene	ND		1.0	0.90	ug/L			09/09/23 08:23	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/09/23 08:23	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/09/23 08:23	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/09/23 08:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/09/23 08:23	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/09/23 08:23	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/09/23 08:23	1
Trichloroethene	ND		1.0	0.15	ug/L			09/09/23 08:23	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/09/23 08:23	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/09/23 08:23	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/09/23 08:23	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/09/23 08:23	1
Vinyl acetate	ND		25	0.93	ug/L			09/09/23 08:23	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/09/23 08:23	1
Xylenes, Total	ND		10	1.6	ug/L			09/09/23 08:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 130*		*09/09/23 08:23*	*1*
Dibromofluoromethane	*95*		*75 - 126*		*09/09/23 08:23*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/09/23 08:23*	*1*

Lab Sample ID: LCS 400-640361/1002
Matrix: Water
Analysis Batch: 640361

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	324		ug/L		129	38 - 160
Acrylonitrile	500	468		ug/L		94	64 - 142
Benzene	50.0	47.8		ug/L		96	70 - 130
Bromobenzene	50.0	46.5		ug/L		93	70 - 132
Bromochloromethane	50.0	42.7		ug/L		85	70 - 130
Bromodichloromethane	50.0	47.5		ug/L		95	67 - 133
Bromoform	50.0	47.9		ug/L		96	57 - 140
Bromomethane	25.0	23.5		ug/L		94	10 - 160
2-Butanone (MEK)	200	196		ug/L		98	61 - 145
Carbon disulfide	50.0	40.4		ug/L		81	61 - 137
Carbon tetrachloride	50.0	45.7		ug/L		91	61 - 137
Chlorobenzene	50.0	46.8		ug/L		94	70 - 130
Chloroethane	25.0	26.7		ug/L		107	55 - 141
2-Chloroethyl vinyl ether	25.0	20.8		ug/L		83	10 - 160

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

Lab Sample ID: LCS 400-640361/1002
Matrix: Water
Analysis Batch: 640361

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	45.9		ug/L		92	69 - 130
1-Chlorohexane	50.0	53.5		ug/L		107	69 - 130
Chloromethane	25.0	27.4		ug/L		110	58 - 137
cis-1,2-Dichloroethene	50.0	49.6		ug/L		99	68 - 130
cis-1,3-Dichloropropene	50.0	48.8		ug/L		98	69 - 132
Dibromochloromethane	50.0	46.6		ug/L		93	67 - 135
1,2-Dichlorobenzene	50.0	45.8		ug/L		92	67 - 130
1,3-Dichlorobenzene	50.0	47.0		ug/L		94	70 - 130
1,4-Dichlorobenzene	50.0	46.3		ug/L		93	70 - 130
Dichlorodifluoromethane	25.0	17.1		ug/L		68	41 - 146
1,1-Dichloroethane	50.0	49.7		ug/L		99	70 - 130
1,2-Dichloroethane	50.0	46.6		ug/L		93	69 - 130
1,1-Dichloroethene	50.0	41.0		ug/L		82	63 - 134
1,2-Dichloropropane	50.0	51.7		ug/L		103	70 - 130
1,3-Dichloropropane	50.0	49.2		ug/L		98	70 - 130
2,2-Dichloropropane	50.0	45.6		ug/L		91	52 - 135
1,1-Dichloropropene	50.0	47.5		ug/L		95	70 - 130
Ethylbenzene	50.0	48.1		ug/L		96	70 - 130
Ethyl methacrylate	50.0	48.4		ug/L		97	68 - 130
Hexachlorobutadiene	50.0	53.0		ug/L		106	53 - 140
2-Hexanone	200	202		ug/L		101	65 - 137
Isopropy benzene	50.0	46.1		ug/L		92	70 - 130
Methylene bromide	50.0	44.7		ug/L		89	70 - 130
Methylene Chloride	50.0	43.4		ug/L		87	66 - 135
4-Methyl-2-pentanone (MIBK)	200	192		ug/L		96	69 - 138
Methyl tert-butyl ether	50.0	44.5		ug/L		89	66 - 130
m-Xylene & p-Xylene	50.0	47.8		ug/L		96	70 - 130
Naphthalene	50.0	43.6		ug/L		87	47 - 149
n-Butylbenzene	50.0	48.6		ug/L		97	67 - 130
N-Propylbenzene	50.0	46.4		ug/L		93	70 - 130
o-Chlorotoluene	50.0	48.1		ug/L		96	70 - 130
o-Xylene	50.0	47.8		ug/L		96	70 - 130
p-Chlorotoluene	50.0	47.4		ug/L		95	70 - 130
p-Isopropyltoluene	50.0	45.9		ug/L		92	65 - 130
sec-Butylbenzene	50.0	46.5		ug/L		93	66 - 130
Styrene	50.0	45.7		ug/L		91	70 - 130
tert-Butylbenzene	50.0	52.8		ug/L		106	64 - 139
1,1,1,2-Tetrachloroethane	50.0	48.2		ug/L		96	67 - 131
1,1,2,2-Tetrachloroethane	50.0	45.9		ug/L		92	70 - 131
Tetrachloroethene	50.0	47.0		ug/L		94	65 - 130
Toluene	50.0	48.3		ug/L		97	70 - 130
trans-1,2-Dichloroethene	50.0	44.6		ug/L		89	70 - 130
trans-1,3-Dichloropropene	50.0	48.8		ug/L		98	63 - 130
1,2,3-Trichlorobenzene	50.0	48.7		ug/L		97	60 - 138
1,2,4-Trichlorobenzene	50.0	49.1		ug/L		98	60 - 140
1,1,1-Trichloroethane	50.0	44.8		ug/L		90	68 - 130
1,1,2-Trichloroethane	50.0	48.7		ug/L		97	70 - 130
Trichloroethene	50.0	44.0		ug/L		88	70 - 130
Trichlorofluoromethane	25.0	25.2		ug/L		101	65 - 138

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

Lab Sample ID: LCS 400-640361/1002
Matrix: Water
Analysis Batch: 640361

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	50.0	43.1		ug/L		86	70 - 130
1,2,4-Trimethy benzene	50.0	45.2		ug/L		90	70 - 130
1,3,5-Trimethy benzene	50.0	45.8		ug/L		92	69 - 130
Vinyl acetate	50.0	52.2		ug/L		104	26 - 160
Vinyl chloride	25.0	25.1		ug/L		100	59 - 136
Xylenes, Total	100	95.6		ug/L		96	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*72 - 130*
Dibromofluoromethane	*91*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

Lab Sample ID: 400-242794-10 MS
Matrix: Water
Analysis Batch: 640361

Client Sample ID: P93D-ROX-083023
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND		200	109		ug/L		55	43 - 150
Acrolein	ND		250	339		ug/L		136	38 - 150
Acrylonitrile	ND		500	605		ug/L		121	62 - 149
Benzene	ND		50.0	56.2		ug/L		112	56 - 142
Bromobenzene	ND		50.0	53.3		ug/L		107	59 - 136
Bromochloromethane	ND		50.0	51.9		ug/L		104	64 - 140
Bromodichloromethane	ND		50.0	57.0		ug/L		114	59 - 143
Bromoform	ND		50.0	59.1		ug/L		118	50 - 140
Bromomethane	ND		25.0	22.9		ug/L		92	10 - 150
2-Butanone (MEK)	ND		200	151		ug/L		76	55 - 150
Carbon disulfide	ND		50.0	47.9		ug/L		96	48 - 150
Carbon tetrachloride	ND		50.0	54.4		ug/L		109	55 - 145
Chlorobenzene	ND		50.0	53.3		ug/L		107	64 - 130
Chloroethane	ND		25.0	27.3		ug/L		109	50 - 150
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	54.4		ug/L		109	60 - 141
1-Chlorohexane	ND		50.0	61.8		ug/L		124	56 - 136
Chloromethane	ND		25.0	28.0		ug/L		112	49 - 148
cis-1,2-Dichloroethene	ND		50.0	59.9		ug/L		120	59 - 143
cis-1,3-Dichloropropene	ND		50.0	58.1		ug/L		116	57 - 140
Dibromochloromethane	ND		50.0	56.0		ug/L		112	56 - 143
1,2-Dichlorobenzene	ND		50.0	50.9		ug/L		102	52 - 137
1,3-Dichlorobenzene	ND		50.0	51.7		ug/L		103	54 - 135
1,4-Dichlorobenzene	ND		50.0	50.1		ug/L		100	53 - 135
Dichlorodifluoromethane	ND		25.0	18.0		ug/L		72	16 - 150
1,1-Dichloroethane	ND		50.0	59.6		ug/L		119	61 - 144
1,2-Dichloroethane	ND		50.0	55.4		ug/L		111	60 - 141
1,1-Dichloroethene	ND		50.0	52.3		ug/L		105	54 - 147
1,2-Dichloropropane	ND		50.0	61.7		ug/L		123	66 - 137
1,3-Dichloropropane	ND		50.0	59.1		ug/L		118	66 - 133
2,2-Dichloropropane	ND		50.0	55.0		ug/L		110	42 - 144

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

Lab Sample ID: 400-242794-10 MS
Matrix: Water
Analysis Batch: 640361

Client Sample ID: P93D-ROX-083023
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	56.7		ug/L		113	65 - 136
Ethylbenzene	ND		50.0	54.6		ug/L		109	58 - 131
Ethyl methacrylate	ND		50.0	59.4		ug/L		119	64 - 130
Hexachlorobutadiene	ND		50.0	55.7		ug/L		111	31 - 149
2-Hexanone	ND		200	198		ug/L		99	65 - 140
Isopropy benzene	ND		50.0	51.8		ug/L		104	56 - 133
Methylene bromide	ND		50.0	54.3		ug/L		109	63 - 138
Methylene Chloride	ND		50.0	52.9		ug/L		106	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	239		ug/L		119	63 - 146
Methyl tert-butyl ether	0.81	J	50.0	56.2		ug/L		111	59 - 137
m-Xylene & p-Xylene	ND		50.0	53.8		ug/L		108	57 - 130
Naphthalene	ND		50.0	52.5		ug/L		105	25 - 150
n-Butylbenzene	ND		50.0	50.2		ug/L		100	41 - 142
N-Propylbenzene	ND		50.0	52.0		ug/L		104	51 - 138
o-Chlorotoluene	ND		50.0	53.0		ug/L		106	53 - 134
o-Xylene	ND		50.0	54.1		ug/L		108	61 - 130
p-Chlorotoluene	ND		50.0	52.6		ug/L		105	54 - 133
p-Isopropyltoluene	ND		50.0	50.0		ug/L		100	48 - 139
sec-Butylbenzene	ND		50.0	51.9		ug/L		104	50 - 138
Styrene	ND		50.0	51.5		ug/L		103	58 - 131
tert-Butylbenzene	ND		50.0	58.9		ug/L		118	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	56.0		ug/L		112	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	56.4		ug/L		113	66 - 135
Tetrachloroethene	ND		50.0	51.5		ug/L		103	52 - 133
Toluene	ND		50.0	56.0		ug/L		112	65 - 130
trans-1,2-Dichloroethene	ND		50.0	54.1		ug/L		108	61 - 143
trans-1,3-Dichloropropene	ND		50.0	57.2		ug/L		114	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	54.6		ug/L		109	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	51.9		ug/L		104	39 - 148
1,1,1-Trichloroethane	ND		50.0	53.3		ug/L		107	57 - 142
1,1,2-Trichloroethane	ND		50.0	59.4		ug/L		119	66 - 131
Trichloroethene	ND		50.0	52.1		ug/L		104	64 - 136
Trichlorofluoromethane	ND		25.0	24.9		ug/L		99	54 - 150
1,2,3-Trichloropropane	ND		50.0	53.3		ug/L		107	65 - 133
1,2,4-Trimethy benzene	ND		50.0	50.4		ug/L		101	50 - 139
1,3,5-Trimethy benzene	ND		50.0	51.2		ug/L		102	52 - 135
Vinyl acetate	ND		50.0	59.4		ug/L		119	26 - 150
Vinyl chloride	ND		25.0	26.0		ug/L		104	46 - 150
Xylenes, Total	ND		100	108		ug/L		108	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*72 - 130*
Dibromofluoromethane	*92*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

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

Lab Sample ID: 400-242794-10 MSD
Matrix: Water
Analysis Batch: 640361

Client Sample ID: P93D-ROX-083023
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	104		ug/L		52	43 - 150	5	30
Acrolein	ND		250	347		ug/L		139	38 - 150	2	31
Acrylonitrile	ND		500	570		ug/L		114	62 - 149	6	30
Benzene	ND		50.0	54.5		ug/L		109	56 - 142	3	30
Bromobenzene	ND		50.0	46.5		ug/L		93	59 - 136	14	30
Bromochloromethane	ND		50.0	49.3		ug/L		99	64 - 140	5	30
Bromodichloromethane	ND		50.0	53.7		ug/L		107	59 - 143	6	30
Bromoform	ND		50.0	54.2		ug/L		108	50 - 140	9	30
Bromomethane	ND		25.0	25.1		ug/L		100	10 - 150	9	50
2-Butanone (MEK)	ND		200	147		ug/L		73	55 - 150	3	30
Carbon disulfide	ND		50.0	46.1		ug/L		92	48 - 150	4	30
Carbon tetrachloride	ND		50.0	51.2		ug/L		102	55 - 145	6	30
Chlorobenzene	ND		50.0	48.8		ug/L		98	64 - 130	9	30
Chloroethane	ND		25.0	27.7		ug/L		111	50 - 150	2	30
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	51.7		ug/L		103	60 - 141	5	30
1-Chlorohexane	ND		50.0	55.0		ug/L		110	56 - 136	12	30
Chloromethane	ND		25.0	29.2		ug/L		117	49 - 148	4	31
cis-1,2-Dichloroethene	ND		50.0	56.3		ug/L		113	59 - 143	6	30
cis-1,3-Dichloropropene	ND		50.0	53.4		ug/L		107	57 - 140	8	30
Dibromochloromethane	ND		50.0	52.4		ug/L		105	56 - 143	7	30
1,2-Dichlorobenzene	ND		50.0	43.5		ug/L		87	52 - 137	16	30
1,3-Dichlorobenzene	ND		50.0	43.0		ug/L		86	54 - 135	18	30
1,4-Dichlorobenzene	ND		50.0	42.4		ug/L		85	53 - 135	17	30
Dichlorodifluoromethane	ND		25.0	17.7		ug/L		71	16 - 150	1	31
1,1-Dichloroethane	ND		50.0	57.3		ug/L		115	61 - 144	4	30
1,2-Dichloroethane	ND		50.0	52.5		ug/L		105	60 - 141	6	30
1,1-Dichloroethene	ND		50.0	50.1		ug/L		100	54 - 147	4	30
1,2-Dichloropropane	ND		50.0	58.5		ug/L		117	66 - 137	5	30
1,3-Dichloropropane	ND		50.0	56.8		ug/L		114	66 - 133	4	30
2,2-Dichloropropane	ND		50.0	51.6		ug/L		103	42 - 144	6	31
1,1-Dichloropropene	ND		50.0	53.4		ug/L		107	65 - 136	6	30
Ethylbenzene	ND		50.0	49.2		ug/L		98	58 - 131	10	30
Ethyl methacrylate	ND		50.0	56.0		ug/L		112	64 - 130	6	30
Hexachlorobutadiene	ND		50.0	39.5		ug/L		79	31 - 149	34	36
2-Hexanone	ND		200	187		ug/L		93	65 - 140	6	30
Isopropy benzene	ND		50.0	45.7		ug/L		91	56 - 133	12	30
Methylene bromide	ND		50.0	51.4		ug/L		103	63 - 138	6	30
Methylene Chloride	ND		50.0	49.5		ug/L		99	60 - 146	7	32
4-Methyl-2-pentanone (MIBK)	ND		200	224		ug/L		112	63 - 146	7	30
Methyl tert-butyl ether	0.81	J	50.0	53.2		ug/L		105	59 - 137	5	30
m-Xylene & p-Xylene	ND		50.0	48.4		ug/L		97	57 - 130	11	30
Naphthalene	ND		50.0	44.9		ug/L		90	25 - 150	16	30
n-Butylbenzene	ND		50.0	38.6		ug/L		77	41 - 142	26	31
N-Propylbenzene	ND		50.0	43.3		ug/L		87	51 - 138	18	30
o-Chlorotoluene	ND		50.0	47.1		ug/L		94	53 - 134	12	30
o-Xylene	ND		50.0	48.6		ug/L		97	61 - 130	11	30
p-Chlorotoluene	ND		50.0	43.8		ug/L		88	54 - 133	18	30

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

Lab Sample ID: 400-242794-10 MSD
Matrix: Water
Analysis Batch: 640361

Client Sample ID: P93D-ROX-083023
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	39.4		ug/L		79	48 - 139	24	30
sec-Butylbenzene	ND		50.0	42.4		ug/L		85	50 - 138	20	30
Styrene	ND		50.0	46.5		ug/L		93	58 - 131	10	30
tert-Butylbenzene	ND		50.0	49.7		ug/L		99	54 - 146	17	30
1,1,1,2-Tetrachloroethane	ND		50.0	52.0		ug/L		104	59 - 137	7	30
1,1,2,2-Tetrachloroethane	ND		50.0	53.0		ug/L		106	66 - 135	6	30
Tetrachloroethene	ND		50.0	48.0		ug/L		96	52 - 133	7	30
Toluene	ND		50.0	52.2		ug/L		104	65 - 130	7	30
trans-1,2-Dichloroethene	ND		50.0	50.8		ug/L		102	61 - 143	6	30
trans-1,3-Dichloropropene	ND		50.0	53.9		ug/L		108	53 - 133	6	30
1,2,3-Trichlorobenzene	ND		50.0	44.6		ug/L		89	43 - 145	20	30
1,2,4-Trichlorobenzene	ND		50.0	41.8		ug/L		84	39 - 148	22	30
1,1,1-Trichloroethane	ND		50.0	51.1		ug/L		102	57 - 142	4	30
1,1,2-Trichloroethane	ND		50.0	55.8		ug/L		112	66 - 131	6	30
Trichloroethene	ND		50.0	49.1		ug/L		98	64 - 136	6	30
Trichlorofluoromethane	ND		25.0	25.6		ug/L		102	54 - 150	3	30
1,2,3-Trichloropropane	ND		50.0	49.1		ug/L		98	65 - 133	8	30
1,2,4-Trimethy benzene	ND		50.0	42.2		ug/L		84	50 - 139	18	30
1,3,5-Trimethy benzene	ND		50.0	42.9		ug/L		86	52 - 135	17	30
Vinyl acetate	ND		50.0	53.2		ug/L		106	26 - 150	11	33
Vinyl chloride	ND		25.0	25.7		ug/L		103	46 - 150	1	30
Xylenes, Total	ND		100	96.9		ug/L		97	59 - 130	11	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*72 - 130*
Dibromofluoromethane	*90*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

Lab Sample ID: MB 400-640415/4
Matrix: Water
Analysis Batch: 640415

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			09/11/23 10:45	1
Acrolein	ND		20	3.3	ug/L			09/11/23 10:45	1
Acrylonitrile	ND		10	2.8	ug/L			09/11/23 10:45	1
Benzene	ND		1.0	0.50	ug/L			09/11/23 10:45	1
Bromobenzene	ND		1.0	0.54	ug/L			09/11/23 10:45	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/11/23 10:45	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/11/23 10:45	1
Bromoform	ND		5.0	0.25	ug/L			09/11/23 10:45	1
Bromomethane	ND		1.0	0.98	ug/L			09/11/23 10:45	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/11/23 10:45	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/11/23 10:45	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/11/23 10:45	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/11/23 10:45	1
Chloroethane	ND		1.0	0.76	ug/L			09/11/23 10:45	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/11/23 10:45	1

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

Lab Sample ID: MB 400-640415/4
Matrix: Water
Analysis Batch: 640415

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			09/11/23 10:45	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/11/23 10:45	1
Chloromethane	ND		1.0	0.90	ug/L			09/11/23 10:45	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/11/23 10:45	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/11/23 10:45	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/11/23 10:45	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/11/23 10:45	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/11/23 10:45	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/11/23 10:45	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/11/23 10:45	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/11/23 10:45	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/11/23 10:45	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/11/23 10:45	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/11/23 10:45	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/11/23 10:45	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/11/23 10:45	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/11/23 10:45	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/11/23 10:45	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/11/23 10:45	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/11/23 10:45	1
2-Hexanone	ND		25	1.4	ug/L			09/11/23 10:45	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/11/23 10:45	1
Methylene bromide	ND		5.0	0.22	ug/L			09/11/23 10:45	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/11/23 10:45	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/11/23 10:45	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/11/23 10:45	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/11/23 10:45	1
Naphthalene	ND		5.0	3.0	ug/L			09/11/23 10:45	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/11/23 10:45	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/11/23 10:45	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/11/23 10:45	1
o-Xylene	ND		5.0	0.60	ug/L			09/11/23 10:45	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/11/23 10:45	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/11/23 10:45	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			09/11/23 10:45	1
Styrene	ND		1.0	1.0	ug/L			09/11/23 10:45	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/11/23 10:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/11/23 10:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/11/23 10:45	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/11/23 10:45	1
Toluene	ND		1.0	0.90	ug/L			09/11/23 10:45	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/11/23 10:45	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/11/23 10:45	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/11/23 10:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/11/23 10:45	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/11/23 10:45	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/11/23 10:45	1
Trichloroethene	ND		1.0	0.15	ug/L			09/11/23 10:45	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/11/23 10:45	1

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

Lab Sample ID: MB 400-640415/4
Matrix: Water
Analysis Batch: 640415

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			09/11/23 10:45	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/11/23 10:45	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/11/23 10:45	1
Vinyl acetate	ND		25	0.93	ug/L			09/11/23 10:45	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/11/23 10:45	1
Xylenes, Total	ND		10	1.6	ug/L			09/11/23 10:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*72 - 130*		*09/11/23 10:45*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*09/11/23 10:45*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*09/11/23 10:45*	*1*

Lab Sample ID: LCS 400-640415/1002
Matrix: Water
Analysis Batch: 640415

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	270		ug/L		135	43 - 160
Acrolein	250	306		ug/L		122	38 - 160
Acrylonitrile	500	538		ug/L		108	64 - 142
Benzene	50.0	53.5		ug/L		107	70 - 130
Bromobenzene	50.0	53.0		ug/L		106	70 - 132
Bromochloromethane	50.0	47.2		ug/L		94	70 - 130
Bromodichloromethane	50.0	54.0		ug/L		108	67 - 133
Bromoform	50.0	55.9		ug/L		112	57 - 140
Bromomethane	25.0	24.4		ug/L		97	10 - 160
2-Butanone (MEK)	200	251		ug/L		125	61 - 145
Carbon disulfide	50.0	45.4		ug/L		91	61 - 137
Carbon tetrachloride	50.0	51.0		ug/L		102	61 - 137
Chlorobenzene	50.0	53.1		ug/L		106	70 - 130
Chloroethane	25.0	26.0		ug/L		104	55 - 141
2-Chloroethyl vinyl ether	25.0	18.2		ug/L		73	10 - 160
Chloroform	50.0	50.4		ug/L		101	69 - 130
1-Chlorohexane	50.0	63.0		ug/L		126	69 - 130
Chloromethane	25.0	25.6		ug/L		102	58 - 137
cis-1,2-Dichloroethene	50.0	55.7		ug/L		111	68 - 130
cis-1,3-Dichloropropene	50.0	55.1		ug/L		110	69 - 132
Dibromochloromethane	50.0	52.5		ug/L		105	67 - 135
1,2-Dichlorobenzene	50.0	53.0		ug/L		106	67 - 130
1,3-Dichlorobenzene	50.0	54.0		ug/L		108	70 - 130
1,4-Dichlorobenzene	50.0	54.6		ug/L		109	70 - 130
Dichlorodifluoromethane	25.0	16.7		ug/L		67	41 - 146
1,1-Dichloroethane	50.0	55.5		ug/L		111	70 - 130
1,2-Dichloroethane	50.0	50.5		ug/L		101	69 - 130
1,1-Dichloroethene	50.0	48.4		ug/L		97	63 - 134
1,2-Dichloropropane	50.0	58.4		ug/L		117	70 - 130
1,3-Dichloropropane	50.0	55.0		ug/L		110	70 - 130
2,2-Dichloropropane	50.0	51.5		ug/L		103	52 - 135

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

Lab Sample ID: LCS 400-640415/1002
Matrix: Water
Analysis Batch: 640415

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	54.2		ug/L		108	70 - 130
Ethylbenzene	50.0	56.3		ug/L		113	70 - 130
Ethyl methacrylate	50.0	54.6		ug/L		109	68 - 130
Hexachlorobutadiene	50.0	60.5		ug/L		121	53 - 140
2-Hexanone	200	266		ug/L		133	65 - 137
Isopropy benzene	50.0	53.6		ug/L		107	70 - 130
Methylene bromide	50.0	49.4		ug/L		99	70 - 130
Methylene Chloride	50.0	47.1		ug/L		94	66 - 135
4-Methyl-2-pentanone (MIBK)	200	229		ug/L		115	69 - 138
Methyl tert-butyl ether	50.0	49.3		ug/L		99	66 - 130
m-Xylene & p-Xylene	50.0	55.4		ug/L		111	70 - 130
Naphthalene	50.0	48.2		ug/L		96	47 - 149
n-Butylbenzene	50.0	59.6		ug/L		119	67 - 130
N-Propylbenzene	50.0	55.8		ug/L		112	70 - 130
o-Chlorotoluene	50.0	58.7		ug/L		117	70 - 130
o-Xylene	50.0	54.3		ug/L		109	70 - 130
p-Chlorotoluene	50.0	56.0		ug/L		112	70 - 130
p-Isopropyltoluene	50.0	55.5		ug/L		111	65 - 130
sec-Butylbenzene	50.0	56.7		ug/L		113	66 - 130
Styrene	50.0	52.0		ug/L		104	70 - 130
tert-Butylbenzene	50.0	52.5		ug/L		105	64 - 139
1,1,1,2-Tetrachloroethane	50.0	53.3		ug/L		107	67 - 131
1,1,2,2-Tetrachloroethane	50.0	50.6		ug/L		101	70 - 131
Tetrachloroethene	50.0	51.4		ug/L		103	65 - 130
Toluene	50.0	54.1		ug/L		108	70 - 130
trans-1,2-Dichloroethene	50.0	49.1		ug/L		98	70 - 130
trans-1,3-Dichloropropene	50.0	54.4		ug/L		109	63 - 130
1,2,3-Trichlorobenzene	50.0	54.9		ug/L		110	60 - 138
1,2,4-Trichlorobenzene	50.0	55.0		ug/L		110	60 - 140
1,1,1-Trichloroethane	50.0	49.7		ug/L		99	68 - 130
1,1,2-Trichloroethane	50.0	54.9		ug/L		110	70 - 130
Trichloroethene	50.0	49.5		ug/L		99	70 - 130
Trichlorofluoromethane	25.0	23.6		ug/L		95	65 - 138
1,2,3-Trichloropropane	50.0	48.2		ug/L		96	70 - 130
1,2,4-Trimethy benzene	50.0	55.2		ug/L		110	70 - 130
1,3,5-Trimethy benzene	50.0	54.6		ug/L		109	69 - 130
Vinyl acetate	50.0	51.5		ug/L		103	26 - 160
Vinyl chloride	25.0	24.9		ug/L		99	59 - 136
Xylenes, Total	100	110		ug/L		110	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*72 - 130*
Dibromofluoromethane	*92*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

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

Lab Sample ID: MB 400-639760/1-A
Matrix: Water
Analysis Batch: 640111

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 639760

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		09/05/23 14:55	09/07/23 18:36	1
Benzenethiol	ND		10	1.7	ug/L		09/05/23 14:55	09/07/23 18:36	1
Benzoic acid	ND		30	7.3	ug/L		09/05/23 14:55	09/07/23 18:36	1
Benzyl alcohol	ND		10	2.0	ug/L		09/05/23 14:55	09/07/23 18:36	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		09/05/23 14:55	09/07/23 18:36	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		09/05/23 14:55	09/07/23 18:36	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		09/05/23 14:55	09/07/23 18:36	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		09/05/23 14:55	09/07/23 18:36	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		09/05/23 14:55	09/07/23 18:36	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		09/05/23 14:55	09/07/23 18:36	1
4-Chloroaniline	ND		10	3.4	ug/L		09/05/23 14:55	09/07/23 18:36	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		09/05/23 14:55	09/07/23 18:36	1
2-Chloronaphthalene	ND		10	0.14	ug/L		09/05/23 14:55	09/07/23 18:36	1
2-Chlorophenol	ND		10	2.2	ug/L		09/05/23 14:55	09/07/23 18:36	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		09/05/23 14:55	09/07/23 18:36	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		09/05/23 14:55	09/07/23 18:36	1
Dibenzofuran	ND		10	0.17	ug/L		09/05/23 14:55	09/07/23 18:36	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		09/05/23 14:55	09/07/23 18:36	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		09/05/23 14:55	09/07/23 18:36	1
Diethyl phthalate	ND		10	0.24	ug/L		09/05/23 14:55	09/07/23 18:36	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		09/05/23 14:55	09/07/23 18:36	1
Dimethyl phthalate	ND		10	0.17	ug/L		09/05/23 14:55	09/07/23 18:36	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		09/05/23 14:55	09/07/23 18:36	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		09/05/23 14:55	09/07/23 18:36	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		09/05/23 14:55	09/07/23 18:36	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		09/05/23 14:55	09/07/23 18:36	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		09/05/23 14:55	09/07/23 18:36	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		09/05/23 14:55	09/07/23 18:36	1
1,4-Dioxane	ND		10	1.0	ug/L		09/05/23 14:55	09/07/23 18:36	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		09/05/23 14:55	09/07/23 18:36	1
Hexachlorobenzene	ND		10	0.17	ug/L		09/05/23 14:55	09/07/23 18:36	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/05/23 14:55	09/07/23 18:36	1
Hexachloroethane	ND		10	4.2	ug/L		09/05/23 14:55	09/07/23 18:36	1
Indene	ND		10	1.0	ug/L		09/05/23 14:55	09/07/23 18:36	1
Isophorone	ND		10	0.14	ug/L		09/05/23 14:55	09/07/23 18:36	1
2-Methylphenol	ND		10	1.8	ug/L		09/05/23 14:55	09/07/23 18:36	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		09/05/23 14:55	09/07/23 18:36	1
2-Nitroaniline	ND		10	2.2	ug/L		09/05/23 14:55	09/07/23 18:36	1
3-Nitroaniline	ND		10	1.8	ug/L		09/05/23 14:55	09/07/23 18:36	1
4-Nitroaniline	ND		10	1.5	ug/L		09/05/23 14:55	09/07/23 18:36	1
Nitrobenzene	ND		10	0.13	ug/L		09/05/23 14:55	09/07/23 18:36	1
2-Nitrophenol	ND		10	5.2	ug/L		09/05/23 14:55	09/07/23 18:36	1
4-Nitrophenol	ND		10	2.1	ug/L		09/05/23 14:55	09/07/23 18:36	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		09/05/23 14:55	09/07/23 18:36	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		09/05/23 14:55	09/07/23 18:36	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		09/05/23 14:55	09/07/23 18:36	1
Pentachlorophenol	ND		20	1.4	ug/L		09/05/23 14:55	09/07/23 18:36	1
Phenol	ND		10	2.6	ug/L		09/05/23 14:55	09/07/23 18:36	1

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

Lab Sample ID: MB 400-639760/1-A
Matrix: Water
Analysis Batch: 640111

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 639760

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	ND		10	3.2	ug/L		09/05/23 14:55	09/07/23 18:36	1
Quinoline	ND		10	4.5	ug/L		09/05/23 14:55	09/07/23 18:36	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		09/05/23 14:55	09/07/23 18:36	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		09/05/23 14:55	09/07/23 18:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*46 - 124*	*09/05/23 14:55*	*09/07/23 18:36*	*1*
2-Fluorophenol	*48*		*13 - 113*	*09/05/23 14:55*	*09/07/23 18:36*	*1*
Nitrobenzene-d5	*73*		*36 - 126*	*09/05/23 14:55*	*09/07/23 18:36*	*1*
Phenol-d5	*69*		*17 - 127*	*09/05/23 14:55*	*09/07/23 18:36*	*1*
Terphenyl-d14	*89*		*44 - 149*	*09/05/23 14:55*	*09/07/23 18:36*	*1*
2,4,6-Tribromophenol	*61*		*26 - 150*	*09/05/23 14:55*	*09/07/23 18:36*	*1*

Lab Sample ID: LCS 400-639760/14-A
Matrix: Water
Analysis Batch: 640111

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	ND	*-	ug/L		1	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*46 - 124*
2-Fluorophenol	*30*		*13 - 113*
Nitrobenzene-d5	*59*		*36 - 126*
Phenol-d5	*47*		*17 - 127*
Terphenyl-d14	*77*		*44 - 149*
2,4,6-Tribromophenol	*51*		*26 - 150*

Lab Sample ID: LCS 400-639760/2-A
Matrix: Water
Analysis Batch: 640111

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	82.3		ug/L		69	21 - 120
Benzoic acid	522	269		ug/L		52	10 - 144
Benzyl alcohol	120	94.0		ug/L		78	28 - 120
Bis(2-chloroethoxy)methane	120	77.7		ug/L		65	47 - 120
Bis(2-chloroethyl)ether	120	78.7		ug/L		66	44 - 120
bis (2-chloroisopropyl) ether	120	80.2		ug/L		67	33 - 121
Bis(2-ethylhexyl) phthalate	120	82.6		ug/L		69	52 - 147
4-Bromophenyl phenyl ether	120	93.9		ug/L		78	54 - 122
Butyl benzyl phthalate	120	82.4		ug/L		69	54 - 133
4-Chloroaniline	120	53.4		ug/L		45	26 - 120
4-Chloro-3-methylphenol	120	91.5		ug/L		76	48 - 131
2-Chloronaphthalene	120	87.5		ug/L		73	52 - 121
2-Chlorophenol	120	80.7		ug/L		67	40 - 120
4-Chlorophenyl phenyl ether	120	103		ug/L		86	56 - 125
Dibenz[a,h]acridine	120	105		ug/L		88	31 - 150

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

Lab Sample ID: LCS 400-639760/2-A
Matrix: Water
Analysis Batch: 640111

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dibenzofuran	120	93.1		ug/L		78	56 - 122
3,3'-Dichlorobenzidine	160	140		ug/L		88	36 - 132
2,4-Dichlorophenol	120	85.1		ug/L		71	49 - 120
Diethyl phthalate	120	91.7		ug/L		76	50 - 137
2,4-Dimethylphenol	120	90.1		ug/L		75	48 - 120
Dimethyl phthalate	120	92.6		ug/L		77	57 - 124
Di-n-butyl phthalate	120	87.2		ug/L		73	58 - 126
4,6-Dinitro-ortho-cresol	240	186		ug/L		78	23 - 148
2,4-Dinitrophenol	240	184		ug/L		77	10 - 150
2,4-Dinitrotoluene	120	98.1		ug/L		82	54 - 142
2,6-Dinitrotoluene	120	90.3		ug/L		75	55 - 130
Di-n-octyl phthalate	120	84.1		ug/L		70	57 - 138
1,4-Dioxane	120	63.6		ug/L		53	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	82.3		ug/L		69	45 - 124
Hexachlorobenzene	120	93.4		ug/L		78	52 - 129
Hexachlorocyclopentadiene	120	38.8		ug/L		32	10 - 134
Hexachloroethane	120	69.4		ug/L		58	20 - 120
Indene	120	84.4		ug/L		70	49 - 120
Isophorone	120	83.9		ug/L		70	48 - 120
2-Methylphenol	120	87.6		ug/L		73	46 - 124
3 & 4 Methylphenol	120	89.7		ug/L		75	45 - 120
2-Nitroaniline	120	97.3		ug/L		81	51 - 145
3-Nitroaniline	120	94.4		ug/L		79	37 - 127
4-Nitroaniline	120	115		ug/L		96	36 - 137
Nitrobenzene	120	82.3		ug/L		69	45 - 120
2-Nitrophenol	120	86.1		ug/L		72	40 - 124
4-Nitrophenol	240	207		ug/L		86	23 - 146
N-Nitrosodimethylamine	120	94.0		ug/L		78	29 - 137
N-Nitrosodi-n-propylamine	120	95.2		ug/L		79	45 - 120
N-Nitrosodiphenylamine	119	86.0		ug/L		72	54 - 120
Pentachlorophenol	240	169		ug/L		71	31 - 130
Phenol	120	89.4		ug/L		74	11 - 120
Pyridine	240	130		ug/L		54	16 - 120
Quinoline	120	102		ug/L		86	49 - 130
2,4,5-Trichlorophenol	120	101		ug/L		84	51 - 136
2,4,6-Trichlorophenol	120	91.6		ug/L		76	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*46 - 124*
2-Fluorophenol	*64*		*13 - 113*
Nitrobenzene-d5	*76*		*36 - 126*
Phenol-d5	*75*		*17 - 127*
Terphenyl-d14	*87*		*44 - 149*
2,4,6-Tribromophenol	*76*		*26 - 150*

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

Lab Sample ID: LCSD 400-639760/15-A
Matrix: Water
Analysis Batch: 640111

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 639760

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	76.4	*1	ug/L		64	10 - 120	192	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*46 - 124*
2-Fluorophenol	*69*		*13 - 113*
Nitrobenzene-d5	*76*		*36 - 126*
Phenol-d5	*81*		*17 - 127*
Terphenyl-d14	*98*		*44 - 149*
2,4,6-Tribromophenol	*69*		*26 - 150*

Lab Sample ID: 400-242794-10 MS
Matrix: Water
Analysis Batch: 640846

Client Sample ID: P93D-ROX-083023
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	ND		114	52.7		ug/L		46	10 - 120
Benzoic acid	ND		495	344		ug/L		69	10 - 149
Benzyl alcohol	ND		114	81.7		ug/L		72	33 - 120
Bis(2-chloroethoxy)methane	ND		114	80.5		ug/L		71	26 - 120
Bis(2-chloroethyl)ether	ND		114	98.7		ug/L		87	42 - 120
bis (2-chloroisopropyl) ether	ND		114	60.0		ug/L		53	28 - 120
Bis(2-ethylhexyl) phthalate	ND		114	93.4		ug/L		82	39 - 120
4-Bromophenyl phenyl ether	ND		114	88.2		ug/L		77	40 - 120
Butyl benzyl phthalate	0.40	J	114	93.3		ug/L		82	45 - 120
4-Chloroaniline	ND		114	67.7		ug/L		59	10 - 120
4-Chloro-3-methylphenol	ND		114	90.8		ug/L		80	34 - 120
2-Chloronaphthalene	ND		114	86.4		ug/L		76	39 - 120
2-Chlorophenol	ND		114	79.4		ug/L		70	25 - 120
4-Chlorophenyl phenyl ether	ND		114	92.6		ug/L		81	44 - 120
Dibenz[a,h]acridine	ND		56.8	64.4		ug/L		113	50 - 150
Dibenzofuran	ND		114	91.0		ug/L		80	25 - 130
3,3'-Dichlorobenzidine	ND		152	88.4		ug/L		58	10 - 120
2,4-Dichlorophenol	ND		114	88.6		ug/L		78	31 - 120
Diethyl phthalate	ND		114	96.4		ug/L		85	46 - 120
2,4-Dimethylphenol	ND		114	85.8		ug/L		75	21 - 120
Dimethyl phthalate	ND		114	91.7		ug/L		80	38 - 120
Di-n-butyl phthalate	ND		114	97.3		ug/L		85	49 - 120
4,6-Dinitro-ortho-cresol	ND		228	209		ug/L		91	25 - 120
2,4-Dinitrophenol	ND		228	193		ug/L		85	15 - 140
2,4-Dinitrotoluene	ND		114	97.9		ug/L		86	53 - 120
2,6-Dinitrotoluene	ND		114	92.0		ug/L		81	43 - 120
Di-n-octyl phthalate	ND		114	98.9		ug/L		87	35 - 121
1,4-Dioxane	ND		114	57.6		ug/L		51	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		114	78.8		ug/L		69	50 - 150
Hexachlorobenzene	ND		114	91.8		ug/L		80	38 - 122
Hexachlorocyclopentadiene	ND		114	27.8		ug/L		24	10 - 120
Hexachloroethane	ND		114	67.6		ug/L		59	10 - 150

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

Lab Sample ID: 400-242794-10 MS
Matrix: Water
Analysis Batch: 640846

Client Sample ID: P93D-ROX-083023
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Indene	ND		114	85.1		ug/L		75	50 - 150
Isophorone	ND		114	78.8		ug/L		69	42 - 120
2-Methylphenol	ND		114	83.5		ug/L		73	28 - 120
3 & 4 Methylphenol	ND		114	81.1		ug/L		71	31 - 120
2-Nitroaniline	ND		114	76.9		ug/L		67	45 - 120
3-Nitroaniline	ND		114	65.4		ug/L		57	10 - 130
4-Nitroaniline	ND		114	87.0		ug/L		76	10 - 132
Nitrobenzene	ND		114	78.6		ug/L		69	39 - 120
2-Nitrophenol	ND		114	89.2		ug/L		78	33 - 120
4-Nitrophenol	ND		228	181		ug/L		79	10 - 120
N-Nitrosodimethylamine	ND		114	58.0		ug/L		51	10 - 139
N-Nitrosodi-n-propylamine	ND		114	77.5		ug/L		68	37 - 124
N-Nitrosodiphenylamine	ND		113	84.9		ug/L		75	10 - 150
Pentachlorophenol	ND		228	206		ug/L		90	29 - 130
Phenol	ND		114	84.2		ug/L		74	10 - 150
Pyridine	ND		228	93.3		ug/L		41	10 - 120
Quinoline	ND		56.8	36.1		ug/L		64	51 - 120
2,4,5-Trichlorophenol	ND		114	89.6		ug/L		79	34 - 120
2,4,6-Trichlorophenol	ND		114	89.9		ug/L		79	33 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*46 - 124*
2-Fluorophenol	*53*		*13 - 113*
Nitrobenzene-d5	*71*		*36 - 126*
Phenol-d5	*64*		*17 - 127*
Terphenyl-d14	*74*		*44 - 149*
2,4,6-Tribromophenol	*83*		*26 - 150*

Lab Sample ID: 400-242794-10 MSD
Matrix: Water
Analysis Batch: 640846

Client Sample ID: P93D-ROX-083023
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	ND		115	53.6		ug/L		47	10 - 120	2	63
Benzoic acid	ND		498	357		ug/L		72	10 - 149	4	49
Benzyl alcohol	ND		115	84.1		ug/L		73	33 - 120	3	37
Bis(2-chloroethoxy)methane	ND		115	83.3		ug/L		73	26 - 120	4	70
Bis(2-chloroethyl)ether	ND		115	102		ug/L		89	42 - 120	3	42
bis (2-chloroisopropyl) ether	ND		115	64.4		ug/L		56	28 - 120	7	41
Bis(2-ethylhexyl) phthalate	ND		115	100		ug/L		87	39 - 120	7	35
4-Bromophenyl phenyl ether	ND		115	92.5		ug/L		81	40 - 120	5	30
Butyl benzyl phthalate	0.40	J	115	98.3		ug/L		85	45 - 120	5	32
4-Chloroaniline	ND		115	69.5		ug/L		61	10 - 120	3	94
4-Chloro-3-methylphenol	ND		115	92.5		ug/L		81	34 - 120	2	40
2-Chloronaphthalene	ND		115	89.7		ug/L		78	39 - 120	4	29
2-Chlorophenol	ND		115	82.9		ug/L		72	25 - 120	4	42
4-Chlorophenyl phenyl ether	ND		115	96.7		ug/L		84	44 - 120	4	27
Dibenz[a,h]acridine	ND		57.1	65.2		ug/L		114	50 - 150	1	40

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

Lab Sample ID: 400-242794-10 MSD
Matrix: Water
Analysis Batch: 640846

Client Sample ID: P93D-ROX-083023
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dibenzofuran	ND		115	95.6		ug/L		83	25 - 130	5	29
3,3'-Dichlorobenzidine	ND		153	88.0		ug/L		58	10 - 120	0	58
2,4-Dichlorophenol	ND		115	89.1		ug/L		78	31 - 120	1	43
Diethyl phthalate	ND		115	102		ug/L		89	46 - 120	5	40
2,4-Dimethylphenol	ND		115	88.6		ug/L		77	21 - 120	3	47
Dimethyl phthalate	ND		115	95.9		ug/L		84	38 - 120	4	36
Di-n-butyl phthalate	ND		115	103		ug/L		90	49 - 120	6	32
4,6-Dinitro-ortho-cresol	ND		229	217		ug/L		95	25 - 120	4	42
2,4-Dinitrophenol	ND		229	206		ug/L		90	15 - 140	7	36
2,4-Dinitrotoluene	ND		115	103		ug/L		90	53 - 120	5	28
2,6-Dinitrotoluene	ND		115	95.7		ug/L		84	43 - 120	4	28
Di-n-octyl phthalate	ND		115	105		ug/L		92	35 - 121	6	35
1,4-Dioxane	ND		115	64.2		ug/L		56	50 - 150	11	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		115	81.7		ug/L		71	50 - 150	4	40
Hexachlorobenzene	ND		115	94.0		ug/L		82	38 - 122	2	33
Hexachlorocyclopentadiene	ND		115	32.5		ug/L		28	10 - 120	16	50
Hexachloroethane	ND		115	72.7		ug/L		64	10 - 150	7	41
Indene	ND		115	89.5		ug/L		78	50 - 150	5	40
Isophorone	ND		115	81.4		ug/L		71	42 - 120	3	33
2-Methylphenol	ND		115	85.7		ug/L		75	28 - 120	3	47
3 & 4 Methylphenol	ND		115	81.9		ug/L		72	31 - 120	1	47
2-Nitroaniline	ND		115	79.7		ug/L		70	45 - 120	4	33
3-Nitroaniline	ND		115	68.1		ug/L		59	10 - 130	4	39
4-Nitroaniline	ND		115	89.3		ug/L		78	10 - 132	3	50
Nitrobenzene	ND		115	80.4		ug/L		70	39 - 120	2	35
2-Nitrophenol	ND		115	89.8		ug/L		78	33 - 120	1	43
4-Nitrophenol	ND		229	186		ug/L		81	10 - 120	3	82
N-Nitrosodimethylamine	ND		115	59.1		ug/L		52	10 - 139	2	62
N-Nitrosodi-n-propylamine	ND		115	80.8		ug/L		71	37 - 124	4	36
N-Nitrosodiphenylamine	ND		114	88.2		ug/L		78	10 - 150	4	34
Pentachlorophenol	ND		229	216		ug/L		94	29 - 130	5	42
Phenol	ND		115	86.7		ug/L		76	10 - 150	3	52
Pyridine	ND		229	130		ug/L		57	10 - 120	33	55
Quinoline	ND		57.1	48.9		ug/L		86	51 - 120	30	40
2,4,5-Trichlorophenol	ND		115	91.3		ug/L		80	34 - 120	2	42
2,4,6-Trichlorophenol	ND		115	93.8		ug/L		82	33 - 120	4	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*46 - 124*
2-Fluorophenol	*55*		*13 - 113*
Nitrobenzene-d5	*71*		*36 - 126*
Phenol-d5	*64*		*17 - 127*
Terphenyl-d14	*76*		*44 - 149*
2,4,6-Tribromophenol	*82*		*26 - 150*

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

Lab Sample ID: MB 400-639760/1-A
Matrix: Water
Analysis Batch: 640207

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 639760

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		09/05/23 14:55	09/08/23 15:52	1
Acenaphthylene	ND		0.20	0.044	ug/L		09/05/23 14:55	09/08/23 15:52	1
Anthracene	ND		0.20	0.047	ug/L		09/05/23 14:55	09/08/23 15:52	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		09/05/23 14:55	09/08/23 15:52	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		09/05/23 14:55	09/08/23 15:52	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		09/05/23 14:55	09/08/23 15:52	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		09/05/23 14:55	09/08/23 15:52	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		09/05/23 14:55	09/08/23 15:52	1
Chrysene	ND		0.20	0.033	ug/L		09/05/23 14:55	09/08/23 15:52	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		09/05/23 14:55	09/08/23 15:52	1
Fluoranthene	ND		0.20	0.034	ug/L		09/05/23 14:55	09/08/23 15:52	1
Fluorene	ND		0.20	0.089	ug/L		09/05/23 14:55	09/08/23 15:52	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		09/05/23 14:55	09/08/23 15:52	1
Phenanthrene	ND		0.20	0.090	ug/L		09/05/23 14:55	09/08/23 15:52	1
Pyrene	ND		0.20	0.039	ug/L		09/05/23 14:55	09/08/23 15:52	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		09/05/23 14:55	09/08/23 15:52	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		09/05/23 14:55	09/08/23 15:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*96*		*18 - 147*	*09/05/23 14:55*	*09/08/23 15:52*	*1*
2-Fluorobiphenyl	*83*		*15 - 128*	*09/05/23 14:55*	*09/08/23 15:52*	*1*
Nitrobenzene-d5	*63*		*10 - 144*	*09/05/23 14:55*	*09/08/23 15:52*	*1*

Lab Sample ID: LCS 400-639760/16-A
Matrix: Water
Analysis Batch: 640207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	2.00	1.59		ug/L		80	40 - 140
Acenaphthylene	2.00	1.55		ug/L		77	40 - 140
Anthracene	2.00	1.56		ug/L		78	40 - 140
Benzo[a]anthracene	2.00	1.55		ug/L		78	40 - 140
Benzo[a]pyrene	2.00	1.28		ug/L		64	40 - 140
Benzo[b]fluoranthene	2.00	1.35		ug/L		67	40 - 140
Benzo[g,h,i]perylene	2.00	1.32		ug/L		66	40 - 140
Benzo[k]fluoranthene	2.00	1.37		ug/L		68	40 - 140
Chrysene	2.00	1.57		ug/L		79	40 - 140
Dibenz(a,h)anthracene	2.00	1.18		ug/L		59	40 - 140
Fluoranthene	2.00	1.74		ug/L		87	40 - 140
Fluorene	2.00	1.58		ug/L		79	40 - 140
Indeno[1,2,3-cd]pyrene	2.00	1.26		ug/L		63	40 - 140
Phenanthrene	2.00	1.59		ug/L		80	40 - 140
Pyrene	2.00	1.43		ug/L		71	40 - 140
1-Methylnaphthalene	2.00	1.61		ug/L		80	40 - 140
2-Methylnaphthalene	2.00	1.59		ug/L		80	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*84*		*18 - 147*

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

Lab Sample ID: LCS 400-639760/16-A
Matrix: Water
Analysis Batch: 640207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 639760

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	76		15 - 128
Nitrobenzene-d5	61		10 - 144

Lab Sample ID: LCSD 400-639760/17-A
Matrix: Water
Analysis Batch: 640207

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 639760

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			2.00	1.54		ug/L		77	40 - 140	4	40
Acenaphthylene			2.00	1.59		ug/L		80	40 - 140	3	40
Anthracene			2.00	1.50		ug/L		75	40 - 140	4	40
Benzo[a]anthracene			2.00	1.54		ug/L		77	40 - 140	1	40
Benzo[a]pyrene			2.00	1.29		ug/L		65	40 - 140	1	40
Benzo[b]fluoranthene			2.00	1.29		ug/L		64	40 - 140	4	40
Benzo[g,h,i]perylene			2.00	1.30		ug/L		65	40 - 140	1	40
Benzo[k]fluoranthene			2.00	1.34		ug/L		67	40 - 140	2	40
Chrysene			2.00	1.51		ug/L		76	40 - 140	4	40
Dibenz(a,h)anthracene			2.00	1.20		ug/L		60	40 - 140	2	40
Fluoranthene			2.00	1.71		ug/L		86	40 - 140	2	40
Fluorene			2.00	1.61		ug/L		81	40 - 140	2	40
Indeno[1,2,3-cd]pyrene			2.00	1.28		ug/L		64	40 - 140	1	40
Phenanthrene			2.00	1.49		ug/L		74	40 - 140	7	40
Pyrene			2.00	1.33		ug/L		67	40 - 140	7	40
1-Methylnaphthalene			2.00	1.56		ug/L		78	40 - 140	3	40
2-Methylnaphthalene			2.00	1.53		ug/L		76	40 - 140	4	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	84		18 - 147
2-Fluorobiphenyl	73		15 - 128
Nitrobenzene-d5	58		10 - 144

Lab Sample ID: 400-242794-10 MS
Matrix: Water
Analysis Batch: 640497

Client Sample ID: P93D-ROX-083023
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		114	98.4		ug/L		86	50 - 150
Acenaphthylene	0.043	J	114	101		ug/L		89	50 - 150
Anthracene	ND		114	102		ug/L		90	50 - 150
Benzo[a]anthracene	ND		114	102		ug/L		89	50 - 150
Benzo[a]pyrene	ND		114	95.8		ug/L		84	50 - 150
Benzo[b]fluoranthene	0.063	J	114	91.6		ug/L		80	50 - 150
Benzo[g,h,i]perylene	ND		114	99.4		ug/L		87	50 - 150
Benzo[k]fluoranthene	0.060	J	114	88.4		ug/L		77	50 - 150
Chrysene	0.061	J	114	96.1		ug/L		84	50 - 150
Dibenz(a,h)anthracene	0.10	J	114	104		ug/L		91	50 - 150
Fluoranthene	0.10	J	114	119		ug/L		104	50 - 150
Fluorene	ND		114	107		ug/L		94	50 - 150

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

Lab Sample ID: 400-242794-10 MS
Matrix: Water
Analysis Batch: 640497

Client Sample ID: P93D-ROX-083023
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Indeno[1,2,3-cd]pyrene	0.10	J	114	102		ug/L		89	50 - 150
Phenanthrene	ND		114	98.0		ug/L		86	50 - 150
Pyrene	ND		114	81.7		ug/L		72	50 - 150
1-Methylnaphthalene	ND		114	81.1		ug/L		71	50 - 150
2-Methylnaphthalene	ND		114	80.8		ug/L		71	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*65*		*18 - 147*
2-Fluorobiphenyl	*68*		*15 - 128*
Nitrobenzene-d5	*80*		*10 - 144*

Lab Sample ID: 400-242794-10 MSD
Matrix: Water
Analysis Batch: 640497

Client Sample ID: P93D-ROX-083023
Prep Type: Total/NA
Prep Batch: 639760

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		115	103		ug/L		90	50 - 150	5	40
Acenaphthylene	0.043	J	115	106		ug/L		92	50 - 150	4	40
Anthracene	ND		115	109		ug/L		95	50 - 150	6	40
Benzo[a]anthracene	ND		115	107		ug/L		94	50 - 150	5	40
Benzo[a]pyrene	ND		115	101		ug/L		88	50 - 150	5	40
Benzo[b]fluoranthene	0.063	J	115	96.9		ug/L		85	50 - 150	6	40
Benzo[g,h,i]perylene	ND		115	98.7		ug/L		86	50 - 150	1	40
Benzo[k]fluoranthene	0.060	J	115	94.3		ug/L		82	50 - 150	6	40
Chrysene	0.061	J	115	99.8		ug/L		87	50 - 150	4	40
Dibenz(a,h)anthracene	0.10	J	115	104		ug/L		90	50 - 150	0	40
Fluoranthene	0.10	J	115	124		ug/L		108	50 - 150	4	40
Fluorene	ND		115	113		ug/L		98	50 - 150	5	40
Indeno[1,2,3-cd]pyrene	0.10	J	115	103		ug/L		90	50 - 150	1	40
Phenanthrene	ND		115	105		ug/L		91	50 - 150	7	40
Pyrene	ND		115	87.2		ug/L		76	50 - 150	6	40
1-Methylnaphthalene	ND		115	89.7		ug/L		78	50 - 150	10	40
2-Methylnaphthalene	ND		115	88.4		ug/L		77	50 - 150	9	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*68*		*18 - 147*
2-Fluorobiphenyl	*72*		*15 - 128*
Nitrobenzene-d5	*89*		*10 - 144*

Lab Sample ID: MB 400-640651/1-A
Matrix: Water
Analysis Batch: 641154

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640651

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		09/12/23 10:32	09/15/23 16:40	1
Acenaphthylene	ND		0.20	0.044	ug/L		09/12/23 10:32	09/15/23 16:40	1
Anthracene	ND		0.20	0.047	ug/L		09/12/23 10:32	09/15/23 16:40	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		09/12/23 10:32	09/15/23 16:40	1

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

Lab Sample ID: MB 400-640651/1-A
Matrix: Water
Analysis Batch: 641154

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640651

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.20	0.064	ug/L		09/12/23 10:32	09/15/23 16:40	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		09/12/23 10:32	09/15/23 16:40	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		09/12/23 10:32	09/15/23 16:40	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		09/12/23 10:32	09/15/23 16:40	1
Chrysene	ND		0.20	0.033	ug/L		09/12/23 10:32	09/15/23 16:40	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		09/12/23 10:32	09/15/23 16:40	1
Fluoranthene	ND		0.20	0.034	ug/L		09/12/23 10:32	09/15/23 16:40	1
Fluorene	ND		0.20	0.089	ug/L		09/12/23 10:32	09/15/23 16:40	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		09/12/23 10:32	09/15/23 16:40	1
Phenanthrene	ND		0.20	0.090	ug/L		09/12/23 10:32	09/15/23 16:40	1
Pyrene	ND		0.20	0.039	ug/L		09/12/23 10:32	09/15/23 16:40	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		09/12/23 10:32	09/15/23 16:40	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		09/12/23 10:32	09/15/23 16:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*94*		*18 - 147*	*09/12/23 10:32*	*09/15/23 16:40*	*1*
2-Fluorobiphenyl	*75*		*15 - 128*	*09/12/23 10:32*	*09/15/23 16:40*	*1*
Nitrobenzene-d5	*69*		*10 - 144*	*09/12/23 10:32*	*09/15/23 16:40*	*1*

Lab Sample ID: LCS 400-640651/19-A
Matrix: Water
Analysis Batch: 641090

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640651

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	2.00	1.64		ug/L		82	40 - 140
Acenaphthylene	2.00	1.79		ug/L		89	40 - 140
Anthracene	2.00	1.55		ug/L		77	40 - 140
Benzo[a]anthracene	2.00	1.74		ug/L		87	40 - 140
Benzo[a]pyrene	2.00	1.41		ug/L		71	40 - 140
Benzo[b]fluoranthene	2.00	1.55		ug/L		78	40 - 140
Benzo[g,h,i]perylene	2.00	1.54		ug/L		77	40 - 140
Benzo[k]fluoranthene	2.00	1.60		ug/L		80	40 - 140
Chrysene	2.00	1.73		ug/L		87	40 - 140
Dibenz(a,h)anthracene	2.00	1.37		ug/L		69	40 - 140
Fluoranthene	2.00	1.78		ug/L		89	40 - 140
Fluorene	2.00	1.67		ug/L		83	40 - 140
Indeno[1,2,3-cd]pyrene	2.00	1.45		ug/L		73	40 - 140
Phenanthrene	2.00	1.52		ug/L		76	40 - 140
Pyrene	2.00	1.72		ug/L		86	40 - 140
1-Methylnaphthalene	2.00	1.74		ug/L		87	40 - 140
2-Methylnaphthalene	2.00	1.78		ug/L		89	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*112*		*18 - 147*
2-Fluorobiphenyl	*91*		*15 - 128*
Nitrobenzene-d5	*66*		*10 - 144*

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

Lab Sample ID: LCSD 400-640651/20-A
Matrix: Water
Analysis Batch: 641090

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640651

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			2.00	1.63		ug/L		81	40 - 140	1	40
Acenaphthylene			2.00	1.75		ug/L		87	40 - 140	2	40
Anthracene			2.00	1.57		ug/L		79	40 - 140	1	40
Benzo[a]anthracene			2.00	1.82		ug/L		91	40 - 140	4	40
Benzo[a]pyrene			2.00	1.43		ug/L		72	40 - 140	2	40
Benzo[b]fluoranthene			2.00	1.46		ug/L		73	40 - 140	6	40
Benzo[g,h,i]perylene			2.00	1.47		ug/L		74	40 - 140	4	40
Benzo[k]fluoranthene			2.00	1.54		ug/L		77	40 - 140	4	40
Chrysene			2.00	1.72		ug/L		86	40 - 140	1	40
Dibenz(a,h)anthracene			2.00	1.34		ug/L		67	40 - 140	2	40
Fluoranthene			2.00	1.82		ug/L		91	40 - 140	3	40
Fluorene			2.00	1.63		ug/L		82	40 - 140	2	40
Indeno[1,2,3-cd]pyrene			2.00	1.44		ug/L		72	40 - 140	1	40
Phenanthrene			2.00	1.54		ug/L		77	40 - 140	1	40
Pyrene			2.00	1.71		ug/L		85	40 - 140	1	40
1-Methylnaphthalene			2.00	1.83		ug/L		91	40 - 140	5	40
2-Methylnaphthalene			2.00	1.86		ug/L		93	40 - 140	4	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*112*		*18 - 147*
2-Fluorobiphenyl	*94*		*15 - 128*
Nitrobenzene-d5	*67*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-639897/1-A
Matrix: Water
Analysis Batch: 639945

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 639897

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/06/23 12:59	09/06/23 15:55	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/06/23 12:59	09/06/23 15:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*70*		*51 - 149*	*09/06/23 12:59*	*09/06/23 15:55*	*1*

Lab Sample ID: LCS 400-639897/2-A
Matrix: Water
Analysis Batch: 639945

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 639897

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-D bromo-3-Chloropropane			0.101	0.0933		ug/L		93	60 - 140
1,2-D bromoethane			0.101	0.0725		ug/L		72	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*47*	*S1-*	*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-639897/3-A
Matrix: Water
Analysis Batch: 639945

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 639897

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane			0.101	0.0970		ug/L		97	60 - 140	4	30
1,2-D bromoethane			0.101	0.0748		ug/L		74	60 - 140	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*55*		*51 - 149*

Lab Sample ID: 400-242794-10 MS
Matrix: Water
Analysis Batch: 639945

Client Sample ID: P93D-ROX-083023
Prep Type: Total/NA
Prep Batch: 639897

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-D bromo-3-Chloropropane	ND		0.0999	0.113		ug/L		114	10 - 150		
1,2-D bromoethane	ND		0.100	0.0932		ug/L		93	39 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*70*		*51 - 149*

Lab Sample ID: 400-242794-10 MSD
Matrix: Water
Analysis Batch: 639945

Client Sample ID: P93D-ROX-083023
Prep Type: Total/NA
Prep Batch: 639897

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane	ND		0.0983	0.107		ug/L		109	10 - 150	6	20
1,2-D bromoethane	ND		0.0985	0.0875		ug/L		89	39 - 150	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*66*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

400-242794 COC

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 [illegible] 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: 8/30/2023
PO #	**GSAP Project ID**	PAGE: 1 of 3
60697537 – 3.3.2	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 – 3.3.2

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 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

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* Please provide sample receipt upon login.
* Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; loredana.fillmon@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☐ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

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
00 [illegible] 10	TB-ROX-083023-8260-A	8/30/2023	0000	Water	2					2	X			
	TB-ROX-083023-8011-A	8/30/2023	0000	Water	2					2		X		
	MW6B-ROX-083023	8/30/2023	0920	Water	6			2		8	X	X	X	X
	MW6B-ROX-083023	8/30/2023	0920	Water	6			2		8	X	X	X	X
	MW11-ROX-083023	8/30/2023	1030	Water	6			2		8	X	X	X	X
	MW28-ROX-083023	8/30/2023	1145	Water	6			2		8	X	X	X	X
	P54-ROX-083023	8/30/2023	1335	Water	6			2		8	X	X	X	X

8/30/2023

Relinquished by: (Signature) JOE MAYER	Received by: (Signature) FEDEX: 5293 4337 5397, 5293 4337 5401	Date: 8/30/2023	Time: 1600
Relinquished by: (Signature)	Received by: (Signature) BP	Date: 8/31/23	Time: 919
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

9/18/2023

CUSTODY SEALS: 1599772, 1599773, 1599774, 159975

3.3°C IR 8 10
5.3 IR10 BP

Version: 13Oct22

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: 8/30/2023
PO #	**GSAP Project ID**	PAGE: 2 of 3
60697537 – 3.3.2	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 – 3.3.2

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, S. Beadle

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; loredana.filimon@aecom.com**

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

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-083023-8260-B	8/30/2023	0000	Water	2					2	X			
	TB-ROX-083023-8011-B	8/30/2023	0000	Water	2					2		X		
	P93D-ROX-083023	8/30/2023	0950	Water	6			2		8	X	X	X	X
	P93D-ROX-083023-MS	8/30/2023	0950	Water	6			2		8	X	X	X	X
	P93D-ROX-083023-MSD	8/30/2023	0950	Water	6			2		8	X	X	X	X
	ROST4PZC-ROX-083023	8/30/2023	1015	Water	6			2		8	X	X	X	X
	ROST4PZE-ROX-083023	8/30/2023	1100	Water	6			2		8	X	X	X	X
	MW12-ROX-083023-EB	8/30/2023	1150	Water	6			2		8	X	X	X	X
	MW12-ROX-083023	8/30/2023	1220	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
MARY MASSA	FEDEX: See page 1	8/30/2023	1600
	BP	8/31/23	919

Version: 12July23

CUSTODY SEALS: See page 1

3.3°C IR10

Page 101 of 110

9/18/2023

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

400-242795 COC

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 I 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: 8/30/2023
PO #	**GSAP Project ID**	PAGE: 2 of 3
60697537 – 3.3.2	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 60697537 – 3.3.2

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, S. Beadle

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 :

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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
60697537 – 3.3.2

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
110	MW22-083023	8/30/2023	1320	Water	6			2		8	X	X	X	X

8/30/23

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
MARY MASSA	FEDEX: See page 1	8/30/2023	1600
	BP	8/31/23	919

CUSTODY SEALS: See page 1

3.3°C IR10
5.3 IR10

Version: 13Oct22

Page 102 of 110

9/18/2023

Leah Klingensmith

From: Massa, Mary <Mary.Massa@aecom.com>
Sent: Wednesday, August 30, 2023 2:48 PM
To: Leah Klingensmith; Lisa Monroe; Trina Perez
Cc: Pennington, Wendy; Remiger, Melissa
Subject: #60697537-3.3.2 Roxana (Aug) Monthly Groundwater - samples arriving tomorrow (Thursday) in Pensacola
Attachments: Aug23 Roxana GW COC_083023.pdf

EXTERNAL EMAIL*

Hi Leah,

Please see the attached COC for #60697537-3.3.2 Roxana (August) Monthly Groundwater - samples arriving tomorrow (Thursday) in Pensacola and let the group know of any questions or concerns.

Please note:

- There is an expedited 5 day TAT requested for monthly sampling
- The in-cooler COC is incorrect in two places: on page 1 MW-6B DUP sample is lacking the -DUP in its sample ID, on page 3 MW-22 sample is lacking the -ROX- in its sample ID, the attached PDF is the corrected version.

Thank you,

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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* WARNING - EXTERNAL: This email originated from outside of Eurofins Environment Testing America. Do not click any links or open any attachments unless you trust the sender and know that the content is safe!

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: 8/30/2023
PO #	**GSAP Project ID**	PAGE: 1 of 3
60697537 – 3.3.2	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 – 3.3.2

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): J. Mayer T. Jenkins

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@aecom.com

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; loredana.filimon@aecom.com

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☐ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

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
10	TB-ROX-083023-8260-A	8/30/2023	0000	Water	2					2	X			
	TB-ROX-083023-8011-A	8/30/2023	0000	Water	2					2		X		
	MW6B-ROX-083023	8/30/2023	0920	Water	6			2		8	X	X	X	X
	MW6B-ROX-083023-DUP	8/30/2023	0920	Water	6			2		8	X	X	X	X
	MW11-ROX-083023	8/30/2023	1030	Water	6			2		8	X	X	X	X
	MW28-ROX-083023	8/30/2023	1145	Water	6			2		8	X	X	X	X
	P54-ROX-083023	8/30/2023	1335	Water	6			2		8	X	X	X	X

8/30/23

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
JOE MAYER	FEDEX: 5293 4337 5397, 5293 4337 5401	8/30/2023	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 13Oct22

CUSTODY SEALS: 1599772, 1599773, 1599774, 159975

Page 105 of 110

9/18/2023

13

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other (_____)

Shell Oil Products US Chain Of Custody Record

AECOM

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES_____	

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 8/30/2023
PO #	**GSAP Project ID**	PAGE: 2 of 3
60697537 – 3.3.2	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 – 3.3.2

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, S. Beadle	

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 :

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☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

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-083023-8260-B	8/30/2023	0000	Water	2					2	X			
	TB-ROX-083023-8011-B	8/30/2023	0000	Water	2					2		X		
	P93D-ROX-083023	8/30/2023	0950	Water	6			2		8	X	X	X	X
	P93D-ROX-083023-MS	8/30/2023	0950	Water	6			2		8	X	X	X	X
	P93D-ROX-083023-MSD	8/30/2023	0950	Water	6			2		8	X	X	X	X
	ROST4PZC-ROX-083023	8/30/2023	1015	Water	6			2		8	X	X	X	X
	ROST4PZE-ROX-083023	8/30/2023	1100	Water	6			2		8	X	X	X	X
	MW12-ROX-083023-EB	8/30/2023	1150	Water	6			2		8	X	X	X	X
	MW12-ROX-083023	8/30/2023	1220	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
MARY MASSA	FEDEX: See page 1	8/30/2023	1600

CUSTODY SEALS: See page 1

Version: 12July23

Page 106 of 110

9/18/2023

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: 8/30/2023
PO #	**GSAP Project ID**	PAGE: 2 of 3
60697537 – 3.3.2	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 – 3.3.2
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, S. Beadle
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: melissa.remiger@aecom.com
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; loredana.filimon@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☑ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

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
10	MW22-ROX-083023	8/30/2023	1320	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
MARY MASSA	FEDEX: See page 1	8/30/2023	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 13Oct22

CUSTODY SEALS: See page 1

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9/18/2023

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-242794-1
SDG Number:

Login Number: 242794
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	3.3°C, 5.3°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	

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-242794-1
SDG Number:

Login Number: 242795
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	3.3°C, 5.3°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: 400-242794-1
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	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	12-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-23
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 Monthly August/September 2023 Data Review

Laboratory SDG: 400-242836-1

Data Reviewer: Andrei Niculau

Peer Reviewer: Cheyana Cokley

Date Reviewed: 10/11/2023

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

Sample Identification	Sample Identification
TB-ROX-083123-8260-A	TB-ROX-083123-8011-B
TB-ROX-083123-8011-A	P93C-ROX-083123
MW5-ROX-083123	P93C-ROX-083123-DUP
P114R-ROX-083123	P57-ROX-083123
MW13-ROX-083123	T12-ROX-083123
TB-ROX-083123-8260-B	--

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 dimethyl phthalate was detected in method blank MB 400-640140/1-A. LCS/LCSD recoveries for benzenethiol were outside evaluation criteria. The surrogate recovery for 4-bromofluorobenzene was outside criteria in the VOC by 8011 LCS. The initial calibration verifications (ICV) for 4,6-dinitro-ortho-cresol and 3,3'-dichlorobenzidine, and 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?

Yes

Blank ID	Parameter	Analyte	Concentration/Amount
MB 400-640140/1-A	SVOCs	Dimethyl phthalate	0.550 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
MW5-ROX-083123	SVOCs	Dimethyl phthalate	-	**U**
MW13-ROX-083123	SVOCs	Dimethyl phthalate	-	**U**
P93C-ROX-083123	SVOCs	Dimethyl phthalate	-	**U**
P93C-ROX-083123-DUP	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 400-640140/18-A/19-A	SVOCs	Benzenethiol	**2/3**	22	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 below evaluation criteria; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW5-ROX-083123	SVOCs	Benzenethiol	**UJ**
P114R-ROX-083123	SVOCs	Benzenethiol	**UJ**
MW13-ROX-083123	SVOCs	Benzenethiol	**UJ**
P93C-ROX-083123	SVOCs	Benzenethiol	**UJ**
P93C-ROX-083123-DUP	SVOCs	Benzenethiol	**UJ**
P57-ROX-083123	SVOCs	Benzenethiol	**UJ**
T12-ROX-083123	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
LCS 400-639897/2-A	VOCs by 8011	4-Bromofluorobenzene	**47**	51-149

Analytical data reported as non-detect and associated with surrogate recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. 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?

Yes

Field ID	Field Duplicate ID
P93C-ROX-083123	P93C-ROX-083123-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 verification for several analytes was outside evaluation criteria, biased low. The continuing calibration verification for several analytes was outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW5-ROX-083123	VOCs	Dichlorodifluoromethane	**UJ**
P114R-ROX-083123	VOCs	Dichlorodifluoromethane	**UJ**
MW13-ROX-083123	VOCs	Dichlorodifluoromethane	**UJ**
P93C-ROX-083123	VOCs	Dichlorodifluoromethane	**UJ**
P93C-ROX-083123-DUP	VOCs	Dichlorodifluoromethane	**UJ**
P57-ROX-083123	VOCs	Dichlorodifluoromethane	**UJ**
T12-ROX-083123	VOCs	Dichlorodifluoromethane	**UJ**
MW5-ROX-083123	VOCs	2-Chloroethyl vinyl ether	**UJ**
P114R-ROX-083123	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW13-ROX-083123	VOCs	2-Chloroethyl vinyl ether	**UJ**
P93C-ROX-083123	VOCs	2-Chloroethyl vinyl ether	**UJ**
P93C-ROX-083123-DUP	VOCs	2-Chloroethyl vinyl ether	**UJ**

Sample ID	Parameter	Analyte	Qualification
P57-ROX-083123	VOCs	2-Chloroethyl vinyl ether	UJ
T12-ROX-083123	VOCs	2-Chloroethyl vinyl ether	UJ
MW5-ROX-083123	SVOCs	4,6-Dinitro-ortho-cresol	UJ
P114R-ROX-083123	SVOCs	4,6-Dinitro-ortho-cresol	UJ
MW13-ROX-083123	SVOCs	4,6-Dinitro-ortho-cresol	UJ
P93C-ROX-083123	SVOCs	4,6-Dinitro-ortho-cresol	UJ
P93C-ROX-083123-DUP	SVOCs	4,6-Dinitro-ortho-cresol	UJ
P57-ROX-083123	SVOCs	4,6-Dinitro-ortho-cresol	UJ
T12-ROX-083123	SVOCs	4,6-Dinitro-ortho-cresol	UJ
MW5-ROX-083123	SVOCs	3,3'-Dichlorobenzidine	UJ
P114R-ROX-083123	SVOCs	3,3'-Dichlorobenzidine	UJ
MW13-ROX-083123	SVOCs	3,3'-Dichlorobenzidine	UJ
P93C-ROX-083123	SVOCs	3,3'-Dichlorobenzidine	UJ
P93C-ROX-083123-DUP	SVOCs	3,3'-Dichlorobenzidine	UJ
P57-ROX-083123	SVOCs	3,3'-Dichlorobenzidine	UJ
T12-ROX-083123	SVOCs	3,3'-Dichlorobenzidine	UJ
MW5-ROX-083123	SVOCs	Hexachlorocyclopentadiene	UJ
P114R-ROX-083123	SVOCs	Hexachlorocyclopentadiene	UJ
MW13-ROX-083123	SVOCs	Hexachlorocyclopentadiene	UJ
P93C-ROX-083123	SVOCs	Hexachlorocyclopentadiene	UJ
P93C-ROX-083123-DUP	SVOCs	Hexachlorocyclopentadiene	UJ
P57-ROX-083123	SVOCs	Hexachlorocyclopentadiene	UJ
T12-ROX-083123	SVOCs	Hexachlorocyclopentadiene	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 9/18/2023 7:40:23 AM

JOB DESCRIPTION

ROXANA MONTHLY GW

JOB NUMBER

400-242836-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

myEOL

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
9/18/2023 7:40:23 AM

Authorized for release by
Leah Klingensmith, Senior Project Manager
Leah.Klingensmith@et.eurofinsus.com
(615)301-5038

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Job ID: 400-242836-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-242836-1

Receipt
The samples were received on 9/1/2023 9:18 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 3.5°C and 5.1°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 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-083123-8260-A (400-242836-1), MW5-ROX-083123 (400-242836-3), P114R-ROX-083123 (400-242836-4), MW13-ROX-083123 (400-242836-5), TB-ROX-083123-8260-B (400-242836-6), P93C-ROX-083123 (400-242836-8), P93C-ROX-083123-DUP (400-242836-9), P57-ROX-083123 (400-242836-10) and T12-ROX-083123 (400-242836-11). 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 continuing calibration verification (CCV) associated with batch 400-640405 recovered above the upper control limit for 1-Chlorohexane, Hexachlorobutadiene and n-Butylbenzene. The samples associated with this CCV were non-detects or not reported for the affected analytes; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-640405 recovered outside acceptance criteria, low biased, for 2-Chloroethyl vinyl ether 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.

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 continuing calibration verification (CCV) associated with batch 400-640672 recovered above the upper control limit for 2,4,5-Trichlorophenol, 2,4-Dinitrotoluene, 2-Nitrophenol, 4-Bromophenyl phenyl ether, 4-Chlorophenyl phenyl ether, 4-Nitrophenol, Dibenzofuran, Diethyl phthalate and Hexachlorobenzene. 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 400-640672 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: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-640140 and analytical batch 400-640672 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 method blank for preparation batch 400-640140 and analytical batch 400-640672 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 400-637784 was outside method criteria for the following analyte(s): 3,3'-Dichlorobenzidine and 4,6-Dinitro-ortho-cresol. 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 400-640637 recovered above the upper control

Job ID: 400-242836-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

limit for Fluoranthene. 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-083123 (400-242836-4).

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 400-639945 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8011: Surrogate recovery for (LCS 400-639897/2-A) was outside control limits. The spiked target analytes recovered within limits; therefore, the data has been reported.

Method 8011: The continuing calibration verification (CCV) associated with batch 400-640148 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: 400-242836-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-242836-1	TB-ROX-083123-8260-A	Water	08/31/23 12:00	09/01/23 09:18
400-242836-2	TB-ROX-083123-8011-A	Water	08/31/23 12:00	09/01/23 09:18
400-242836-3	MW5-ROX-083123	Water	08/31/23 10:20	09/01/23 09:18
400-242836-4	P114R-ROX-083123	Water	08/31/23 12:35	09/01/23 09:18
400-242836-5	MW13-ROX-083123	Water	08/31/23 13:30	09/01/23 09:18
400-242836-6	TB-ROX-083123-8260-B	Water	08/31/23 12:00	09/01/23 09:18
400-242836-7	TB-ROX-083123-8011-B	Water	08/31/23 12:00	09/01/23 09:18
400-242836-8	P93C-ROX-083123	Water	08/31/23 09:40	09/01/23 09:18
400-242836-9	P93C-ROX-083123-DUP	Water	08/31/23 09:40	09/01/23 09:18
400-242836-10	P57-ROX-083123	Water	08/31/23 12:00	09/01/23 09:18
400-242836-11	T12-ROX-083123	Water	08/31/23 13:10	09/01/23 09:18

Detection Summary

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

Job ID: 400-242836-1

Client Sample ID: TB-ROX-083123-8260-A — Lab Sample ID: 400-242836-1

No Detections.

Client Sample ID: TB-ROX-083123-8011-A — Lab Sample ID: 400-242836-2

No Detections.

Client Sample ID: MW5-ROX-083123 — Lab Sample ID: 400-242836-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	3.6		1.0	0.22	ug/L	1		8260D	Total/NA
tert-Butylbenzene	2.1		1.0	0.63	ug/L	1		8260D	Total/NA
Dimethyl phthalate	0.40	J B	9.7	0.16	ug/L	1		8270E	Total/NA
Di-n-butyl phthalate	4.2	J	9.7	2.6	ug/L	1		8270E	Total/NA

Client Sample ID: P114R-ROX-083123 — Lab Sample ID: 400-242836-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	2.2		1.0	0.22	ug/L	1		8260D	Total/NA
Acenaphthene	0.85		0.20	0.097	ug/L	1		8270E SIM	Total/NA
Acenaphthylene	0.18	J	0.20	0.043	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW13-ROX-083123 — Lab Sample ID: 400-242836-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.4		1.0	0.22	ug/L	1		8260D	Total/NA
Benzoic acid	18	J	29	7.2	ug/L	1		8270E	Total/NA
Dimethyl phthalate	0.81	J B	9.8	0.17	ug/L	1		8270E	Total/NA
Di-n-butyl phthalate	7.5	J	9.8	2.6	ug/L	1		8270E	Total/NA

Client Sample ID: TB-ROX-083123-8260-B — Lab Sample ID: 400-242836-6

No Detections.

Client Sample ID: TB-ROX-083123-8011-B — Lab Sample ID: 400-242836-7

No Detections.

Client Sample ID: P93C-ROX-083123 — Lab Sample ID: 400-242836-8

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	3.0		1.0	0.22	ug/L	1		8260D	Total/NA
Diethyl phthalate	0.41	J	9.6	0.23	ug/L	1		8270E	Total/NA
Dimethyl phthalate	0.66	J B	9.6	0.16	ug/L	1		8270E	Total/NA
Di-n-butyl phthalate	7.5	J	9.6	2.6	ug/L	1		8270E	Total/NA

Client Sample ID: P93C-ROX-083123-DUP — Lab Sample ID: 400-242836-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	42		1.0	0.50	ug/L	1		8260D	Total/NA
Methyl tert-butyl ether	2.7		1.0	0.22	ug/L	1		8260D	Total/NA
Dimethyl phthalate	0.41	J B	9.5	0.16	ug/L	1		8270E	Total/NA
Di-n-butyl phthalate	3.9	J	9.5	2.6	ug/L	1		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: P57-ROX-083123 — Lab Sample ID: 400-242836-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	13	J	25	10	ug/L	1		8260D	Total/NA
Benzene	10		1.0	0.50	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	4.4	J	25	2.6	ug/L	1		8260D	Total/NA
Ethylbenzene	0.79	J	1.0	0.50	ug/L	1		8260D	Total/NA
Isopropy benzene	25		1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	0.79	J	5.0	0.63	ug/L	1		8260D	Total/NA
N-Propylbenzene	28		1.0	0.69	ug/L	1		8260D	Total/NA
sec-Butylbenzene	5.4		1.0	0.70	ug/L	1		8260D	Total/NA
tert-Butylbenzene	6.9		1.0	0.63	ug/L	1		8260D	Total/NA
Toluene	3.5		1.0	0.90	ug/L	1		8260D	Total/NA
n-Butylbenzene - RA	2.8		1.0	0.76	ug/L	1		8260D	Total/NA
Acenaphthene	0.16	J	0.19	0.095	ug/L	1		8270E SIM	Total/NA
Anthracene	0.061	J	0.19	0.045	ug/L	1		8270E SIM	Total/NA
Fluorene	0.30		0.19	0.085	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.22		0.19	0.086	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	13		0.19	0.077	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	13		0.19	0.063	ug/L	1		8270E SIM	Total/NA

Client Sample ID: T12-ROX-083123 — Lab Sample ID: 400-242836-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	11		5.0	2.5	ug/L	5		8260D	Total/NA
Isopropy benzene	22		5.0	2.7	ug/L	5		8260D	Total/NA
Methyl tert-butyl ether	1.5	J	5.0	1.1	ug/L	5		8260D	Total/NA
m-Xylene & p-Xylene	47		25	3.2	ug/L	5		8260D	Total/NA
Naphthalene	17	J	25	15	ug/L	5		8260D	Total/NA
N-Propylbenzene	30		5.0	3.5	ug/L	5		8260D	Total/NA
o-Xylene	3.2	J	25	3.0	ug/L	5		8260D	Total/NA
Toluene	41		5.0	4.5	ug/L	5		8260D	Total/NA
1,3,5-Trimethy benzene	8.8		5.0	2.8	ug/L	5		8260D	Total/NA
Xylenes, Total	50		50	8.0	ug/L	5		8260D	Total/NA
Benzene - DL	1900		10	5.0	ug/L	10		8260D	Total/NA
Acenaphthene	0.39		0.19	0.095	ug/L	1		8270E SIM	Total/NA
Anthracene	0.15	J	0.19	0.045	ug/L	1		8270E SIM	Total/NA
Fluorene	0.42		0.19	0.085	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.50		0.19	0.086	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	18		0.19	0.076	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	26		0.19	0.063	ug/L	1		8270E SIM	Total/NA
Phenol	100		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: 400-242836-1

Client Sample ID: TB-ROX-083123-8260-A
Date Collected: 08/31/23 12:00
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-1
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			09/10/23 16:06	1
Acrolein	ND		20	3.3	ug/L			09/10/23 16:06	1
Acrylonitrile	ND		10	2.8	ug/L			09/10/23 16:06	1
Benzene	ND		1.0	0.50	ug/L			09/10/23 16:06	1
Bromobenzene	ND		1.0	0.54	ug/L			09/10/23 16:06	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/10/23 16:06	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/10/23 16:06	1
Bromoform	ND		5.0	0.25	ug/L			09/10/23 16:06	1
Bromomethane	ND		1.0	0.98	ug/L			09/10/23 16:06	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/10/23 16:06	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/10/23 16:06	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/10/23 16:06	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/10/23 16:06	1
Chloroethane	ND		1.0	0.76	ug/L			09/10/23 16:06	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/10/23 16:06	1
Chloroform	ND		1.0	0.90	ug/L			09/10/23 16:06	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/10/23 16:06	1
Chloromethane	ND		1.0	0.90	ug/L			09/10/23 16:06	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/10/23 16:06	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/10/23 16:06	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/10/23 16:06	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/10/23 16:06	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/10/23 16:06	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/10/23 16:06	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/10/23 16:06	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/10/23 16:06	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/10/23 16:06	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 16:06	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 16:06	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 16:06	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 16:06	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/10/23 16:06	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/10/23 16:06	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/10/23 16:06	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/10/23 16:06	1
2-Hexanone	ND		25	1.4	ug/L			09/10/23 16:06	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/10/23 16:06	1
Methylene bromide	ND		5.0	0.22	ug/L			09/10/23 16:06	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/10/23 16:06	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/10/23 16:06	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/10/23 16:06	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/10/23 16:06	1
Naphthalene	ND		5.0	3.0	ug/L			09/10/23 16:06	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/10/23 16:06	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/10/23 16:06	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/10/23 16:06	1
o-Xylene	ND		5.0	0.60	ug/L			09/10/23 16:06	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/10/23 16:06	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/10/23 16:06	1

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

Job ID: 400-242836-1

Client Sample ID: TB-ROX-083123-8260-A
Date Collected: 08/31/23 12:00
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-1
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			09/10/23 16:06	1
Styrene	ND		1.0	1.0	ug/L			09/10/23 16:06	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/10/23 16:06	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/10/23 16:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/10/23 16:06	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/10/23 16:06	1
Toluene	ND		1.0	0.90	ug/L			09/10/23 16:06	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 16:06	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/10/23 16:06	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/10/23 16:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/10/23 16:06	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/10/23 16:06	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/10/23 16:06	1
Trichloroethene	ND		1.0	0.15	ug/L			09/10/23 16:06	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/10/23 16:06	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/10/23 16:06	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/10/23 16:06	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/10/23 16:06	1
Vinyl acetate	ND		25	0.93	ug/L			09/10/23 16:06	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/10/23 16:06	1
Xylenes, Total	ND		10	1.6	ug/L			09/10/23 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 130*		*09/10/23 16:06*	*1*
Dibromofluoromethane	*93*		*75 - 126*		*09/10/23 16:06*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/10/23 16:06*	*1*

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

Job ID: 400-242836-1

Client Sample ID: TB-ROX-083123-8011-A
Date Collected: 08/31/23 12:00
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-2
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-D bromo-3-Chloropropane	ND		0.031	0.018	ug/L		09/06/23 12:59	09/06/23 22:21	1
1,2-D bromoethane	ND		0.021	0.016	ug/L		09/06/23 12:59	09/06/23 22:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*71*		*51 - 149*	*09/06/23 12:59*	*09/06/23 22:21*	*1*

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

Job ID: 400-242836-1

Client Sample ID: MW5-ROX-083123
Date Collected: 08/31/23 10:20
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-3
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			09/10/23 16:30	1
Acrolein	ND		20	3.3	ug/L			09/10/23 16:30	1
Acrylonitrile	ND		10	2.8	ug/L			09/10/23 16:30	1
Benzene	ND		1.0	0.50	ug/L			09/10/23 16:30	1
Bromobenzene	ND		1.0	0.54	ug/L			09/10/23 16:30	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/10/23 16:30	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/10/23 16:30	1
Bromoform	ND		5.0	0.25	ug/L			09/10/23 16:30	1
Bromomethane	ND		1.0	0.98	ug/L			09/10/23 16:30	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/10/23 16:30	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/10/23 16:30	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/10/23 16:30	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/10/23 16:30	1
Chloroethane	ND		1.0	0.76	ug/L			09/10/23 16:30	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/10/23 16:30	1
Chloroform	ND		1.0	0.90	ug/L			09/10/23 16:30	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/10/23 16:30	1
Chloromethane	ND		1.0	0.90	ug/L			09/10/23 16:30	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/10/23 16:30	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/10/23 16:30	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/10/23 16:30	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/10/23 16:30	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/10/23 16:30	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/10/23 16:30	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/10/23 16:30	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/10/23 16:30	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/10/23 16:30	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 16:30	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 16:30	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 16:30	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 16:30	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/10/23 16:30	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/10/23 16:30	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/10/23 16:30	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/10/23 16:30	1
2-Hexanone	ND		25	1.4	ug/L			09/10/23 16:30	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/10/23 16:30	1
Methylene bromide	ND		5.0	0.22	ug/L			09/10/23 16:30	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/10/23 16:30	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/10/23 16:30	1
Methyl tert-butyl ether	**3.6**		1.0	0.22	ug/L			09/10/23 16:30	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/10/23 16:30	1
Naphthalene	ND		5.0	3.0	ug/L			09/10/23 16:30	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/10/23 16:30	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/10/23 16:30	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/10/23 16:30	1
o-Xylene	ND		5.0	0.60	ug/L			09/10/23 16:30	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/10/23 16:30	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/10/23 16:30	1

Client Sample ID: MW5-ROX-083123
Date Collected: 08/31/23 10:20
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-3
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			09/10/23 16:30	1
Styrene	ND		1.0	1.0	ug/L			09/10/23 16:30	1
tert-Butylbenzene	**2.1**		1.0	0.63	ug/L			09/10/23 16:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/10/23 16:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/10/23 16:30	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/10/23 16:30	1
Toluene	ND		1.0	0.90	ug/L			09/10/23 16:30	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 16:30	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/10/23 16:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/10/23 16:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/10/23 16:30	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/10/23 16:30	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/10/23 16:30	1
Trichloroethene	ND		1.0	0.15	ug/L			09/10/23 16:30	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/10/23 16:30	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/10/23 16:30	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/10/23 16:30	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/10/23 16:30	1
Vinyl acetate	ND		25	0.93	ug/L			09/10/23 16:30	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/10/23 16:30	1
Xylenes, Total	ND		10	1.6	ug/L			09/10/23 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*72 - 130*		*09/10/23 16:30*	*1*
Dibromofluoromethane	*96*		*75 - 126*		*09/10/23 16:30*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/10/23 16:30*	*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		09/07/23 15:48	09/12/23 17:04	1
Acenaphthylene	ND		0.19	0.043	ug/L		09/07/23 15:48	09/12/23 17:04	1
Anthracene	ND		0.19	0.046	ug/L		09/07/23 15:48	09/12/23 17:04	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		09/07/23 15:48	09/12/23 17:04	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		09/07/23 15:48	09/12/23 17:04	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		09/07/23 15:48	09/12/23 17:04	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/07/23 15:48	09/12/23 17:04	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		09/07/23 15:48	09/12/23 17:04	1
Chrysene	ND		0.19	0.032	ug/L		09/07/23 15:48	09/12/23 17:04	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		09/07/23 15:48	09/12/23 17:04	1
Fluoranthene	ND		0.19	0.033	ug/L		09/07/23 15:48	09/12/23 17:04	1
Fluorene	ND		0.19	0.086	ug/L		09/07/23 15:48	09/12/23 17:04	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		09/07/23 15:48	09/12/23 17:04	1
Phenanthrene	ND		0.19	0.087	ug/L		09/07/23 15:48	09/12/23 17:04	1
Pyrene	ND		0.19	0.038	ug/L		09/07/23 15:48	09/12/23 17:04	1
1-Methylnaphthalene	ND		0.19	0.078	ug/L		09/07/23 15:48	09/12/23 17:04	1
2-Methylnaphthalene	ND		0.19	0.064	ug/L		09/07/23 15:48	09/12/23 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*58*		*18 - 147*	*09/07/23 15:48*	*09/12/23 17:04*	*1*
2-Fluorobiphenyl	*60*		*15 - 128*	*09/07/23 15:48*	*09/12/23 17:04*	*1*

Client Sample ID: MW5-ROX-083123
Date Collected: 08/31/23 10:20
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-3
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	09/07/23 15:48	09/12/23 17:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	3.7	ug/L		09/07/23 15:48	09/12/23 18:47	1
Benzenethiol	ND	*-	9.7	1.6	ug/L		09/07/23 15:48	09/12/23 18:47	1
Benzoic acid	ND		29	7.1	ug/L		09/07/23 15:48	09/12/23 18:47	1
Benzyl alcohol	ND		9.7	1.9	ug/L		09/07/23 15:48	09/12/23 18:47	1
Bis(2-chloroethoxy)methane	ND		9.7	0.16	ug/L		09/07/23 15:48	09/12/23 18:47	1
Bis(2-chloroethyl)ether	ND		9.7	2.6	ug/L		09/07/23 15:48	09/12/23 18:47	1
bis (2-chloroisopropyl) ether	ND		9.7	0.16	ug/L		09/07/23 15:48	09/12/23 18:47	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.8	ug/L		09/07/23 15:48	09/12/23 18:47	1
4-Bromophenyl phenyl ether	ND		9.7	0.19	ug/L		09/07/23 15:48	09/12/23 18:47	1
Butyl benzyl phthalate	ND		9.7	0.18	ug/L		09/07/23 15:48	09/12/23 18:47	1
4-Chloroaniline	ND		9.7	3.3	ug/L		09/07/23 15:48	09/12/23 18:47	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		09/07/23 15:48	09/12/23 18:47	1
2-Chloronaphthalene	ND		9.7	0.14	ug/L		09/07/23 15:48	09/12/23 18:47	1
2-Chlorophenol	ND		9.7	2.1	ug/L		09/07/23 15:48	09/12/23 18:47	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		09/07/23 15:48	09/12/23 18:47	1
Dibenz[a,h]acridine	ND		9.7	0.97	ug/L		09/07/23 15:48	09/12/23 18:47	1
Dibenzofuran	ND		9.7	0.16	ug/L		09/07/23 15:48	09/12/23 18:47	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		09/07/23 15:48	09/12/23 18:47	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		09/07/23 15:48	09/12/23 18:47	1
Diethyl phthalate	ND		9.7	0.23	ug/L		09/07/23 15:48	09/12/23 18:47	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		09/07/23 15:48	09/12/23 18:47	1
Dimethyl phthalate	**0.40**	**J B**	9.7	0.16	ug/L		09/07/23 15:48	09/13/23 22:52	1
Di-n-butyl phthalate	**4.2**	**J**	9.7	2.6	ug/L		09/07/23 15:48	09/12/23 18:47	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.6	ug/L		09/07/23 15:48	09/12/23 18:47	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/07/23 15:48	09/12/23 18:47	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		09/07/23 15:48	09/12/23 18:47	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		09/07/23 15:48	09/12/23 18:47	1
Di-n-octyl phthalate	ND		9.7	0.16	ug/L		09/07/23 15:48	09/12/23 18:47	1
1,4-Dioxane	ND		9.7	0.97	ug/L		09/07/23 15:48	09/12/23 18:47	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		09/07/23 15:48	09/12/23 18:47	1
Hexachlorobenzene	ND		9.7	0.16	ug/L		09/07/23 15:48	09/12/23 18:47	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/07/23 15:48	09/12/23 18:47	1
Hexachloroethane	ND		9.7	4.1	ug/L		09/07/23 15:48	09/12/23 18:47	1
Indene	ND		9.7	0.97	ug/L		09/07/23 15:48	09/12/23 18:47	1
Isophorone	ND		9.7	0.14	ug/L		09/07/23 15:48	09/12/23 18:47	1
2-Methylphenol	ND		9.7	1.7	ug/L		09/07/23 15:48	09/12/23 18:47	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		09/07/23 15:48	09/12/23 18:47	1
2-Nitroaniline	ND		9.7	2.1	ug/L		09/07/23 15:48	09/12/23 18:47	1
3-Nitroaniline	ND		9.7	1.7	ug/L		09/07/23 15:48	09/12/23 18:47	1
4-Nitroaniline	ND		9.7	1.5	ug/L		09/07/23 15:48	09/12/23 18:47	1
Nitrobenzene	ND		9.7	0.13	ug/L		09/07/23 15:48	09/12/23 18:47	1
2-Nitrophenol	ND		9.7	5.0	ug/L		09/07/23 15:48	09/12/23 18:47	1
4-Nitrophenol	ND		9.7	2.0	ug/L		09/07/23 15:48	09/12/23 18:47	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		09/07/23 15:48	09/12/23 18:47	1

Client Sample ID: MW5-ROX-083123

Date Collected: 08/31/23 10:20
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-3

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	3.2	ug/L		09/07/23 15:48	09/12/23 18:47	1
N-Nitrosodiphenylamine	ND		9.7	0.17	ug/L		09/07/23 15:48	09/12/23 18:47	1
Pentachlorophenol	ND		19	1.4	ug/L		09/07/23 15:48	09/12/23 18:47	1
Phenol	ND		9.7	2.5	ug/L		09/07/23 15:48	09/12/23 18:47	1
Pyridine	ND		9.7	3.1	ug/L		09/07/23 15:48	09/12/23 18:47	1
Quinoline	ND		9.7	4.4	ug/L		09/07/23 15:48	09/12/23 18:47	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		09/07/23 15:48	09/12/23 18:47	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		09/07/23 15:48	09/12/23 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*46 - 124*	*09/07/23 15:48*	*09/12/23 18:47*	*1*
2-Fluorophenol	*54*		*13 - 113*	*09/07/23 15:48*	*09/12/23 18:47*	*1*
Nitrobenzene-d5	*65*		*36 - 126*	*09/07/23 15:48*	*09/12/23 18:47*	*1*
Phenol-d5	*63*		*17 - 127*	*09/07/23 15:48*	*09/12/23 18:47*	*1*
Terphenyl-d14	*86*		*44 - 149*	*09/07/23 15:48*	*09/12/23 18:47*	*1*
2,4,6-Tribromophenol	*72*		*26 - 150*	*09/07/23 15:48*	*09/12/23 18:47*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.032	0.018	ug/L		09/06/23 12:59	09/06/23 22:41	1
1,2-D bromoethane	ND		0.021	0.016	ug/L		09/06/23 12:59	09/06/23 22:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*51 - 149*	*09/06/23 12:59*	*09/06/23 22:41*	*1*

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

Job ID: 400-242836-1

Client Sample ID: P114R-ROX-083123
Date Collected: 08/31/23 12:35
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-4
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			09/10/23 16:55	1
Acrolein	ND		20	3.3	ug/L			09/10/23 16:55	1
Acrylonitrile	ND		10	2.8	ug/L			09/10/23 16:55	1
Benzene	ND		1.0	0.50	ug/L			09/10/23 16:55	1
Bromobenzene	ND		1.0	0.54	ug/L			09/10/23 16:55	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/10/23 16:55	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/10/23 16:55	1
Bromoform	ND		5.0	0.25	ug/L			09/10/23 16:55	1
Bromomethane	ND		1.0	0.98	ug/L			09/10/23 16:55	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/10/23 16:55	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/10/23 16:55	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/10/23 16:55	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/10/23 16:55	1
Chloroethane	ND		1.0	0.76	ug/L			09/10/23 16:55	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/10/23 16:55	1
Chloroform	ND		1.0	0.90	ug/L			09/10/23 16:55	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/10/23 16:55	1
Chloromethane	ND		1.0	0.90	ug/L			09/10/23 16:55	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/10/23 16:55	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/10/23 16:55	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/10/23 16:55	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/10/23 16:55	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/10/23 16:55	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/10/23 16:55	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/10/23 16:55	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/10/23 16:55	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/10/23 16:55	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 16:55	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 16:55	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 16:55	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 16:55	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/10/23 16:55	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/10/23 16:55	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/10/23 16:55	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/10/23 16:55	1
2-Hexanone	ND		25	1.4	ug/L			09/10/23 16:55	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/10/23 16:55	1
Methylene bromide	ND		5.0	0.22	ug/L			09/10/23 16:55	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/10/23 16:55	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/10/23 16:55	1
Methyl tert-butyl ether	**2.2**		1.0	0.22	ug/L			09/10/23 16:55	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/10/23 16:55	1
Naphthalene	ND		5.0	3.0	ug/L			09/10/23 16:55	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/10/23 16:55	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/10/23 16:55	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/10/23 16:55	1
o-Xylene	ND		5.0	0.60	ug/L			09/10/23 16:55	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/10/23 16:55	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/10/23 16:55	1

Client Sample ID: P114R-ROX-083123

Date Collected: 08/31/23 12:35
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-4

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			09/10/23 16:55	1
Styrene	ND		1.0	1.0	ug/L			09/10/23 16:55	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/10/23 16:55	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/10/23 16:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/10/23 16:55	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/10/23 16:55	1
Toluene	ND		1.0	0.90	ug/L			09/10/23 16:55	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 16:55	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/10/23 16:55	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/10/23 16:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/10/23 16:55	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/10/23 16:55	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/10/23 16:55	1
Trichloroethene	ND		1.0	0.15	ug/L			09/10/23 16:55	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/10/23 16:55	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/10/23 16:55	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/10/23 16:55	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/10/23 16:55	1
Vinyl acetate	ND		25	0.93	ug/L			09/10/23 16:55	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/10/23 16:55	1
Xylenes, Total	ND		10	1.6	ug/L			09/10/23 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*72 - 130*		*09/10/23 16:55*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*09/10/23 16:55*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*09/10/23 16:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.85**		0.20	0.097	ug/L		09/07/23 15:48	09/12/23 17:24	1
Acenaphthylene	**0.18**	**J**	0.20	0.043	ug/L		09/07/23 15:48	09/12/23 17:24	1
Anthracene	ND		0.20	0.046	ug/L		09/07/23 15:48	09/12/23 17:24	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		09/07/23 15:48	09/12/23 17:24	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		09/07/23 15:48	09/12/23 17:24	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		09/07/23 15:48	09/12/23 17:24	1
Benzo[g,h,i]perylene	ND		0.20	0.026	ug/L		09/07/23 15:48	09/12/23 17:24	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		09/07/23 15:48	09/12/23 17:24	1
Chrysene	ND		0.20	0.032	ug/L		09/07/23 15:48	09/12/23 17:24	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		09/07/23 15:48	09/12/23 17:24	1
Fluoranthene	ND		0.20	0.033	ug/L		09/07/23 15:48	09/12/23 17:24	1
Fluorene	ND		0.20	0.087	ug/L		09/07/23 15:48	09/12/23 17:24	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		09/07/23 15:48	09/12/23 17:24	1
Phenanthrene	ND		0.20	0.088	ug/L		09/07/23 15:48	09/12/23 17:24	1
Pyrene	ND		0.20	0.038	ug/L		09/07/23 15:48	09/12/23 17:24	1
1-Methylnaphthalene	ND		0.98	0.39	ug/L		09/07/23 15:48	09/15/23 12:19	5
2-Methylnaphthalene	ND		0.98	0.32	ug/L		09/07/23 15:48	09/15/23 12:19	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*57*		*18 - 147*	*09/07/23 15:48*	*09/12/23 17:24*	*1*
2-Fluorobiphenyl	*53*		*15 - 128*	*09/07/23 15:48*	*09/12/23 17:24*	*1*

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

Job ID: 400-242836-1

Client Sample ID: P114R-ROX-083123
Date Collected: 08/31/23 12:35
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*53*		*10 - 144*	*09/07/23 15:48*	*09/15/23 12:19*	*5*

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		09/07/23 15:48	09/12/23 19:08	1
Benzenethiol	ND	*-	9.8	1.7	ug/L		09/07/23 15:48	09/12/23 19:08	1
Benzoic acid	ND		29	7.1	ug/L		09/07/23 15:48	09/12/23 19:08	1
Benzyl alcohol	ND		9.8	2.0	ug/L		09/07/23 15:48	09/12/23 19:08	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		09/07/23 15:48	09/12/23 19:08	1
Bis(2-chloroethyl)ether	ND		9.8	2.6	ug/L		09/07/23 15:48	09/12/23 19:08	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		09/07/23 15:48	09/12/23 19:08	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		09/07/23 15:48	09/12/23 19:08	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		09/07/23 15:48	09/12/23 19:08	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		09/07/23 15:48	09/12/23 19:08	1
4-Chloroaniline	ND		9.8	3.3	ug/L		09/07/23 15:48	09/12/23 19:08	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		09/07/23 15:48	09/12/23 19:08	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		09/07/23 15:48	09/12/23 19:08	1
2-Chlorophenol	ND		9.8	2.1	ug/L		09/07/23 15:48	09/12/23 19:08	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		09/07/23 15:48	09/12/23 19:08	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		09/07/23 15:48	09/12/23 19:08	1
Dibenzofuran	ND		9.8	0.17	ug/L		09/07/23 15:48	09/12/23 19:08	1
3,3'-Dichlorobenzidine	ND		9.8	2.5	ug/L		09/07/23 15:48	09/12/23 19:08	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		09/07/23 15:48	09/12/23 19:08	1
Diethyl phthalate	ND		9.8	0.23	ug/L		09/07/23 15:48	09/12/23 19:08	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		09/07/23 15:48	09/12/23 19:08	1
Dimethyl phthalate	ND		9.8	0.17	ug/L		09/07/23 15:48	09/13/23 23:17	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		09/07/23 15:48	09/12/23 19:08	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		09/07/23 15:48	09/12/23 19:08	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/07/23 15:48	09/12/23 19:08	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		09/07/23 15:48	09/12/23 19:08	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		09/07/23 15:48	09/12/23 19:08	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		09/07/23 15:48	09/12/23 19:08	1
1,4-Dioxane	ND		9.8	0.98	ug/L		09/07/23 15:48	09/12/23 19:08	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		09/07/23 15:48	09/12/23 19:08	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		09/07/23 15:48	09/12/23 19:08	1
Hexachlorocyclopentadiene	ND		20	2.5	ug/L		09/07/23 15:48	09/12/23 19:08	1
Hexachloroethane	ND		9.8	4.1	ug/L		09/07/23 15:48	09/12/23 19:08	1
Indene	ND		9.8	0.98	ug/L		09/07/23 15:48	09/12/23 19:08	1
Isophorone	ND		9.8	0.14	ug/L		09/07/23 15:48	09/12/23 19:08	1
2-Methylphenol	ND		9.8	1.8	ug/L		09/07/23 15:48	09/12/23 19:08	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		09/07/23 15:48	09/12/23 19:08	1
2-Nitroaniline	ND		9.8	2.1	ug/L		09/07/23 15:48	09/12/23 19:08	1
3-Nitroaniline	ND		9.8	1.8	ug/L		09/07/23 15:48	09/12/23 19:08	1
4-Nitroaniline	ND		9.8	1.5	ug/L		09/07/23 15:48	09/12/23 19:08	1
Nitrobenzene	ND		9.8	0.13	ug/L		09/07/23 15:48	09/12/23 19:08	1
2-Nitrophenol	ND		9.8	5.1	ug/L		09/07/23 15:48	09/12/23 19:08	1
4-Nitrophenol	ND		9.8	2.1	ug/L		09/07/23 15:48	09/12/23 19:08	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		09/07/23 15:48	09/12/23 19:08	1

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

Job ID: 400-242836-1

Client Sample ID: P114R-ROX-083123
Date Collected: 08/31/23 12:35
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-4
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	3.2	ug/L		09/07/23 15:48	09/12/23 19:08	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		09/07/23 15:48	09/12/23 19:08	1
Pentachlorophenol	ND		20	1.4	ug/L		09/07/23 15:48	09/12/23 19:08	1
Phenol	ND		9.8	2.5	ug/L		09/07/23 15:48	09/12/23 19:08	1
Pyridine	ND		9.8	3.1	ug/L		09/07/23 15:48	09/12/23 19:08	1
Quinoline	ND		9.8	4.4	ug/L		09/07/23 15:48	09/12/23 19:08	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		09/07/23 15:48	09/12/23 19:08	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		09/07/23 15:48	09/12/23 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*46 - 124*	*09/07/23 15:48*	*09/12/23 19:08*	*1*
2-Fluorophenol	*52*		*13 - 113*	*09/07/23 15:48*	*09/12/23 19:08*	*1*
Nitrobenzene-d5	*61*		*36 - 126*	*09/07/23 15:48*	*09/12/23 19:08*	*1*
Phenol-d5	*60*		*17 - 127*	*09/07/23 15:48*	*09/12/23 19:08*	*1*
Terphenyl-d14	*86*		*44 - 149*	*09/07/23 15:48*	*09/12/23 19:08*	*1*
2,4,6-Tribromophenol	*80*		*26 - 150*	*09/07/23 15:48*	*09/12/23 19:08*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/06/23 12:59	09/06/23 23:21	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/06/23 12:59	09/06/23 23:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*51 - 149*	*09/06/23 12:59*	*09/06/23 23:21*	*1*

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

Job ID: 400-242836-1

Client Sample ID: MW13-ROX-083123
Date Collected: 08/31/23 13:30
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-5
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			09/10/23 17:20	1
Acrolein	ND		20	3.3	ug/L			09/10/23 17:20	1
Acrylonitrile	ND		10	2.8	ug/L			09/10/23 17:20	1
Benzene	ND		1.0	0.50	ug/L			09/10/23 17:20	1
Bromobenzene	ND		1.0	0.54	ug/L			09/10/23 17:20	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/10/23 17:20	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/10/23 17:20	1
Bromoform	ND		5.0	0.25	ug/L			09/10/23 17:20	1
Bromomethane	ND		1.0	0.98	ug/L			09/10/23 17:20	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/10/23 17:20	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/10/23 17:20	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/10/23 17:20	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/10/23 17:20	1
Chloroethane	ND		1.0	0.76	ug/L			09/10/23 17:20	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/10/23 17:20	1
Chloroform	ND		1.0	0.90	ug/L			09/10/23 17:20	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/10/23 17:20	1
Chloromethane	ND		1.0	0.90	ug/L			09/10/23 17:20	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/10/23 17:20	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/10/23 17:20	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/10/23 17:20	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/10/23 17:20	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/10/23 17:20	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/10/23 17:20	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/10/23 17:20	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/10/23 17:20	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/10/23 17:20	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 17:20	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 17:20	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 17:20	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 17:20	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/10/23 17:20	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/10/23 17:20	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/10/23 17:20	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/10/23 17:20	1
2-Hexanone	ND		25	1.4	ug/L			09/10/23 17:20	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/10/23 17:20	1
Methylene bromide	ND		5.0	0.22	ug/L			09/10/23 17:20	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/10/23 17:20	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/10/23 17:20	1
Methyl tert-butyl ether	**1.4**		1.0	0.22	ug/L			09/10/23 17:20	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/10/23 17:20	1
Naphthalene	ND		5.0	3.0	ug/L			09/10/23 17:20	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/10/23 17:20	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/10/23 17:20	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/10/23 17:20	1
o-Xylene	ND		5.0	0.60	ug/L			09/10/23 17:20	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/10/23 17:20	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/10/23 17:20	1

Client Sample ID: MW13-ROX-083123
Date Collected: 08/31/23 13:30
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-5
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			09/10/23 17:20	1
Styrene	ND		1.0	1.0	ug/L			09/10/23 17:20	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/10/23 17:20	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/10/23 17:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/10/23 17:20	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/10/23 17:20	1
Toluene	ND		1.0	0.90	ug/L			09/10/23 17:20	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 17:20	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/10/23 17:20	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/10/23 17:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/10/23 17:20	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/10/23 17:20	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/10/23 17:20	1
Trichloroethene	ND		1.0	0.15	ug/L			09/10/23 17:20	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/10/23 17:20	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/10/23 17:20	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/10/23 17:20	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/10/23 17:20	1
Vinyl acetate	ND		25	0.93	ug/L			09/10/23 17:20	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/10/23 17:20	1
Xylenes, Total	ND		10	1.6	ug/L			09/10/23 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*72 - 130*		*09/10/23 17:20*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*09/10/23 17:20*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/10/23 17:20*	*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		09/07/23 15:48	09/12/23 17:45	1
Acenaphthylene	ND		0.20	0.043	ug/L		09/07/23 15:48	09/12/23 17:45	1
Anthracene	ND		0.20	0.046	ug/L		09/07/23 15:48	09/12/23 17:45	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		09/07/23 15:48	09/12/23 17:45	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		09/07/23 15:48	09/12/23 17:45	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		09/07/23 15:48	09/12/23 17:45	1
Benzo[g,h,i]perylene	ND		0.20	0.026	ug/L		09/07/23 15:48	09/12/23 17:45	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		09/07/23 15:48	09/12/23 17:45	1
Chrysene	ND		0.20	0.032	ug/L		09/07/23 15:48	09/12/23 17:45	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		09/07/23 15:48	09/12/23 17:45	1
Fluoranthene	ND		0.20	0.033	ug/L		09/07/23 15:48	09/12/23 17:45	1
Fluorene	ND		0.20	0.087	ug/L		09/07/23 15:48	09/12/23 17:45	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		09/07/23 15:48	09/12/23 17:45	1
Phenanthrene	ND		0.20	0.088	ug/L		09/07/23 15:48	09/12/23 17:45	1
Pyrene	ND		0.20	0.038	ug/L		09/07/23 15:48	09/12/23 17:45	1
1-Methylnaphthalene	ND		0.20	0.078	ug/L		09/07/23 15:48	09/12/23 17:45	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		09/07/23 15:48	09/12/23 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*75*		*18 - 147*	*09/07/23 15:48*	*09/12/23 17:45*	*1*
2-Fluorobiphenyl	*44*		*15 - 128*	*09/07/23 15:48*	*09/12/23 17:45*	*1*

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

Job ID: 400-242836-1

Client Sample ID: MW13-ROX-083123
Date Collected: 08/31/23 13:30
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	87		10 - 144	09/07/23 15:48	09/12/23 17:45	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		09/07/23 15:48	09/12/23 19:29	1
Benzenethiol	ND	*-	9.8	1.7	ug/L		09/07/23 15:48	09/12/23 19:29	1
Benzoic acid	**18**	**J**	29	7.2	ug/L		09/07/23 15:48	09/12/23 19:29	1
Benzyl alcohol	ND		9.8	2.0	ug/L		09/07/23 15:48	09/12/23 19:29	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		09/07/23 15:48	09/12/23 19:29	1
Bis(2-chloroethyl)ether	ND		9.8	2.6	ug/L		09/07/23 15:48	09/12/23 19:29	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		09/07/23 15:48	09/12/23 19:29	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		09/07/23 15:48	09/12/23 19:29	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		09/07/23 15:48	09/12/23 19:29	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		09/07/23 15:48	09/12/23 19:29	1
4-Chloroaniline	ND		9.8	3.3	ug/L		09/07/23 15:48	09/12/23 19:29	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		09/07/23 15:48	09/12/23 19:29	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		09/07/23 15:48	09/12/23 19:29	1
2-Chlorophenol	ND		9.8	2.2	ug/L		09/07/23 15:48	09/12/23 19:29	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		09/07/23 15:48	09/12/23 19:29	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		09/07/23 15:48	09/12/23 19:29	1
Dibenzofuran	ND		9.8	0.17	ug/L		09/07/23 15:48	09/12/23 19:29	1
3,3'-Dichlorobenzidine	ND		9.8	2.6	ug/L		09/07/23 15:48	09/12/23 19:29	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		09/07/23 15:48	09/12/23 19:29	1
Diethyl phthalate	ND		9.8	0.24	ug/L		09/07/23 15:48	09/12/23 19:29	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		09/07/23 15:48	09/12/23 19:29	1
Dimethyl phthalate	**0.81**	**J B**	9.8	0.17	ug/L		09/07/23 15:48	09/12/23 19:29	1
Di-n-butyl phthalate	**7.5**	**J**	9.8	2.6	ug/L		09/07/23 15:48	09/12/23 19:29	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		09/07/23 15:48	09/12/23 19:29	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/07/23 15:48	09/12/23 19:29	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		09/07/23 15:48	09/12/23 19:29	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		09/07/23 15:48	09/12/23 19:29	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		09/07/23 15:48	09/12/23 19:29	1
1,4-Dioxane	ND		9.8	0.98	ug/L		09/07/23 15:48	09/12/23 19:29	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		09/07/23 15:48	09/12/23 19:29	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		09/07/23 15:48	09/12/23 19:29	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/07/23 15:48	09/12/23 19:29	1
Hexachloroethane	ND		9.8	4.1	ug/L		09/07/23 15:48	09/12/23 19:29	1
Indene	ND		9.8	0.98	ug/L		09/07/23 15:48	09/12/23 19:29	1
Isophorone	ND		9.8	0.14	ug/L		09/07/23 15:48	09/12/23 19:29	1
2-Methylphenol	ND		9.8	1.8	ug/L		09/07/23 15:48	09/12/23 19:29	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		09/07/23 15:48	09/12/23 19:29	1
2-Nitroaniline	ND		9.8	2.2	ug/L		09/07/23 15:48	09/12/23 19:29	1
3-Nitroaniline	ND		9.8	1.8	ug/L		09/07/23 15:48	09/12/23 19:29	1
4-Nitroaniline	ND		9.8	1.5	ug/L		09/07/23 15:48	09/12/23 19:29	1
Nitrobenzene	ND		9.8	0.13	ug/L		09/07/23 15:48	09/12/23 19:29	1
2-Nitrophenol	ND		9.8	5.1	ug/L		09/07/23 15:48	09/12/23 19:29	1
4-Nitrophenol	ND		9.8	2.1	ug/L		09/07/23 15:48	09/12/23 19:29	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		09/07/23 15:48	09/12/23 19:29	1

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

Job ID: 400-242836-1

Client Sample ID: MW13-ROX-083123
Date Collected: 08/31/23 13:30
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-5
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		9.8	3.2	ug/L		09/07/23 15:48	09/12/23 19:29	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		09/07/23 15:48	09/12/23 19:29	1
Pentachlorophenol	ND		20	1.4	ug/L		09/07/23 15:48	09/12/23 19:29	1
Phenol	ND		9.8	2.6	ug/L		09/07/23 15:48	09/12/23 19:29	1
Pyridine	ND		9.8	3.1	ug/L		09/07/23 15:48	09/12/23 19:29	1
Quinoline	ND		9.8	4.4	ug/L		09/07/23 15:48	09/12/23 19:29	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		09/07/23 15:48	09/12/23 19:29	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		09/07/23 15:48	09/12/23 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*91*		*46 - 124*	*09/07/23 15:48*	*09/12/23 19:29*	*1*
2-Fluorophenol	*56*		*13 - 113*	*09/07/23 15:48*	*09/12/23 19:29*	*1*
Nitrobenzene-d5	*80*		*36 - 126*	*09/07/23 15:48*	*09/12/23 19:29*	*1*
Phenol-d5	*73*		*17 - 127*	*09/07/23 15:48*	*09/12/23 19:29*	*1*
Terphenyl-d14	*109*		*44 - 149*	*09/07/23 15:48*	*09/12/23 19:29*	*1*
2,4,6-Tribromophenol	*95*		*26 - 150*	*09/07/23 15:48*	*09/12/23 19:29*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.029	0.017	ug/L		09/06/23 12:59	09/06/23 23:42	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/06/23 12:59	09/06/23 23:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*51 - 149*	*09/06/23 12:59*	*09/06/23 23:42*	*1*

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

Job ID: 400-242836-1

Client Sample ID: TB-ROX-083123-8260-B
Date Collected: 08/31/23 12:00
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-6
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			09/10/23 17:44	1
Acrolein	ND		20	3.3	ug/L			09/10/23 17:44	1
Acrylonitrile	ND		10	2.8	ug/L			09/10/23 17:44	1
Benzene	ND		1.0	0.50	ug/L			09/10/23 17:44	1
Bromobenzene	ND		1.0	0.54	ug/L			09/10/23 17:44	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/10/23 17:44	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/10/23 17:44	1
Bromoform	ND		5.0	0.25	ug/L			09/10/23 17:44	1
Bromomethane	ND		1.0	0.98	ug/L			09/10/23 17:44	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/10/23 17:44	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/10/23 17:44	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/10/23 17:44	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/10/23 17:44	1
Chloroethane	ND		1.0	0.76	ug/L			09/10/23 17:44	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/10/23 17:44	1
Chloroform	ND		1.0	0.90	ug/L			09/10/23 17:44	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/10/23 17:44	1
Chloromethane	ND		1.0	0.90	ug/L			09/10/23 17:44	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/10/23 17:44	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/10/23 17:44	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/10/23 17:44	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/10/23 17:44	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/10/23 17:44	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/10/23 17:44	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/10/23 17:44	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/10/23 17:44	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/10/23 17:44	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 17:44	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 17:44	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 17:44	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 17:44	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/10/23 17:44	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/10/23 17:44	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/10/23 17:44	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/10/23 17:44	1
2-Hexanone	ND		25	1.4	ug/L			09/10/23 17:44	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/10/23 17:44	1
Methylene bromide	ND		5.0	0.22	ug/L			09/10/23 17:44	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/10/23 17:44	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/10/23 17:44	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/10/23 17:44	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/10/23 17:44	1
Naphthalene	ND		5.0	3.0	ug/L			09/10/23 17:44	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/10/23 17:44	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/10/23 17:44	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/10/23 17:44	1
o-Xylene	ND		5.0	0.60	ug/L			09/10/23 17:44	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/10/23 17:44	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/10/23 17:44	1

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

Job ID: 400-242836-1

Client Sample ID: TB-ROX-083123-8260-B
Date Collected: 08/31/23 12:00
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-6
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			09/10/23 17:44	1
Styrene	ND		1.0	1.0	ug/L			09/10/23 17:44	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/10/23 17:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/10/23 17:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/10/23 17:44	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/10/23 17:44	1
Toluene	ND		1.0	0.90	ug/L			09/10/23 17:44	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 17:44	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/10/23 17:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/10/23 17:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/10/23 17:44	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/10/23 17:44	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/10/23 17:44	1
Trichloroethene	ND		1.0	0.15	ug/L			09/10/23 17:44	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/10/23 17:44	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/10/23 17:44	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/10/23 17:44	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/10/23 17:44	1
Vinyl acetate	ND		25	0.93	ug/L			09/10/23 17:44	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/10/23 17:44	1
Xylenes, Total	ND		10	1.6	ug/L			09/10/23 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*72 - 130*		*09/10/23 17:44*	*1*
Dibromofluoromethane	*95*		*75 - 126*		*09/10/23 17:44*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/10/23 17:44*	*1*

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

Job ID: 400-242836-1

Client Sample ID: TB-ROX-083123-8011-B
Date Collected: 08/31/23 12:00
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-7
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-D bromo-3-Chloropropane	ND		0.029	0.017	ug/L		09/06/23 12:59	09/07/23 00:02	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/06/23 12:59	09/07/23 00:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*51 - 149*	*09/06/23 12:59*	*09/07/23 00:02*	*1*

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

Job ID: 400-242836-1

Client Sample ID: P93C-ROX-083123
Date Collected: 08/31/23 09:40
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-8
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			09/10/23 18:09	1
Acrolein	ND		20	3.3	ug/L			09/10/23 18:09	1
Acrylonitrile	ND		10	2.8	ug/L			09/10/23 18:09	1
Benzene	**47**		1.0	0.50	ug/L			09/10/23 18:09	1
Bromobenzene	ND		1.0	0.54	ug/L			09/10/23 18:09	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/10/23 18:09	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/10/23 18:09	1
Bromoform	ND		5.0	0.25	ug/L			09/10/23 18:09	1
Bromomethane	ND		1.0	0.98	ug/L			09/10/23 18:09	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/10/23 18:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/10/23 18:09	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/10/23 18:09	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/10/23 18:09	1
Chloroethane	ND		1.0	0.76	ug/L			09/10/23 18:09	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/10/23 18:09	1
Chloroform	ND		1.0	0.90	ug/L			09/10/23 18:09	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/10/23 18:09	1
Chloromethane	ND		1.0	0.90	ug/L			09/10/23 18:09	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/10/23 18:09	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/10/23 18:09	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/10/23 18:09	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/10/23 18:09	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/10/23 18:09	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/10/23 18:09	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/10/23 18:09	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/10/23 18:09	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/10/23 18:09	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 18:09	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 18:09	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 18:09	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 18:09	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/10/23 18:09	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/10/23 18:09	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/10/23 18:09	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/10/23 18:09	1
2-Hexanone	ND		25	1.4	ug/L			09/10/23 18:09	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/10/23 18:09	1
Methylene bromide	ND		5.0	0.22	ug/L			09/10/23 18:09	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/10/23 18:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/10/23 18:09	1
Methyl tert-butyl ether	**3.0**		1.0	0.22	ug/L			09/10/23 18:09	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/10/23 18:09	1
Naphthalene	ND		5.0	3.0	ug/L			09/10/23 18:09	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/10/23 18:09	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/10/23 18:09	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/10/23 18:09	1
o-Xylene	ND		5.0	0.60	ug/L			09/10/23 18:09	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/10/23 18:09	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/10/23 18:09	1

Client Sample ID: P93C-ROX-083123
Date Collected: 08/31/23 09:40
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-8
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			09/10/23 18:09	1
Styrene	ND		1.0	1.0	ug/L			09/10/23 18:09	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/10/23 18:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/10/23 18:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/10/23 18:09	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/10/23 18:09	1
Toluene	ND		1.0	0.90	ug/L			09/10/23 18:09	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 18:09	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/10/23 18:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/10/23 18:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/10/23 18:09	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/10/23 18:09	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/10/23 18:09	1
Trichloroethene	ND		1.0	0.15	ug/L			09/10/23 18:09	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/10/23 18:09	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/10/23 18:09	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/10/23 18:09	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/10/23 18:09	1
Vinyl acetate	ND		25	0.93	ug/L			09/10/23 18:09	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/10/23 18:09	1
Xylenes, Total	ND		10	1.6	ug/L			09/10/23 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*72 - 130*		*09/10/23 18:09*	*1*
Dibromofluoromethane	*96*		*75 - 126*		*09/10/23 18:09*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/10/23 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	0.095	ug/L		09/07/23 15:48	09/12/23 18:06	1
Acenaphthylene	ND		0.19	0.042	ug/L		09/07/23 15:48	09/12/23 18:06	1
Anthracene	ND		0.19	0.045	ug/L		09/07/23 15:48	09/12/23 18:06	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		09/07/23 15:48	09/12/23 18:06	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		09/07/23 15:48	09/12/23 18:06	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		09/07/23 15:48	09/12/23 18:06	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/07/23 15:48	09/12/23 18:06	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		09/07/23 15:48	09/12/23 18:06	1
Chrysene	ND		0.19	0.032	ug/L		09/07/23 15:48	09/12/23 18:06	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		09/07/23 15:48	09/12/23 18:06	1
Fluoranthene	ND		0.19	0.033	ug/L		09/07/23 15:48	09/12/23 18:06	1
Fluorene	ND		0.19	0.085	ug/L		09/07/23 15:48	09/12/23 18:06	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		09/07/23 15:48	09/12/23 18:06	1
Phenanthrene	ND		0.19	0.086	ug/L		09/07/23 15:48	09/12/23 18:06	1
Pyrene	ND		0.19	0.037	ug/L		09/07/23 15:48	09/12/23 18:06	1
1-Methylnaphthalene	ND		0.19	0.077	ug/L		09/07/23 15:48	09/12/23 18:06	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		09/07/23 15:48	09/12/23 18:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*66*		*18 - 147*	*09/07/23 15:48*	*09/12/23 18:06*	*1*
2-Fluorobiphenyl	*57*		*15 - 128*	*09/07/23 15:48*	*09/12/23 18:06*	*1*

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

Job ID: 400-242836-1

Client Sample ID: P93C-ROX-083123
Date Collected: 08/31/23 09:40
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-8
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*	*09/07/23 15:48*	*09/12/23 18:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		09/07/23 15:48	09/12/23 19:50	1
Benzenethiol	ND	*-	9.6	1.6	ug/L		09/07/23 15:48	09/12/23 19:50	1
Benzoic acid	ND		29	7.0	ug/L		09/07/23 15:48	09/12/23 19:50	1
Benzyl alcohol	ND		9.6	1.9	ug/L		09/07/23 15:48	09/12/23 19:50	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		09/07/23 15:48	09/12/23 19:50	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		09/07/23 15:48	09/12/23 19:50	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		09/07/23 15:48	09/12/23 19:50	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		09/07/23 15:48	09/12/23 19:50	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		09/07/23 15:48	09/12/23 19:50	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		09/07/23 15:48	09/12/23 19:50	1
4-Chloroaniline	ND		9.6	3.3	ug/L		09/07/23 15:48	09/12/23 19:50	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		09/07/23 15:48	09/12/23 19:50	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		09/07/23 15:48	09/12/23 19:50	1
2-Chlorophenol	ND		9.6	2.1	ug/L		09/07/23 15:48	09/12/23 19:50	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		09/07/23 15:48	09/12/23 19:50	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		09/07/23 15:48	09/12/23 19:50	1
Dibenzofuran	ND		9.6	0.16	ug/L		09/07/23 15:48	09/12/23 19:50	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		09/07/23 15:48	09/12/23 19:50	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		09/07/23 15:48	09/12/23 19:50	1
Diethyl phthalate	**0.41**	**J**	9.6	0.23	ug/L		09/07/23 15:48	09/12/23 19:50	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		09/07/23 15:48	09/12/23 19:50	1
Dimethyl phthalate	**0.66**	**J B**	9.6	0.16	ug/L		09/07/23 15:48	09/13/23 23:41	1
Di-n-butyl phthalate	**7.5**	**J**	9.6	2.6	ug/L		09/07/23 15:48	09/12/23 19:50	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		09/07/23 15:48	09/12/23 19:50	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/07/23 15:48	09/12/23 19:50	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		09/07/23 15:48	09/12/23 19:50	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		09/07/23 15:48	09/12/23 19:50	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		09/07/23 15:48	09/12/23 19:50	1
1,4-Dioxane	ND		9.6	0.96	ug/L		09/07/23 15:48	09/12/23 19:50	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		09/07/23 15:48	09/12/23 19:50	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		09/07/23 15:48	09/12/23 19:50	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/07/23 15:48	09/12/23 19:50	1
Hexachloroethane	ND		9.6	4.0	ug/L		09/07/23 15:48	09/12/23 19:50	1
Indene	ND		9.6	0.96	ug/L		09/07/23 15:48	09/12/23 19:50	1
Isophorone	ND		9.6	0.13	ug/L		09/07/23 15:48	09/12/23 19:50	1
2-Methylphenol	ND		9.6	1.7	ug/L		09/07/23 15:48	09/12/23 19:50	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/07/23 15:48	09/12/23 19:50	1
2-Nitroaniline	ND		9.6	2.1	ug/L		09/07/23 15:48	09/12/23 19:50	1
3-Nitroaniline	ND		9.6	1.7	ug/L		09/07/23 15:48	09/12/23 19:50	1
4-Nitroaniline	ND		9.6	1.4	ug/L		09/07/23 15:48	09/12/23 19:50	1
Nitrobenzene	ND		9.6	0.12	ug/L		09/07/23 15:48	09/12/23 19:50	1
2-Nitrophenol	ND		9.6	5.0	ug/L		09/07/23 15:48	09/12/23 19:50	1
4-Nitrophenol	ND		9.6	2.0	ug/L		09/07/23 15:48	09/12/23 19:50	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		09/07/23 15:48	09/12/23 19:50	1

Client Sample ID: P93C-ROX-083123

Date Collected: 08/31/23 09:40
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-8

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		9.6	3.2	ug/L		09/07/23 15:48	09/12/23 19:50	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		09/07/23 15:48	09/12/23 19:50	1
Pentachlorophenol	ND		19	1.3	ug/L		09/07/23 15:48	09/12/23 19:50	1
Phenol	ND		9.6	2.5	ug/L		09/07/23 15:48	09/12/23 19:50	1
Pyridine	ND		9.6	3.1	ug/L		09/07/23 15:48	09/12/23 19:50	1
Quinoline	ND		9.6	4.3	ug/L		09/07/23 15:48	09/12/23 19:50	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		09/07/23 15:48	09/12/23 19:50	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		09/07/23 15:48	09/12/23 19:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*46 - 124*	*09/07/23 15:48*	*09/12/23 19:50*	*1*
2-Fluorophenol	*49*		*13 - 113*	*09/07/23 15:48*	*09/12/23 19:50*	*1*
Nitrobenzene-d5	*65*		*36 - 126*	*09/07/23 15:48*	*09/12/23 19:50*	*1*
Phenol-d5	*63*		*17 - 127*	*09/07/23 15:48*	*09/12/23 19:50*	*1*
Terphenyl-d14	*89*		*44 - 149*	*09/07/23 15:48*	*09/12/23 19:50*	*1*
2,4,6-Tribromophenol	*73*		*26 - 150*	*09/07/23 15:48*	*09/12/23 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-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/06/23 12:59	09/07/23 00:22	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/06/23 12:59	09/07/23 00:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*72*		*51 - 149*	*09/06/23 12:59*	*09/07/23 00:22*	*1*

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

Job ID: 400-242836-1

Client Sample ID: P93C-ROX-083123-DUP

Date Collected: 08/31/23 09:40
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-9

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			09/10/23 18:33	1
Acrolein	ND		20	3.3	ug/L			09/10/23 18:33	1
Acrylonitrile	ND		10	2.8	ug/L			09/10/23 18:33	1
Benzene	**42**		1.0	0.50	ug/L			09/10/23 18:33	1
Bromobenzene	ND		1.0	0.54	ug/L			09/10/23 18:33	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/10/23 18:33	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/10/23 18:33	1
Bromoform	ND		5.0	0.25	ug/L			09/10/23 18:33	1
Bromomethane	ND		1.0	0.98	ug/L			09/10/23 18:33	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/10/23 18:33	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/10/23 18:33	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/10/23 18:33	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/10/23 18:33	1
Chloroethane	ND		1.0	0.76	ug/L			09/10/23 18:33	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/10/23 18:33	1
Chloroform	ND		1.0	0.90	ug/L			09/10/23 18:33	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/10/23 18:33	1
Chloromethane	ND		1.0	0.90	ug/L			09/10/23 18:33	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/10/23 18:33	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/10/23 18:33	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/10/23 18:33	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/10/23 18:33	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/10/23 18:33	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/10/23 18:33	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/10/23 18:33	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/10/23 18:33	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/10/23 18:33	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 18:33	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 18:33	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 18:33	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 18:33	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/10/23 18:33	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/10/23 18:33	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/10/23 18:33	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/10/23 18:33	1
2-Hexanone	ND		25	1.4	ug/L			09/10/23 18:33	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/10/23 18:33	1
Methylene bromide	ND		5.0	0.22	ug/L			09/10/23 18:33	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/10/23 18:33	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/10/23 18:33	1
Methyl tert-butyl ether	**2.7**		1.0	0.22	ug/L			09/10/23 18:33	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/10/23 18:33	1
Naphthalene	ND		5.0	3.0	ug/L			09/10/23 18:33	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/10/23 18:33	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/10/23 18:33	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/10/23 18:33	1
o-Xylene	ND		5.0	0.60	ug/L			09/10/23 18:33	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/10/23 18:33	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/10/23 18:33	1

Client Sample ID: P93C-ROX-083123-DUP

Lab Sample ID: 400-242836-9

Date Collected: 08/31/23 09:40

Matrix: Water

Date Received: 09/01/23 09:18

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			09/10/23 18:33	1
Styrene	ND		1.0	1.0	ug/L			09/10/23 18:33	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/10/23 18:33	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/10/23 18:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/10/23 18:33	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/10/23 18:33	1
Toluene	ND		1.0	0.90	ug/L			09/10/23 18:33	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 18:33	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/10/23 18:33	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/10/23 18:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/10/23 18:33	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/10/23 18:33	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/10/23 18:33	1
Trichloroethene	ND		1.0	0.15	ug/L			09/10/23 18:33	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/10/23 18:33	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/10/23 18:33	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/10/23 18:33	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/10/23 18:33	1
Vinyl acetate	ND		25	0.93	ug/L			09/10/23 18:33	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/10/23 18:33	1
Xylenes, Total	ND		10	1.6	ug/L			09/10/23 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*72 - 130*		*09/10/23 18:33*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*09/10/23 18:33*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*09/10/23 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		0.19	0.094	ug/L		09/07/23 15:48	09/12/23 18:27	1
Acenaphthylene	ND		0.19	0.042	ug/L		09/07/23 15:48	09/12/23 18:27	1
Anthracene	ND		0.19	0.045	ug/L		09/07/23 15:48	09/12/23 18:27	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		09/07/23 15:48	09/12/23 18:27	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		09/07/23 15:48	09/12/23 18:27	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		09/07/23 15:48	09/12/23 18:27	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/07/23 15:48	09/12/23 18:27	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		09/07/23 15:48	09/12/23 18:27	1
Chrysene	ND		0.19	0.031	ug/L		09/07/23 15:48	09/12/23 18:27	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		09/07/23 15:48	09/12/23 18:27	1
Fluoranthene	ND		0.19	0.032	ug/L		09/07/23 15:48	09/12/23 18:27	1
Fluorene	ND		0.19	0.085	ug/L		09/07/23 15:48	09/12/23 18:27	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		09/07/23 15:48	09/12/23 18:27	1
Phenanthrene	ND		0.19	0.085	ug/L		09/07/23 15:48	09/12/23 18:27	1
Pyrene	ND		0.19	0.037	ug/L		09/07/23 15:48	09/12/23 18:27	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		09/07/23 15:48	09/12/23 18:27	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		09/07/23 15:48	09/12/23 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*68*		*18 - 147*	*09/07/23 15:48*	*09/12/23 18:27*	*1*
2-Fluorobiphenyl	*55*		*15 - 128*	*09/07/23 15:48*	*09/12/23 18:27*	*1*

Client Sample ID: P93C-ROX-083123-DUP

Lab Sample ID: 400-242836-9

Date Collected: 08/31/23 09:40

Matrix: Water

Date Received: 09/01/23 09:18

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*80*		*10 - 144*	*09/07/23 15:48*	*09/12/23 18:27*	*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		09/07/23 15:48	09/12/23 20:11	1
Benzenethiol	ND	*-	9.5	1.6	ug/L		09/07/23 15:48	09/12/23 20:11	1
Benzoic acid	ND		28	6.9	ug/L		09/07/23 15:48	09/12/23 20:11	1
Benzyl alcohol	ND		9.5	1.9	ug/L		09/07/23 15:48	09/12/23 20:11	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		09/07/23 15:48	09/12/23 20:11	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		09/07/23 15:48	09/12/23 20:11	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		09/07/23 15:48	09/12/23 20:11	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		09/07/23 15:48	09/12/23 20:11	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		09/07/23 15:48	09/12/23 20:11	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		09/07/23 15:48	09/12/23 20:11	1
4-Chloroaniline	ND		9.5	3.2	ug/L		09/07/23 15:48	09/12/23 20:11	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		09/07/23 15:48	09/12/23 20:11	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		09/07/23 15:48	09/12/23 20:11	1
2-Chlorophenol	ND		9.5	2.1	ug/L		09/07/23 15:48	09/12/23 20:11	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		09/07/23 15:48	09/12/23 20:11	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		09/07/23 15:48	09/12/23 20:11	1
Dibenzofuran	ND		9.5	0.16	ug/L		09/07/23 15:48	09/12/23 20:11	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		09/07/23 15:48	09/12/23 20:11	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		09/07/23 15:48	09/12/23 20:11	1
Diethyl phthalate	ND		9.5	0.23	ug/L		09/07/23 15:48	09/12/23 20:11	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		09/07/23 15:48	09/12/23 20:11	1
Dimethyl phthalate	**0.41**	**J B**	9.5	0.16	ug/L		09/07/23 15:48	09/14/23 00:06	1
Di-n-butyl phthalate	**3.9**	**J**	9.5	2.6	ug/L		09/07/23 15:48	09/12/23 20:11	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		09/07/23 15:48	09/12/23 20:11	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		09/07/23 15:48	09/12/23 20:11	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		09/07/23 15:48	09/12/23 20:11	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		09/07/23 15:48	09/12/23 20:11	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		09/07/23 15:48	09/12/23 20:11	1
1,4-Dioxane	ND		9.5	0.95	ug/L		09/07/23 15:48	09/12/23 20:11	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		09/07/23 15:48	09/12/23 20:11	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		09/07/23 15:48	09/12/23 20:11	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/07/23 15:48	09/12/23 20:11	1
Hexachloroethane	ND		9.5	4.0	ug/L		09/07/23 15:48	09/12/23 20:11	1
Indene	ND		9.5	0.95	ug/L		09/07/23 15:48	09/12/23 20:11	1
Isophorone	ND		9.5	0.13	ug/L		09/07/23 15:48	09/12/23 20:11	1
2-Methylphenol	ND		9.5	1.7	ug/L		09/07/23 15:48	09/12/23 20:11	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/07/23 15:48	09/12/23 20:11	1
2-Nitroaniline	ND		9.5	2.1	ug/L		09/07/23 15:48	09/12/23 20:11	1
3-Nitroaniline	ND		9.5	1.7	ug/L		09/07/23 15:48	09/12/23 20:11	1
4-Nitroaniline	ND		9.5	1.4	ug/L		09/07/23 15:48	09/12/23 20:11	1
Nitrobenzene	ND		9.5	0.12	ug/L		09/07/23 15:48	09/12/23 20:11	1
2-Nitrophenol	ND		9.5	4.9	ug/L		09/07/23 15:48	09/12/23 20:11	1
4-Nitrophenol	ND		9.5	2.0	ug/L		09/07/23 15:48	09/12/23 20:11	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		09/07/23 15:48	09/12/23 20:11	1

Client Sample ID: P93C-ROX-083123-DUP

Date Collected: 08/31/23 09:40
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-9

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	3.1	ug/L		09/07/23 15:48	09/12/23 20:11	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		09/07/23 15:48	09/12/23 20:11	1
Pentachlorophenol	ND		19	1.3	ug/L		09/07/23 15:48	09/12/23 20:11	1
Phenol	ND		9.5	2.5	ug/L		09/07/23 15:48	09/12/23 20:11	1
Pyridine	ND		9.5	3.0	ug/L		09/07/23 15:48	09/12/23 20:11	1
Quinoline	ND		9.5	4.3	ug/L		09/07/23 15:48	09/12/23 20:11	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		09/07/23 15:48	09/12/23 20:11	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		09/07/23 15:48	09/12/23 20:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*46 - 124*	*09/07/23 15:48*	*09/12/23 20:11*	*1*
2-Fluorophenol	*52*		*13 - 113*	*09/07/23 15:48*	*09/12/23 20:11*	*1*
Nitrobenzene-d5	*66*		*36 - 126*	*09/07/23 15:48*	*09/12/23 20:11*	*1*
Phenol-d5	*64*		*17 - 127*	*09/07/23 15:48*	*09/12/23 20:11*	*1*
Terphenyl-d14	*89*		*44 - 149*	*09/07/23 15:48*	*09/12/23 20:11*	*1*
2,4,6-Tribromophenol	*85*		*26 - 150*	*09/07/23 15:48*	*09/12/23 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-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/06/23 12:59	09/07/23 00:42	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/06/23 12:59	09/07/23 00:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*		*51 - 149*	*09/06/23 12:59*	*09/07/23 00:42*	*1*

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

Job ID: 400-242836-1

Client Sample ID: P57-ROX-083123
Date Collected: 08/31/23 12:00
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**13**	**J**	25	10	ug/L			09/10/23 18:58	1
Acrolein	ND		20	3.3	ug/L			09/10/23 18:58	1
Acrylonitrile	ND		10	2.8	ug/L			09/10/23 18:58	1
Benzene	**10**		1.0	0.50	ug/L			09/10/23 18:58	1
Bromobenzene	ND		1.0	0.54	ug/L			09/10/23 18:58	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/10/23 18:58	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/10/23 18:58	1
Bromoform	ND		5.0	0.25	ug/L			09/10/23 18:58	1
Bromomethane	ND		1.0	0.98	ug/L			09/10/23 18:58	1
2-Butanone (MEK)	**4.4**	**J**	25	2.6	ug/L			09/10/23 18:58	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/10/23 18:58	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/10/23 18:58	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/10/23 18:58	1
Chloroethane	ND		1.0	0.76	ug/L			09/10/23 18:58	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/10/23 18:58	1
Chloroform	ND		1.0	0.90	ug/L			09/10/23 18:58	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/10/23 18:58	1
Chloromethane	ND		1.0	0.90	ug/L			09/10/23 18:58	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/10/23 18:58	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/10/23 18:58	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/10/23 18:58	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/10/23 18:58	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/10/23 18:58	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/10/23 18:58	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/10/23 18:58	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/10/23 18:58	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/10/23 18:58	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 18:58	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 18:58	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 18:58	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 18:58	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/10/23 18:58	1
Ethylbenzene	**0.79**	**J**	1.0	0.50	ug/L			09/10/23 18:58	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/10/23 18:58	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/10/23 18:58	1
2-Hexanone	ND		25	1.4	ug/L			09/10/23 18:58	1
Isopropylbenzene	**25**		1.0	0.53	ug/L			09/10/23 18:58	1
Methylene bromide	ND		5.0	0.22	ug/L			09/10/23 18:58	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/10/23 18:58	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/10/23 18:58	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/10/23 18:58	1
m-Xylene & p-Xylene	**0.79**	**J**	5.0	0.63	ug/L			09/10/23 18:58	1
Naphthalene	ND		5.0	3.0	ug/L			09/10/23 18:58	1
N-Propylbenzene	**28**		1.0	0.69	ug/L			09/10/23 18:58	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/10/23 18:58	1
o-Xylene	ND		5.0	0.60	ug/L			09/10/23 18:58	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/10/23 18:58	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/10/23 18:58	1
sec-Butylbenzene	**5.4**		1.0	0.70	ug/L			09/10/23 18:58	1

Client Sample ID: P57-ROX-083123
Date Collected: 08/31/23 12:00
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-10
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		1.0	1.0	ug/L			09/10/23 18:58	1
tert-Butylbenzene	**6.9**		1.0	0.63	ug/L			09/10/23 18:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/10/23 18:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/10/23 18:58	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/10/23 18:58	1
Toluene	**3.5**		1.0	0.90	ug/L			09/10/23 18:58	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 18:58	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/10/23 18:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/10/23 18:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/10/23 18:58	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/10/23 18:58	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/10/23 18:58	1
Trichloroethene	ND		1.0	0.15	ug/L			09/10/23 18:58	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/10/23 18:58	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/10/23 18:58	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/10/23 18:58	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/10/23 18:58	1
Vinyl acetate	ND		25	0.93	ug/L			09/10/23 18:58	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/10/23 18:58	1
Xylenes, Total	ND		10	1.6	ug/L			09/10/23 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*72 - 130*		*09/10/23 18:58*	*1*
Dibromofluoromethane	*95*		*75 - 126*		*09/10/23 18:58*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/10/23 18:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	**2.8**		1.0	0.76	ug/L			09/11/23 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*72 - 130*		*09/11/23 17:56*	*1*
Dibromofluoromethane	*96*		*75 - 126*		*09/11/23 17:56*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*09/11/23 17:56*	*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**	0.19	0.095	ug/L		09/07/23 15:48	09/12/23 18:48	1
Acenaphthylene	ND		0.19	0.042	ug/L		09/07/23 15:48	09/12/23 18:48	1
Anthracene	**0.061**	**J**	0.19	0.045	ug/L		09/07/23 15:48	09/12/23 18:48	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		09/07/23 15:48	09/12/23 18:48	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		09/07/23 15:48	09/12/23 18:48	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		09/07/23 15:48	09/12/23 18:48	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/07/23 15:48	09/12/23 18:48	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		09/07/23 15:48	09/12/23 18:48	1
Chrysene	ND		0.19	0.032	ug/L		09/07/23 15:48	09/12/23 18:48	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		09/07/23 15:48	09/12/23 18:48	1
Fluoranthene	ND		0.19	0.033	ug/L		09/07/23 15:48	09/12/23 18:48	1
Fluorene	**0.30**		0.19	0.085	ug/L		09/07/23 15:48	09/12/23 18:48	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		09/07/23 15:48	09/12/23 18:48	1

Client Sample ID: P57-ROX-083123
Date Collected: 08/31/23 12:00
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-10
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	**0.22**		0.19	0.086	ug/L		09/07/23 15:48	09/12/23 18:48	1
Pyrene	ND		0.19	0.037	ug/L		09/07/23 15:48	09/12/23 18:48	1
1-Methylnaphthalene	**13**		0.19	0.077	ug/L		09/07/23 15:48	09/12/23 18:48	1
2-Methylnaphthalene	**13**		0.19	0.063	ug/L		09/07/23 15:48	09/12/23 18:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*64*		*18 - 147*	*09/07/23 15:48*	*09/12/23 18:48*	*1*
2-Fluorobiphenyl	*40*		*15 - 128*	*09/07/23 15:48*	*09/12/23 18:48*	*1*
Nitrobenzene-d5	*76*		*10 - 144*	*09/07/23 15:48*	*09/12/23 18:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		09/07/23 15:48	09/12/23 20:33	1
Benzenethiol	ND	*-	9.6	1.6	ug/L		09/07/23 15:48	09/12/23 20:33	1
Benzoic acid	ND		29	7.0	ug/L		09/07/23 15:48	09/12/23 20:33	1
Benzyl alcohol	ND		9.6	1.9	ug/L		09/07/23 15:48	09/12/23 20:33	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		09/07/23 15:48	09/12/23 20:33	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		09/07/23 15:48	09/12/23 20:33	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		09/07/23 15:48	09/12/23 20:33	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		09/07/23 15:48	09/12/23 20:33	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		09/07/23 15:48	09/12/23 20:33	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		09/07/23 15:48	09/12/23 20:33	1
4-Chloroaniline	ND		9.6	3.3	ug/L		09/07/23 15:48	09/12/23 20:33	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		09/07/23 15:48	09/12/23 20:33	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		09/07/23 15:48	09/12/23 20:33	1
2-Chlorophenol	ND		9.6	2.1	ug/L		09/07/23 15:48	09/12/23 20:33	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		09/07/23 15:48	09/12/23 20:33	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		09/07/23 15:48	09/12/23 20:33	1
Dibenzofuran	ND		9.6	0.16	ug/L		09/07/23 15:48	09/12/23 20:33	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		09/07/23 15:48	09/12/23 20:33	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		09/07/23 15:48	09/12/23 20:33	1
Diethyl phthalate	ND		9.6	0.23	ug/L		09/07/23 15:48	09/12/23 20:33	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		09/07/23 15:48	09/12/23 20:33	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		09/07/23 15:48	09/12/23 20:33	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		09/07/23 15:48	09/12/23 20:33	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		09/07/23 15:48	09/12/23 20:33	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/07/23 15:48	09/12/23 20:33	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		09/07/23 15:48	09/12/23 20:33	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		09/07/23 15:48	09/12/23 20:33	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		09/07/23 15:48	09/12/23 20:33	1
1,4-Dioxane	ND		9.6	0.96	ug/L		09/07/23 15:48	09/12/23 20:33	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		09/07/23 15:48	09/12/23 20:33	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		09/07/23 15:48	09/12/23 20:33	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/07/23 15:48	09/12/23 20:33	1
Hexachloroethane	ND		9.6	4.0	ug/L		09/07/23 15:48	09/12/23 20:33	1
Indene	ND		9.6	0.96	ug/L		09/07/23 15:48	09/12/23 20:33	1
Isophorone	ND		9.6	0.13	ug/L		09/07/23 15:48	09/12/23 20:33	1
2-Methylphenol	ND		9.6	1.7	ug/L		09/07/23 15:48	09/12/23 20:33	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/07/23 15:48	09/12/23 20:33	1

Client Sample ID: P57-ROX-083123
Date Collected: 08/31/23 12:00
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-10
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		9.6	2.1	ug/L		09/07/23 15:48	09/12/23 20:33	1
3-Nitroaniline	ND		9.6	1.7	ug/L		09/07/23 15:48	09/12/23 20:33	1
4-Nitroaniline	ND		9.6	1.4	ug/L		09/07/23 15:48	09/12/23 20:33	1
Nitrobenzene	ND		9.6	0.12	ug/L		09/07/23 15:48	09/12/23 20:33	1
2-Nitrophenol	ND		9.6	5.0	ug/L		09/07/23 15:48	09/12/23 20:33	1
4-Nitrophenol	ND		9.6	2.0	ug/L		09/07/23 15:48	09/12/23 20:33	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		09/07/23 15:48	09/12/23 20:33	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		09/07/23 15:48	09/12/23 20:33	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		09/07/23 15:48	09/12/23 20:33	1
Pentachlorophenol	ND		19	1.3	ug/L		09/07/23 15:48	09/12/23 20:33	1
Phenol	ND		9.6	2.5	ug/L		09/07/23 15:48	09/12/23 20:33	1
Pyridine	ND		9.6	3.1	ug/L		09/07/23 15:48	09/12/23 20:33	1
Quinoline	ND		9.6	4.3	ug/L		09/07/23 15:48	09/12/23 20:33	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		09/07/23 15:48	09/12/23 20:33	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		09/07/23 15:48	09/12/23 20:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*46 - 124*	*09/07/23 15:48*	*09/12/23 20:33*	*1*
2-Fluorophenol	*38*		*13 - 113*	*09/07/23 15:48*	*09/12/23 20:33*	*1*
Nitrobenzene-d5	*63*		*36 - 126*	*09/07/23 15:48*	*09/12/23 20:33*	*1*
Phenol-d5	*55*		*17 - 127*	*09/07/23 15:48*	*09/12/23 20:33*	*1*
Terphenyl-d14	*89*		*44 - 149*	*09/07/23 15:48*	*09/12/23 20:33*	*1*
2,4,6-Tribromophenol	*74*		*26 - 150*	*09/07/23 15:48*	*09/12/23 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-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/07/23 13:27	09/07/23 18:18	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/07/23 13:27	09/07/23 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*		*51 - 149*	*09/07/23 13:27*	*09/07/23 18:18*	*1*

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

Job ID: 400-242836-1

Client Sample ID: T12-ROX-083123
Date Collected: 08/31/23 13:10
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130	50	ug/L			09/10/23 22:40	5
Acrolein	ND		100	17	ug/L			09/10/23 22:40	5
Acrylonitrile	ND		50	14	ug/L			09/10/23 22:40	5
Bromobenzene	ND		5.0	2.7	ug/L			09/10/23 22:40	5
Bromochloromethane	ND		5.0	1.1	ug/L			09/10/23 22:40	5
Bromodichloromethane	ND		5.0	2.5	ug/L			09/10/23 22:40	5
Bromoform	ND		25	1.3	ug/L			09/10/23 22:40	5
Bromomethane	ND		5.0	4.9	ug/L			09/10/23 22:40	5
2-Butanone (MEK)	ND		130	13	ug/L			09/10/23 22:40	5
Carbon disulfide	ND		5.0	2.5	ug/L			09/10/23 22:40	5
Carbon tetrachloride	ND		5.0	0.95	ug/L			09/10/23 22:40	5
Chlorobenzene	ND		5.0	4.5	ug/L			09/10/23 22:40	5
Chloroethane	ND		5.0	3.8	ug/L			09/10/23 22:40	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			09/10/23 22:40	5
Chloroform	ND		5.0	4.5	ug/L			09/10/23 22:40	5
1-Chlorohexane	ND		5.0	1.6	ug/L			09/10/23 22:40	5
Chloromethane	ND		5.0	4.5	ug/L			09/10/23 22:40	5
cis-1,2-Dichloroethene	ND		5.0	1.0	ug/L			09/10/23 22:40	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			09/10/23 22:40	5
Dibromochloromethane	ND		5.0	1.2	ug/L			09/10/23 22:40	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			09/10/23 22:40	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			09/10/23 22:40	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			09/10/23 22:40	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			09/10/23 22:40	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			09/10/23 22:40	5
1,2-Dichloroethane	ND		5.0	0.95	ug/L			09/10/23 22:40	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			09/10/23 22:40	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			09/10/23 22:40	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			09/10/23 22:40	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			09/10/23 22:40	5
1,1-Dichloropropene	ND		5.0	2.5	ug/L			09/10/23 22:40	5
Ethylbenzene	**11**		5.0	2.5	ug/L			09/10/23 22:40	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			09/10/23 22:40	5
Hexachlorobutadiene	ND		25	4.5	ug/L			09/10/23 22:40	5
2-Hexanone	ND		130	7.0	ug/L			09/10/23 22:40	5
Isopropylbenzene	**22**		5.0	2.7	ug/L			09/10/23 22:40	5
Methylene bromide	ND		25	1.1	ug/L			09/10/23 22:40	5
Methylene Chloride	ND		25	15	ug/L			09/10/23 22:40	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			09/10/23 22:40	5
Methyl tert-butyl ether	**1.5**	**J**	5.0	1.1	ug/L			09/10/23 22:40	5
m-Xylene & p-Xylene	**47**		25	3.2	ug/L			09/10/23 22:40	5
Naphthalene	**17**	**J**	25	15	ug/L			09/10/23 22:40	5
n-Butylbenzene	ND		5.0	3.8	ug/L			09/10/23 22:40	5
N-Propylbenzene	**30**		5.0	3.5	ug/L			09/10/23 22:40	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			09/10/23 22:40	5
o-Xylene	**3.2**	**J**	25	3.0	ug/L			09/10/23 22:40	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			09/10/23 22:40	5
p-Isopropyltoluene	ND		5.0	3.6	ug/L			09/10/23 22:40	5
sec-Butylbenzene	ND		5.0	3.5	ug/L			09/10/23 22:40	5

Client Sample ID: T12-ROX-083123
Date Collected: 08/31/23 13:10
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-11
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		5.0	5.0	ug/L			09/10/23 22:40	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			09/10/23 22:40	5
1,1,1,2-Tetrachloroethane	ND		5.0	0.80	ug/L			09/10/23 22:40	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			09/10/23 22:40	5
Tetrachloroethene	ND		5.0	4.5	ug/L			09/10/23 22:40	5
Toluene	**41**		5.0	4.5	ug/L			09/10/23 22:40	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			09/10/23 22:40	5
trans-1,3-Dichloropropene	ND		25	1.0	ug/L			09/10/23 22:40	5
1,2,3-Trichlorobenzene	ND		5.0	4.5	ug/L			09/10/23 22:40	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			09/10/23 22:40	5
1,1,1-Trichloroethane	ND		5.0	0.90	ug/L			09/10/23 22:40	5
1,1,2-Trichloroethane	ND		25	1.1	ug/L			09/10/23 22:40	5
Trichloroethene	ND		5.0	0.75	ug/L			09/10/23 22:40	5
Trichlorofluoromethane	ND		5.0	2.6	ug/L			09/10/23 22:40	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			09/10/23 22:40	5
1,2,4-Trimethy benzene	ND		5.0	4.1	ug/L			09/10/23 22:40	5
1,3,5-Trimethylbenzene	**8.8**		5.0	2.8	ug/L			09/10/23 22:40	5
Vinyl acetate	ND		130	4.7	ug/L			09/10/23 22:40	5
Vinyl chloride	ND		5.0	2.5	ug/L			09/10/23 22:40	5
Xylenes, Total	**50**		50	8.0	ug/L			09/10/23 22:40	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*72 - 130*		*09/10/23 22:40*	*5*
Dibromofluoromethane	*95*		*75 - 126*		*09/10/23 22:40*	*5*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/10/23 22:40*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1900**		10	5.0	ug/L			09/11/23 14:21	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*72 - 130*		*09/11/23 14:21*	*10*
Dibromofluoromethane	*93*		*75 - 126*		*09/11/23 14:21*	*10*
Toluene-d8 (Surr)	*100*		*64 - 132*		*09/11/23 14:21*	*10*

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	0.095	ug/L		09/07/23 15:48	09/12/23 19:09	1
Acenaphthylene	ND		0.19	0.042	ug/L		09/07/23 15:48	09/12/23 19:09	1
Anthracene	**0.15**	**J**	0.19	0.045	ug/L		09/07/23 15:48	09/12/23 19:09	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		09/07/23 15:48	09/12/23 19:09	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		09/07/23 15:48	09/12/23 19:09	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		09/07/23 15:48	09/12/23 19:09	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/07/23 15:48	09/12/23 19:09	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		09/07/23 15:48	09/12/23 19:09	1
Chrysene	ND		0.19	0.032	ug/L		09/07/23 15:48	09/12/23 19:09	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		09/07/23 15:48	09/12/23 19:09	1
Fluoranthene	ND		0.19	0.032	ug/L		09/07/23 15:48	09/12/23 19:09	1
Fluorene	**0.42**		0.19	0.085	ug/L		09/07/23 15:48	09/12/23 19:09	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		09/07/23 15:48	09/12/23 19:09	1

Client Sample ID: T12-ROX-083123
Date Collected: 08/31/23 13:10
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-11
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	**0.50**		0.19	0.086	ug/L		09/07/23 15:48	09/12/23 19:09	1
Pyrene	ND		0.19	0.037	ug/L		09/07/23 15:48	09/12/23 19:09	1
1-Methylnaphthalene	**18**		0.19	0.076	ug/L		09/07/23 15:48	09/12/23 19:09	1
2-Methylnaphthalene	**26**		0.19	0.063	ug/L		09/07/23 15:48	09/12/23 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*100*		*18 - 147*	*09/07/23 15:48*	*09/12/23 19:09*	*1*
2-Fluorobiphenyl	*85*		*15 - 128*	*09/07/23 15:48*	*09/12/23 19:09*	*1*
Nitrobenzene-d5	*105*		*10 - 144*	*09/07/23 15:48*	*09/12/23 19:09*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		09/07/23 15:48	09/12/23 20:54	1
Benzenethiol	ND	*-	9.6	1.6	ug/L		09/07/23 15:48	09/12/23 20:54	1
Benzoic acid	ND		29	7.0	ug/L		09/07/23 15:48	09/12/23 20:54	1
Benzyl alcohol	ND		9.6	1.9	ug/L		09/07/23 15:48	09/12/23 20:54	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		09/07/23 15:48	09/12/23 20:54	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		09/07/23 15:48	09/12/23 20:54	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		09/07/23 15:48	09/12/23 20:54	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		09/07/23 15:48	09/12/23 20:54	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		09/07/23 15:48	09/12/23 20:54	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		09/07/23 15:48	09/12/23 20:54	1
4-Chloroaniline	ND		9.6	3.2	ug/L		09/07/23 15:48	09/12/23 20:54	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		09/07/23 15:48	09/12/23 20:54	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		09/07/23 15:48	09/12/23 20:54	1
2-Chlorophenol	ND		9.6	2.1	ug/L		09/07/23 15:48	09/12/23 20:54	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		09/07/23 15:48	09/12/23 20:54	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		09/07/23 15:48	09/12/23 20:54	1
Dibenzofuran	ND		9.6	0.16	ug/L		09/07/23 15:48	09/12/23 20:54	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		09/07/23 15:48	09/12/23 20:54	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		09/07/23 15:48	09/12/23 20:54	1
Diethyl phthalate	ND		9.6	0.23	ug/L		09/07/23 15:48	09/12/23 20:54	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		09/07/23 15:48	09/12/23 20:54	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		09/07/23 15:48	09/12/23 20:54	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		09/07/23 15:48	09/12/23 20:54	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		09/07/23 15:48	09/12/23 20:54	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		09/07/23 15:48	09/12/23 20:54	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		09/07/23 15:48	09/12/23 20:54	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		09/07/23 15:48	09/12/23 20:54	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		09/07/23 15:48	09/12/23 20:54	1
1,4-Dioxane	ND		9.6	0.96	ug/L		09/07/23 15:48	09/12/23 20:54	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		09/07/23 15:48	09/12/23 20:54	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		09/07/23 15:48	09/12/23 20:54	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/07/23 15:48	09/12/23 20:54	1
Hexachloroethane	ND		9.6	4.0	ug/L		09/07/23 15:48	09/12/23 20:54	1
Indene	ND		9.6	0.96	ug/L		09/07/23 15:48	09/12/23 20:54	1
Isophorone	ND		9.6	0.13	ug/L		09/07/23 15:48	09/12/23 20:54	1
2-Methylphenol	ND		9.6	1.7	ug/L		09/07/23 15:48	09/12/23 20:54	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/07/23 15:48	09/12/23 20:54	1

Client Sample ID: T12-ROX-083123
Date Collected: 08/31/23 13:10
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242836-11
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		9.6	2.1	ug/L		09/07/23 15:48	09/12/23 20:54	1
3-Nitroaniline	ND		9.6	1.7	ug/L		09/07/23 15:48	09/12/23 20:54	1
4-Nitroaniline	ND		9.6	1.4	ug/L		09/07/23 15:48	09/12/23 20:54	1
Nitrobenzene	ND		9.6	0.12	ug/L		09/07/23 15:48	09/12/23 20:54	1
2-Nitrophenol	ND		9.6	5.0	ug/L		09/07/23 15:48	09/12/23 20:54	1
4-Nitrophenol	ND		9.6	2.0	ug/L		09/07/23 15:48	09/12/23 20:54	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		09/07/23 15:48	09/12/23 20:54	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		09/07/23 15:48	09/12/23 20:54	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		09/07/23 15:48	09/12/23 20:54	1
Pentachlorophenol	ND		19	1.3	ug/L		09/07/23 15:48	09/12/23 20:54	1
Phenol	**100**		9.6	2.5	ug/L		09/07/23 15:48	09/12/23 20:54	1
Pyridine	ND		9.6	3.1	ug/L		09/07/23 15:48	09/12/23 20:54	1
Quinoline	ND		9.6	4.3	ug/L		09/07/23 15:48	09/12/23 20:54	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		09/07/23 15:48	09/12/23 20:54	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		09/07/23 15:48	09/12/23 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*120*		*46 - 124*	*09/07/23 15:48*	*09/12/23 20:54*	*1*
2-Fluorophenol	*74*		*13 - 113*	*09/07/23 15:48*	*09/12/23 20:54*	*1*
Nitrobenzene-d5	*105*		*36 - 126*	*09/07/23 15:48*	*09/12/23 20:54*	*1*
Phenol-d5	*99*		*17 - 127*	*09/07/23 15:48*	*09/12/23 20:54*	*1*
Terphenyl-d14	*146*		*44 - 149*	*09/07/23 15:48*	*09/12/23 20:54*	*1*
2,4,6-Tribromophenol	*114*		*26 - 150*	*09/07/23 15:48*	*09/12/23 20:54*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/07/23 13:27	09/07/23 18:38	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/07/23 13:27	09/07/23 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*51 - 149*	*09/07/23 13:27*	*09/07/23 18:38*	*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.
B	Compound was found in the blank and sample.
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
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: 400-242836-1

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)
400-242836-1	TB-ROX-083123-8260-A	109	93	101
400-242836-3	MW5-ROX-083123	110	96	101
400-242836-4	P114R-ROX-083123	110	94	102
400-242836-5	MW13-ROX-083123	108	94	101
400-242836-6	TB-ROX-083123-8260-B	110	95	101
400-242836-8	P93C-ROX-083123	110	96	101
400-242836-9	P93C-ROX-083123-DUP	110	94	100
400-242836-10	P57-ROX-083123	110	95	101
400-242836-10 - RA	P57-ROX-083123	113	96	103
400-242836-11	T12-ROX-083123	111	95	101
400-242836-11 - DL	T12-ROX-083123	110	93	100
LCS 400-640405/1002	Lab Control Sample	105	90	100
LCS 400-640415/1002	Lab Control Sample	107	92	101
MB 400-640405/4	Method Blank	111	94	101
MB 400-640415/4	Method Blank	108	94	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)
400-242836-3	MW5-ROX-083123	75	54	65	63	86	72
400-242836-4	P114R-ROX-083123	72	52	61	60	86	80
400-242836-5	MW13-ROX-083123	91	56	80	73	109	95
400-242836-8	P93C-ROX-083123	74	49	65	63	89	73
400-242836-9	P93C-ROX-083123-DUP	77	52	66	64	89	85
400-242836-10	P57-ROX-083123	75	38	63	55	89	74
400-242836-11	T12-ROX-083123	120	74	105	99	146	114
LCS 400-640140/18-A	Lab Control Sample	78	59	69	66	87	66
LCS 400-640140/2-A	Lab Control Sample	80	60	64	68	87	79
LCSD 400-640140/19-A	Lab Control Sample Dup	89	65	76	74	100	70
LCSD 400-640140/3-A	Lab Control Sample Dup	77	53	65	64	81	80
MB 400-640140/1-A	Method Blank	72	33	63	50	82	61

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: 400-242836-1

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)
400-242836-3	MW5-ROX-083123	58	60	77
400-242836-4	P114R-ROX-083123	57	53	
400-242836-4	P114R-ROX-083123			53
400-242836-5	MW13-ROX-083123	75	44	87
400-242836-8	P93C-ROX-083123	66	57	76
400-242836-9	P93C-ROX-083123-DUP	68	55	80
400-242836-10	P57-ROX-083123	64	40	76
400-242836-11	T12-ROX-083123	100	85	105
LCS 400-640140/22-A	Lab Control Sample	50	50	63
LCSD 400-640140/23-A	Lab Control Sample Dup	67	67	85
MB 400-640140/1-A	Method Blank	54	50	62

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)
400-242836-2	TB-ROX-083123-8011-A	71
400-242836-3	MW5-ROX-083123	81
400-242836-4	P114R-ROX-083123	87
400-242836-5	MW13-ROX-083123	86
400-242836-7	TB-ROX-083123-8011-B	79
400-242836-8	P93C-ROX-083123	72
400-242836-9	P93C-ROX-083123-DUP	76
400-242836-10	P57-ROX-083123	76
400-242836-11	T12-ROX-083123	77
LCS 400-639897/2-A	Lab Control Sample	47 S1-
LCS 400-640109/2-A	Lab Control Sample	77
LCSD 400-639897/3-A	Lab Control Sample Dup	55
LCSD 400-640109/3-A	Lab Control Sample Dup	87
MB 400-639897/1-A	Method Blank	70
MB 400-640109/1-A	Method Blank	80

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-242836-1

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: 400-242836-1

Client Sample ID: TB-ROX-083123-8260-A
Lab Sample ID: 400-242836-1
Date Collected: 08/31/23 12:00
Matrix: Water
Date Received: 09/01/23 09:18

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	640405	09/10/23 16:06	CAR	EET PEN

Client Sample ID: TB-ROX-083123-8011-A
Lab Sample ID: 400-242836-2
Date Collected: 08/31/23 12:00
Matrix: Water
Date Received: 09/01/23 09:18

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	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 22:21	PG	EET PEN

Client Sample ID: MW5-ROX-083123
Lab Sample ID: 400-242836-3
Date Collected: 08/31/23 10:20
Matrix: Water
Date Received: 09/01/23 09:18

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	640405	09/10/23 16:30	CAR	EET PEN
Total/NA	Prep	3520C			257.8 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640898	09/13/23 22:52	VC1	EET PEN
Total/NA	Prep	3520C			257.8 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 18:47	S1B	EET PEN
Total/NA	Prep	3520C			257.8 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 17:04	TH	EET PEN
Total/NA	Prep	8011			33.2 mL	35 mL	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 22:41	PG	EET PEN

Client Sample ID: P114R-ROX-083123
Lab Sample ID: 400-242836-4
Date Collected: 08/31/23 12:35
Matrix: Water
Date Received: 09/01/23 09:18

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	640405	09/10/23 16:55	CAR	EET PEN
Total/NA	Prep	3520C			256 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640898	09/13/23 23:17	VC1	EET PEN
Total/NA	Prep	3520C			256 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 19:08	S1B	EET PEN
Total/NA	Prep	3520C			256 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 17:24	TH	EET PEN
Total/NA	Prep	3520C			256 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM		5	0.4 mL	0.4 mL	641154	09/15/23 12:19	KJA	EET PEN
Total/NA	Prep	8011			35.5 mL	35 mL	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 23:21	PG	EET PEN

Lab Chronicle

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

Job ID: 400-242836-1

Client Sample ID: MW13-ROX-083123
Lab Sample ID: 400-242836-5
Date Collected: 08/31/23 13:30
Matrix: Water
Date Received: 09/01/23 09:18

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	640405	09/10/23 17:20	CAR	EET PEN
Total/NA	Prep	3520C			254.8 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 19:29	S1B	EET PEN
Total/NA	Prep	3520C			254.8 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 17:45	TH	EET PEN
Total/NA	Prep	8011			35.6 mL	35 mL	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 23:42	PG	EET PEN

Client Sample ID: TB-ROX-083123-8260-B
Lab Sample ID: 400-242836-6
Date Collected: 08/31/23 12:00
Matrix: Water
Date Received: 09/01/23 09:18

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	640405	09/10/23 17:44	CAR	EET PEN

Client Sample ID: TB-ROX-083123-8011-B
Lab Sample ID: 400-242836-7
Date Collected: 08/31/23 12:00
Matrix: Water
Date Received: 09/01/23 09:18

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	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/07/23 00:02	PG	EET PEN

Client Sample ID: P93C-ROX-083123
Lab Sample ID: 400-242836-8
Date Collected: 08/31/23 09:40
Matrix: Water
Date Received: 09/01/23 09:18

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	640405	09/10/23 18:09	CAR	EET PEN
Total/NA	Prep	3520C			261.2 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640898	09/13/23 23:41	VC1	EET PEN
Total/NA	Prep	3520C			261.2 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 19:50	S1B	EET PEN
Total/NA	Prep	3520C			261.2 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 18:06	TH	EET PEN
Total/NA	Prep	8011			35.2 mL	35 mL	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/07/23 00:22	PG	EET PEN

Client Sample ID: P93C-ROX-083123-DUP
Lab Sample ID: 400-242836-9
Date Collected: 08/31/23 09:40
Matrix: Water
Date Received: 09/01/23 09:18

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	640405	09/10/23 18:33	CAR	EET PEN

Client Sample ID: P93C-ROX-083123-DUP

Lab Sample ID: 400-242836-9

Date Collected: 08/31/23 09:40

Matrix: Water

Date Received: 09/01/23 09:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			263.2 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640898	09/14/23 00:06	VC1	EET PEN
Total/NA	Prep	3520C			263.2 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 20:11	S1B	EET PEN
Total/NA	Prep	3520C			263.2 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 18:27	TH	EET PEN
Total/NA	Prep	8011			35 mL	35 mL	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/07/23 00:42	PG	EET PEN

Client Sample ID: P57-ROX-083123

Lab Sample ID: 400-242836-10

Date Collected: 08/31/23 12:00

Matrix: Water

Date Received: 09/01/23 09:18

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	640405	09/10/23 18:58	CAR	EET PEN
Total/NA	Analysis	8260D	RA	1	5 mL	5 mL	640415	09/11/23 17:56	WPD	EET PEN
Total/NA	Prep	3520C			260.6 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 20:33	S1B	EET PEN
Total/NA	Prep	3520C			260.6 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 18:48	TH	EET PEN
Total/NA	Prep	8011			34.7 mL	35 mL	640109	09/07/23 13:27	PG	EET PEN
Total/NA	Analysis	8011		1			640148	09/07/23 18:18	PG	EET PEN

Client Sample ID: T12-ROX-083123

Lab Sample ID: 400-242836-11

Date Collected: 08/31/23 13:10

Matrix: Water

Date Received: 09/01/23 09:18

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	640405	09/10/23 22:40	CAR	EET PEN
Total/NA	Analysis	8260D	DL	10	5 mL	5 mL	640415	09/11/23 14:21	WPD	EET PEN
Total/NA	Prep	3520C			261.6 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 20:54	S1B	EET PEN
Total/NA	Prep	3520C			261.6 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 19:09	TH	EET PEN
Total/NA	Prep	8011			34.7 mL	35 mL	640109	09/07/23 13:27	PG	EET PEN
Total/NA	Analysis	8011		1			640148	09/07/23 18:38	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-639897/1-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	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 15:55	PG	EET PEN

Lab Chronicle

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

Job ID: 400-242836-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-640109/1-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	640109	09/07/23 13:27	PG	EET PEN
Total/NA	Analysis	8011		1			640148	09/07/23 16:36	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-640140/1-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	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 17:01	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 14:41	TH	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-640405/4
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	640405	09/10/23 13:14	CAR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-640415/4
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	640415	09/11/23 10:45	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-639897/2-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	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 16:16	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640109/2-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	640109	09/07/23 13:27	PG	EET PEN
Total/NA	Analysis	8011		1			640148	09/07/23 16:56	PG	EET PEN

Lab Chronicle

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

Job ID: 400-242836-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640140/18-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	640140	09/08/23 12:54	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 18:05	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640140/22-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	640140	09/08/23 12:54	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 15:02	TH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640140/2-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	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 17:23	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640405/1002
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	640405	09/10/23 12:13	CAR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640415/1002
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	640415	09/11/23 09:58	WPD	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-639897/3-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	639897	09/06/23 12:59	PG	EET PEN
Total/NA	Analysis	8011		1			639945	09/06/23 16:36	PG	EET PEN

Lab Chronicle

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

Job ID: 400-242836-1

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-640109/3-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	640109	09/07/23 13:27	PG	EET PEN
Total/NA	Analysis	8011		1			640148	09/07/23 17:17	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-640140/19-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	640140	09/08/23 12:54	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 18:26	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-640140/23-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	640140	09/08/23 12:54	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 16:43	TH	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-640140/3-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	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 17:44	S1B	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 640405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242836-1	TB-ROX-083123-8260-A	Total/NA	Water	8260D	
400-242836-3	MW5-ROX-083123	Total/NA	Water	8260D	
400-242836-4	P114R-ROX-083123	Total/NA	Water	8260D	
400-242836-5	MW13-ROX-083123	Total/NA	Water	8260D	
400-242836-6	TB-ROX-083123-8260-B	Total/NA	Water	8260D	
400-242836-8	P93C-ROX-083123	Total/NA	Water	8260D	
400-242836-9	P93C-ROX-083123-DUP	Total/NA	Water	8260D	
400-242836-10	P57-ROX-083123	Total/NA	Water	8260D	
400-242836-11	T12-ROX-083123	Total/NA	Water	8260D	
MB 400-640405/4	Method Blank	Total/NA	Water	8260D	
LCS 400-640405/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 640415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242836-10 - RA	P57-ROX-083123	Total/NA	Water	8260D	
400-242836-11 - DL	T12-ROX-083123	Total/NA	Water	8260D	
MB 400-640415/4	Method Blank	Total/NA	Water	8260D	
LCS 400-640415/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 640140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242836-3	MW5-ROX-083123	Total/NA	Water	3520C	
400-242836-4	P114R-ROX-083123	Total/NA	Water	3520C	
400-242836-5	MW13-ROX-083123	Total/NA	Water	3520C	
400-242836-8	P93C-ROX-083123	Total/NA	Water	3520C	
400-242836-9	P93C-ROX-083123-DUP	Total/NA	Water	3520C	
400-242836-10	P57-ROX-083123	Total/NA	Water	3520C	
400-242836-11	T12-ROX-083123	Total/NA	Water	3520C	
MB 400-640140/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-640140/18-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-640140/22-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-640140/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-640140/19-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-640140/23-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-640140/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 640637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242836-3	MW5-ROX-083123	Total/NA	Water	8270E SIM	640140
400-242836-4	P114R-ROX-083123	Total/NA	Water	8270E SIM	640140
400-242836-5	MW13-ROX-083123	Total/NA	Water	8270E SIM	640140
400-242836-8	P93C-ROX-083123	Total/NA	Water	8270E SIM	640140
400-242836-9	P93C-ROX-083123-DUP	Total/NA	Water	8270E SIM	640140
400-242836-10	P57-ROX-083123	Total/NA	Water	8270E SIM	640140
400-242836-11	T12-ROX-083123	Total/NA	Water	8270E SIM	640140
MB 400-640140/1-A	Method Blank	Total/NA	Water	8270E SIM	640140
LCS 400-640140/22-A	Lab Control Sample	Total/NA	Water	8270E SIM	640140
LCSD 400-640140/23-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	640140

GC/MS Semi VOA

Analysis Batch: 640672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242836-3	MW5-ROX-083123	Total/NA	Water	8270E	640140
400-242836-4	P114R-ROX-083123	Total/NA	Water	8270E	640140
400-242836-5	MW13-ROX-083123	Total/NA	Water	8270E	640140
400-242836-8	P93C-ROX-083123	Total/NA	Water	8270E	640140
400-242836-9	P93C-ROX-083123-DUP	Total/NA	Water	8270E	640140
400-242836-10	P57-ROX-083123	Total/NA	Water	8270E	640140
400-242836-11	T12-ROX-083123	Total/NA	Water	8270E	640140
MB 400-640140/1-A	Method Blank	Total/NA	Water	8270E	640140
LCS 400-640140/18-A	Lab Control Sample	Total/NA	Water	8270E	640140
LCS 400-640140/2-A	Lab Control Sample	Total/NA	Water	8270E	640140
LCSD 400-640140/19-A	Lab Control Sample Dup	Total/NA	Water	8270E	640140
LCSD 400-640140/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	640140

Analysis Batch: 640898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242836-3	MW5-ROX-083123	Total/NA	Water	8270E	640140
400-242836-4	P114R-ROX-083123	Total/NA	Water	8270E	640140
400-242836-8	P93C-ROX-083123	Total/NA	Water	8270E	640140
400-242836-9	P93C-ROX-083123-DUP	Total/NA	Water	8270E	640140

Analysis Batch: 641154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242836-4	P114R-ROX-083123	Total/NA	Water	8270E SIM	640140

GC Semi VOA

Prep Batch: 639897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242836-2	TB-ROX-083123-8011-A	Total/NA	Water	8011	
400-242836-3	MW5-ROX-083123	Total/NA	Water	8011	
400-242836-4	P114R-ROX-083123	Total/NA	Water	8011	
400-242836-5	MW13-ROX-083123	Total/NA	Water	8011	
400-242836-7	TB-ROX-083123-8011-B	Total/NA	Water	8011	
400-242836-8	P93C-ROX-083123	Total/NA	Water	8011	
400-242836-9	P93C-ROX-083123-DUP	Total/NA	Water	8011	
MB 400-639897/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-639897/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-639897/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 639945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242836-2	TB-ROX-083123-8011-A	Total/NA	Water	8011	639897
400-242836-3	MW5-ROX-083123	Total/NA	Water	8011	639897
400-242836-4	P114R-ROX-083123	Total/NA	Water	8011	639897
400-242836-5	MW13-ROX-083123	Total/NA	Water	8011	639897
400-242836-7	TB-ROX-083123-8011-B	Total/NA	Water	8011	639897
400-242836-8	P93C-ROX-083123	Total/NA	Water	8011	639897
400-242836-9	P93C-ROX-083123-DUP	Total/NA	Water	8011	639897
MB 400-639897/1-A	Method Blank	Total/NA	Water	8011	639897
LCS 400-639897/2-A	Lab Control Sample	Total/NA	Water	8011	639897
LCSD 400-639897/3-A	Lab Control Sample Dup	Total/NA	Water	8011	639897

QC Association Summary

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

Job ID: 400-242836-1

GC Semi VOA

Prep Batch: 640109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242836-10	P57-ROX-083123	Total/NA	Water	8011	
400-242836-11	T12-ROX-083123	Total/NA	Water	8011	
MB 400-640109/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-640109/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-640109/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 640148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242836-10	P57-ROX-083123	Total/NA	Water	8011	640109
400-242836-11	T12-ROX-083123	Total/NA	Water	8011	640109
MB 400-640109/1-A	Method Blank	Total/NA	Water	8011	640109
LCS 400-640109/2-A	Lab Control Sample	Total/NA	Water	8011	640109
LCSD 400-640109/3-A	Lab Control Sample Dup	Total/NA	Water	8011	640109

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

Lab Sample ID: MB 400-640405/4
Matrix: Water
Analysis Batch: 640405

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			09/10/23 13:14	1
Acrolein	ND		20	3.3	ug/L			09/10/23 13:14	1
Acrylonitrile	ND		10	2.8	ug/L			09/10/23 13:14	1
Benzene	ND		1.0	0.50	ug/L			09/10/23 13:14	1
Bromobenzene	ND		1.0	0.54	ug/L			09/10/23 13:14	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/10/23 13:14	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/10/23 13:14	1
Bromoform	ND		5.0	0.25	ug/L			09/10/23 13:14	1
Bromomethane	ND		1.0	0.98	ug/L			09/10/23 13:14	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/10/23 13:14	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/10/23 13:14	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/10/23 13:14	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/10/23 13:14	1
Chloroethane	ND		1.0	0.76	ug/L			09/10/23 13:14	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/10/23 13:14	1
Chloroform	ND		1.0	0.90	ug/L			09/10/23 13:14	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/10/23 13:14	1
Chloromethane	ND		1.0	0.90	ug/L			09/10/23 13:14	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/10/23 13:14	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/10/23 13:14	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/10/23 13:14	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/10/23 13:14	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/10/23 13:14	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/10/23 13:14	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/10/23 13:14	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/10/23 13:14	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/10/23 13:14	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 13:14	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 13:14	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 13:14	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 13:14	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/10/23 13:14	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/10/23 13:14	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/10/23 13:14	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/10/23 13:14	1
2-Hexanone	ND		25	1.4	ug/L			09/10/23 13:14	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/10/23 13:14	1
Methylene bromide	ND		5.0	0.22	ug/L			09/10/23 13:14	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/10/23 13:14	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/10/23 13:14	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/10/23 13:14	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/10/23 13:14	1
Naphthalene	ND		5.0	3.0	ug/L			09/10/23 13:14	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/10/23 13:14	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/10/23 13:14	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/10/23 13:14	1
o-Xylene	ND		5.0	0.60	ug/L			09/10/23 13:14	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/10/23 13:14	1

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

Lab Sample ID: MB 400-640405/4
Matrix: Water
Analysis Batch: 640405

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			09/10/23 13:14	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			09/10/23 13:14	1
Styrene	ND		1.0	1.0	ug/L			09/10/23 13:14	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/10/23 13:14	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/10/23 13:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/10/23 13:14	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/10/23 13:14	1
Toluene	ND		1.0	0.90	ug/L			09/10/23 13:14	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 13:14	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/10/23 13:14	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/10/23 13:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/10/23 13:14	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/10/23 13:14	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/10/23 13:14	1
Trichloroethene	ND		1.0	0.15	ug/L			09/10/23 13:14	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/10/23 13:14	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/10/23 13:14	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/10/23 13:14	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/10/23 13:14	1
Vinyl acetate	ND		25	0.93	ug/L			09/10/23 13:14	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/10/23 13:14	1
Xylenes, Total	ND		10	1.6	ug/L			09/10/23 13:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*72 - 130*		*09/10/23 13:14*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*09/10/23 13:14*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/10/23 13:14*	*1*

Lab Sample ID: LCS 400-640405/1002
Matrix: Water
Analysis Batch: 640405

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	250	298		ug/L		119	38 - 160
Acrylonitrile	500	488		ug/L		98	64 - 142
Benzene	50.0	51.9		ug/L		104	70 - 130
Bromobenzene	50.0	52.0		ug/L		104	70 - 132
Bromochloromethane	50.0	44.6		ug/L		89	70 - 130
Bromodichloromethane	50.0	50.7		ug/L		101	67 - 133
Bromoform	50.0	51.6		ug/L		103	57 - 140
Bromomethane	25.0	23.1		ug/L		92	10 - 160
2-Butanone (MEK)	200	224		ug/L		112	61 - 145
Carbon disulfide	50.0	45.0		ug/L		90	61 - 137
Carbon tetrachloride	50.0	50.7		ug/L		101	61 - 137
Chlorobenzene	50.0	51.9		ug/L		104	70 - 130
Chloroethane	25.0	26.3		ug/L		105	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 400-640405/1002
Matrix: Water
Analysis Batch: 640405

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	48.8		ug/L		98	69 - 130
1-Chlorohexane	50.0	63.4		ug/L		127	69 - 130
Chloromethane	25.0	26.7		ug/L		107	58 - 137
cis-1,2-Dichloroethene	50.0	53.7		ug/L		107	68 - 130
cis-1,3-Dichloropropene	50.0	52.6		ug/L		105	69 - 132
Dibromochloromethane	50.0	49.3		ug/L		99	67 - 135
1,2-Dichlorobenzene	50.0	51.4		ug/L		103	67 - 130
1,3-Dichlorobenzene	50.0	53.9		ug/L		108	70 - 130
1,4-Dichlorobenzene	50.0	54.0		ug/L		108	70 - 130
Dichlorodifluoromethane	25.0	16.7		ug/L		67	41 - 146
1,1-Dichloroethane	50.0	51.9		ug/L		104	70 - 130
1,2-Dichloroethane	50.0	47.5		ug/L		95	69 - 130
1,1-Dichloroethene	50.0	48.3		ug/L		97	63 - 134
1,2-Dichloropropane	50.0	55.7		ug/L		111	70 - 130
1,3-Dichloropropane	50.0	51.8		ug/L		104	70 - 130
2,2-Dichloropropane	50.0	50.6		ug/L		101	52 - 135
1,1-Dichloropropene	50.0	52.8		ug/L		106	70 - 130
Ethylbenzene	50.0	54.6		ug/L		109	70 - 130
Ethyl methacrylate	50.0	50.6		ug/L		101	68 - 130
Hexachlorobutadiene	50.0	62.6		ug/L		125	53 - 140
2-Hexanone	200	256		ug/L		128	65 - 137
Isopropy benzene	50.0	53.5		ug/L		107	70 - 130
Methylene bromide	50.0	47.2		ug/L		94	70 - 130
Methylene Chloride	50.0	47.1		ug/L		94	66 - 135
4-Methyl-2-pentanone (MIBK)	200	211		ug/L		105	69 - 138
Methyl tert-butyl ether	50.0	46.3		ug/L		93	66 - 130
m-Xylene & p-Xylene	50.0	54.8		ug/L		110	70 - 130
Naphthalene	50.0	47.4		ug/L		95	47 - 149
n-Butylbenzene	50.0	60.1		ug/L		120	67 - 130
N-Propylbenzene	50.0	55.1		ug/L		110	70 - 130
o-Chlorotoluene	50.0	55.9		ug/L		112	70 - 130
o-Xylene	50.0	53.8		ug/L		108	70 - 130
p-Chlorotoluene	50.0	55.1		ug/L		110	70 - 130
p-Isopropyltoluene	50.0	56.2		ug/L		112	65 - 130
sec-Butylbenzene	50.0	56.4		ug/L		113	66 - 130
Styrene	50.0	51.0		ug/L		102	70 - 130
tert-Butylbenzene	50.0	54.7		ug/L		109	64 - 139
1,1,1,2-Tetrachloroethane	50.0	51.7		ug/L		103	67 - 131
1,1,2,2-Tetrachloroethane	50.0	48.6		ug/L		97	70 - 131
Tetrachloroethene	50.0	55.6		ug/L		111	65 - 130
Toluene	50.0	53.1		ug/L		106	70 - 130
trans-1,2-Dichloroethene	50.0	49.1		ug/L		98	70 - 130
trans-1,3-Dichloropropene	50.0	52.0		ug/L		104	63 - 130
1,2,3-Trichlorobenzene	50.0	55.0		ug/L		110	60 - 138
1,2,4-Trichlorobenzene	50.0	55.2		ug/L		110	60 - 140
1,1,1-Trichloroethane	50.0	48.9		ug/L		98	68 - 130
1,1,2-Trichloroethane	50.0	51.4		ug/L		103	70 - 130
Trichloroethene	50.0	49.6		ug/L		99	70 - 130
Trichlorofluoromethane	25.0	22.7		ug/L		91	65 - 138

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

Lab Sample ID: LCS 400-640405/1002
Matrix: Water
Analysis Batch: 640405

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	45.8		ug/L		92	70 - 130
1,2,4-Trimethy benzene	50.0	54.7		ug/L		109	70 - 130
1,3,5-Trimethy benzene	50.0	54.3		ug/L		109	69 - 130
Vinyl acetate	50.0	48.1		ug/L		96	26 - 160
Vinyl chloride	25.0	25.3		ug/L		101	59 - 136
Xylenes, Total	100	109		ug/L		109	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*72 - 130*
Dibromofluoromethane	*90*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

Lab Sample ID: MB 400-640415/4
Matrix: Water
Analysis Batch: 640415

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			09/11/23 10:45	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/11/23 10:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*72 - 130*		*09/11/23 10:45*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*09/11/23 10:45*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*09/11/23 10:45*	*1*

Lab Sample ID: LCS 400-640415/1002
Matrix: Water
Analysis Batch: 640415

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	53.5		ug/L		107	70 - 130
n-Butylbenzene	50.0	59.6		ug/L		119	67 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*72 - 130*
Dibromofluoromethane	*92*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

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

Lab Sample ID: MB 400-640140/1-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640140

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		09/07/23 15:48	09/12/23 17:01	1
Benzenethiol	ND		10	1.7	ug/L		09/07/23 15:48	09/12/23 17:01	1
Benzoic acid	ND		30	7.3	ug/L		09/07/23 15:48	09/12/23 17:01	1

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

Lab Sample ID: MB 400-640140/1-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640140

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzyl alcohol	ND		10	2.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		09/07/23 15:48	09/12/23 17:01	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		09/07/23 15:48	09/12/23 17:01	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		09/07/23 15:48	09/12/23 17:01	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		09/07/23 15:48	09/12/23 17:01	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		09/07/23 15:48	09/12/23 17:01	1
4-Chloroaniline	ND		10	3.4	ug/L		09/07/23 15:48	09/12/23 17:01	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		09/07/23 15:48	09/12/23 17:01	1
2-Chloronaphthalene	ND		10	0.14	ug/L		09/07/23 15:48	09/12/23 17:01	1
2-Chlorophenol	ND		10	2.2	ug/L		09/07/23 15:48	09/12/23 17:01	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
Dibenzofuran	ND		10	0.17	ug/L		09/07/23 15:48	09/12/23 17:01	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		09/07/23 15:48	09/12/23 17:01	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
Diethyl phthalate	ND		10	0.24	ug/L		09/07/23 15:48	09/12/23 17:01	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		09/07/23 15:48	09/12/23 17:01	1
Dimethyl phthalate	0.550	J	10	0.17	ug/L		09/07/23 15:48	09/12/23 17:01	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		09/07/23 15:48	09/12/23 17:01	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		09/07/23 15:48	09/12/23 17:01	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		09/07/23 15:48	09/12/23 17:01	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		09/07/23 15:48	09/12/23 17:01	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		09/07/23 15:48	09/12/23 17:01	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		09/07/23 15:48	09/12/23 17:01	1
1,4-Dioxane	ND		10	1.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
Hexachlorobenzene	ND		10	0.17	ug/L		09/07/23 15:48	09/12/23 17:01	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/07/23 15:48	09/12/23 17:01	1
Hexachloroethane	ND		10	4.2	ug/L		09/07/23 15:48	09/12/23 17:01	1
Indene	ND		10	1.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
Isophorone	ND		10	0.14	ug/L		09/07/23 15:48	09/12/23 17:01	1
2-Methylphenol	ND		10	1.8	ug/L		09/07/23 15:48	09/12/23 17:01	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		09/07/23 15:48	09/12/23 17:01	1
2-Nitroaniline	ND		10	2.2	ug/L		09/07/23 15:48	09/12/23 17:01	1
3-Nitroaniline	ND		10	1.8	ug/L		09/07/23 15:48	09/12/23 17:01	1
4-Nitroaniline	ND		10	1.5	ug/L		09/07/23 15:48	09/12/23 17:01	1
Nitrobenzene	ND		10	0.13	ug/L		09/07/23 15:48	09/12/23 17:01	1
2-Nitrophenol	ND		10	5.2	ug/L		09/07/23 15:48	09/12/23 17:01	1
4-Nitrophenol	ND		10	2.1	ug/L		09/07/23 15:48	09/12/23 17:01	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		09/07/23 15:48	09/12/23 17:01	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		09/07/23 15:48	09/12/23 17:01	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		09/07/23 15:48	09/12/23 17:01	1
Pentachlorophenol	ND		20	1.4	ug/L		09/07/23 15:48	09/12/23 17:01	1
Phenol	ND		10	2.6	ug/L		09/07/23 15:48	09/12/23 17:01	1
Pyridine	ND		10	3.2	ug/L		09/07/23 15:48	09/12/23 17:01	1
Quinoline	ND		10	4.5	ug/L		09/07/23 15:48	09/12/23 17:01	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		09/07/23 15:48	09/12/23 17:01	1

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

Lab Sample ID: MB 400-640140/1-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640140

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		09/07/23 15:48	09/12/23 17:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*46 - 124*	*09/07/23 15:48*	*09/12/23 17:01*	*1*
2-Fluorophenol	*33*		*13 - 113*	*09/07/23 15:48*	*09/12/23 17:01*	*1*
Nitrobenzene-d5	*63*		*36 - 126*	*09/07/23 15:48*	*09/12/23 17:01*	*1*
Phenol-d5	*50*		*17 - 127*	*09/07/23 15:48*	*09/12/23 17:01*	*1*
Terphenyl-d14	*82*		*44 - 149*	*09/07/23 15:48*	*09/12/23 17:01*	*1*
2,4,6-Tribromophenol	*61*		*26 - 150*	*09/07/23 15:48*	*09/12/23 17:01*	*1*

Lab Sample ID: LCS 400-640140/18-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640140

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	2.78	J *-	ug/L		2	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*46 - 124*
2-Fluorophenol	*59*		*13 - 113*
Nitrobenzene-d5	*69*		*36 - 126*
Phenol-d5	*66*		*17 - 127*
Terphenyl-d14	*87*		*44 - 149*
2,4,6-Tribromophenol	*66*		*26 - 150*

Lab Sample ID: LCS 400-640140/2-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640140

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	83.9		ug/L		70	21 - 120
Benzoic acid	522	203		ug/L		39	10 - 144
Benzyl alcohol	120	92.4		ug/L		77	28 - 120
Bis(2-chloroethoxy)methane	120	79.0		ug/L		66	47 - 120
Bis(2-chloroethyl)ether	120	80.1		ug/L		67	44 - 120
bis (2-chloroisopropyl) ether	120	80.7		ug/L		67	33 - 121
Bis(2-ethylhexyl) phthalate	120	87.1		ug/L		73	52 - 147
4-Bromophenyl phenyl ether	120	107		ug/L		89	54 - 122
Butyl benzyl phthalate	120	90.0		ug/L		75	54 - 133
4-Chloroaniline	120	55.0		ug/L		46	26 - 120
4-Chloro-3-methylphenol	120	95.2		ug/L		79	48 - 131
2-Chloronaphthalene	120	96.3		ug/L		80	52 - 121
2-Chlorophenol	120	88.8		ug/L		74	40 - 120
4-Chlorophenyl phenyl ether	120	116		ug/L		97	56 - 125
Dibenz[a,h]acridine	120	101		ug/L		84	31 - 150
Dibenzofuran	120	103		ug/L		86	56 - 122
3,3'-Dichlorobenzidine	160	141		ug/L		88	36 - 132
2,4-Dichlorophenol	120	95.5		ug/L		80	49 - 120

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

Lab Sample ID: LCS 400-640140/2-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640140

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diethyl phthalate	120	101		ug/L		84	50 - 137
2,4-Dimethylphenol	120	88.9		ug/L		74	48 - 120
Dimethyl phthalate	120	103		ug/L		86	57 - 124
Di-n-butyl phthalate	120	102		ug/L		85	58 - 126
4,6-Dinitro-ortho-cresol	240	125		ug/L		52	23 - 148
2,4-Dinitrophenol	240	116		ug/L		48	10 - 150
2,4-Dinitrotoluene	120	107		ug/L		89	54 - 142
2,6-Dinitrotoluene	120	98.2		ug/L		82	55 - 130
Di-n-octyl phthalate	120	86.9		ug/L		72	57 - 138
1,4-Dioxane	120	62.5		ug/L		52	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	80.9		ug/L		67	45 - 124
Hexachlorobenzene	120	111		ug/L		92	52 - 129
Hexachlorocyclopentadiene	120	33.6		ug/L		28	10 - 134
Hexachloroethane	120	71.7		ug/L		60	20 - 120
Indene	120	87.1		ug/L		73	49 - 120
Isophorone	120	84.7		ug/L		71	48 - 120
2-Methylphenol	120	93.6		ug/L		78	46 - 124
3 & 4 Methylphenol	120	95.2		ug/L		79	45 - 120
2-Nitroaniline	120	91.4		ug/L		76	51 - 145
3-Nitroaniline	120	91.6		ug/L		76	37 - 127
4-Nitroaniline	120	96.8		ug/L		81	36 - 137
Nitrobenzene	120	83.4		ug/L		70	45 - 120
2-Nitrophenol	120	94.7		ug/L		79	40 - 124
4-Nitrophenol	240	200		ug/L		83	23 - 146
N-Nitrosodimethylamine	120	96.9		ug/L		81	29 - 137
N-Nitrosodi-n-propylamine	120	93.7		ug/L		78	45 - 120
N-Nitrosodiphenylamine	119	90.5		ug/L		76	54 - 120
Pentachlorophenol	240	174		ug/L		73	31 - 130
Phenol	120	96.5		ug/L		80	11 - 120
Pyridine	240	125		ug/L		52	16 - 120
Quinoline	120	108		ug/L		90	49 - 130
2,4,5-Trichlorophenol	120	111		ug/L		92	51 - 136
2,4,6-Trichlorophenol	120	100		ug/L		83	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*80*		*46 - 124*
2-Fluorophenol	*60*		*13 - 113*
Nitrobenzene-d5	*64*		*36 - 126*
Phenol-d5	*68*		*17 - 127*
Terphenyl-d14	*87*		*44 - 149*
2,4,6-Tribromophenol	*79*		*26 - 150*

Lab Sample ID: LCSD 400-640140/19-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640140

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol	120	3.48	J *-	ug/L		3	10 - 120	22	30

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	89		46 - 124
2-Fluorophenol	65		13 - 113
Nitrobenzene-d5	76		36 - 126
Phenol-d5	74		17 - 127
Terphenyl-d14	100		44 - 149
2,4,6-Tribromophenol	70		26 - 150

Lab Sample ID: LCSD 400-640140/3-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640140

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	70.2		ug/L		59	21 - 120	18	30
Benzoic acid			522	239		ug/L		46	10 - 144	16	30
Benzyl alcohol			120	86.9		ug/L		72	28 - 120	6	30
Bis(2-chloroethoxy)methane			120	75.9		ug/L		63	47 - 120	4	30
Bis(2-chloroethyl)ether			120	81.8		ug/L		68	44 - 120	2	30
bis (2-chloroisopropyl) ether			120	75.5		ug/L		63	33 - 121	7	30
Bis(2-ethylhexyl) phthalate			120	85.3		ug/L		71	52 - 147	2	30
4-Bromophenyl phenyl ether			120	102		ug/L		85	54 - 122	5	30
Butyl benzyl phthalate			120	84.5		ug/L		70	54 - 133	6	30
4-Chloroaniline			120	53.6		ug/L		45	26 - 120	3	30
4-Chloro-3-methylphenol			120	90.7		ug/L		76	48 - 131	5	30
2-Chloronaphthalene			120	92.5		ug/L		77	52 - 121	4	30
2-Chlorophenol			120	82.2		ug/L		69	40 - 120	8	30
4-Chlorophenyl phenyl ether			120	113		ug/L		94	56 - 125	3	30
Dibenz[a,h]acridine			120	103		ug/L		86	31 - 150	2	30
Dibenzofuran			120	99.4		ug/L		83	56 - 122	4	30
3,3'-Dichlorobenzidine			160	134		ug/L		84	36 - 132	5	30
2,4-Dichlorophenol			120	90.1		ug/L		75	49 - 120	6	30
Diethyl phthalate			120	98.0		ug/L		82	50 - 137	3	30
2,4-Dimethylphenol			120	87.3		ug/L		73	48 - 120	2	30
Dimethyl phthalate			120	100		ug/L		84	57 - 124	3	30
Di-n-butyl phthalate			120	94.0		ug/L		78	58 - 126	8	30
4,6-Dinitro-ortho-cresol			240	129		ug/L		54	23 - 148	3	30
2,4-Dinitrophenol			240	121		ug/L		51	10 - 150	5	30
2,4-Dinitrotoluene			120	104		ug/L		87	54 - 142	3	30
2,6-Dinitrotoluene			120	95.2		ug/L		79	55 - 130	3	30
Di-n-octyl phthalate			120	84.6		ug/L		70	57 - 138	3	30
1,4-Dioxane			120	59.4		ug/L		50	31 - 120	5	30
1,2-Diphenylhydrazine (as Azobenzene)			120	75.1		ug/L		63	45 - 124	7	30
Hexachlorobenzene			120	106		ug/L		88	52 - 129	5	30
Hexachlorocyclopentadiene			120	34.5		ug/L		29	10 - 134	3	30
Hexachloroethane			120	65.7		ug/L		55	20 - 120	9	30
Indene			120	82.1		ug/L		68	49 - 120	6	30
Isophorone			120	81.0		ug/L		68	48 - 120	4	30
2-Methylphenol			120	88.0		ug/L		73	46 - 124	6	30
3 & 4 Methylphenol			120	88.8		ug/L		74	45 - 120	7	30
2-Nitroaniline			120	88.7		ug/L		74	51 - 145	3	30
3-Nitroaniline			120	86.4		ug/L		72	37 - 127	6	30
4-Nitroaniline			120	99.3		ug/L		83	36 - 137	3	30

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

Lab Sample ID: LCSD 400-640140/3-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640140

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrobenzene			120	78.2		ug/L		65	45 - 120	6	30
2-Nitrophenol			120	87.3		ug/L		73	40 - 124	8	30
4-Nitrophenol			240	177		ug/L		74	23 - 146	12	30
N-Nitrosodimethylamine			120	90.8		ug/L		76	29 - 137	7	30
N-Nitrosodi-n-propylamine			120	86.0		ug/L		72	45 - 120	9	30
N-Nitrosodiphenylamine			119	86.8		ug/L		73	54 - 120	4	30
Pentachlorophenol			240	160		ug/L		67	31 - 130	9	30
Phenol			120	88.7		ug/L		74	11 - 120	8	30
Pyridine			240	127		ug/L		53	16 - 120	1	30
Quinoline			120	104		ug/L		86	49 - 130	4	30
2,4,5-Trichlorophenol			120	107		ug/L		89	51 - 136	4	30
2,4,6-Trichlorophenol			120	97.4		ug/L		81	50 - 127	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*77*		*46 - 124*
2-Fluorophenol	*53*		*13 - 113*
Nitrobenzene-d5	*65*		*36 - 126*
Phenol-d5	*64*		*17 - 127*
Terphenyl-d14	*81*		*44 - 149*
2,4,6-Tribromophenol	*80*		*26 - 150*

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

Lab Sample ID: MB 400-640140/1-A
Matrix: Water
Analysis Batch: 640637

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640140

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		09/07/23 15:48	09/12/23 14:41	1
Acenaphthylene	ND		0.20	0.044	ug/L		09/07/23 15:48	09/12/23 14:41	1
Anthracene	ND		0.20	0.047	ug/L		09/07/23 15:48	09/12/23 14:41	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		09/07/23 15:48	09/12/23 14:41	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		09/07/23 15:48	09/12/23 14:41	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		09/07/23 15:48	09/12/23 14:41	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		09/07/23 15:48	09/12/23 14:41	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		09/07/23 15:48	09/12/23 14:41	1
Chrysene	ND		0.20	0.033	ug/L		09/07/23 15:48	09/12/23 14:41	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		09/07/23 15:48	09/12/23 14:41	1
Fluoranthene	ND		0.20	0.034	ug/L		09/07/23 15:48	09/12/23 14:41	1
Fluorene	ND		0.20	0.089	ug/L		09/07/23 15:48	09/12/23 14:41	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		09/07/23 15:48	09/12/23 14:41	1
Phenanthrene	ND		0.20	0.090	ug/L		09/07/23 15:48	09/12/23 14:41	1
Pyrene	ND		0.20	0.039	ug/L		09/07/23 15:48	09/12/23 14:41	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		09/07/23 15:48	09/12/23 14:41	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		09/07/23 15:48	09/12/23 14:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*54*		*18 - 147*	*09/07/23 15:48*	*09/12/23 14:41*	*1*

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

Lab Sample ID: MB 400-640140/1-A
Matrix: Water
Analysis Batch: 640637

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640140

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	50		15 - 128	09/07/23 15:48	09/12/23 14:41	1
Nitrobenzene-d5	62		10 - 144	09/07/23 15:48	09/12/23 14:41	1

Lab Sample ID: LCS 400-640140/22-A
Matrix: Water
Analysis Batch: 640637

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640140

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	2.00	1.17		ug/L		58	40 - 140
Acenaphthylene	2.00	1.24		ug/L		62	40 - 140
Anthracene	2.00	1.22		ug/L		61	40 - 140
Benzo[a]anthracene	2.00	1.06		ug/L		53	40 - 140
Benzo[a]pyrene	2.00	0.900		ug/L		45	40 - 140
Benzo[b]fluoranthene	2.00	0.871		ug/L		44	40 - 140
Benzo[g,h,i]perylene	2.00	0.896		ug/L		45	40 - 140
Benzo[k]fluoranthene	2.00	0.802		ug/L		40	40 - 140
Chrysene	2.00	1.06		ug/L		53	40 - 140
Dibenz(a,h)anthracene	2.00	0.965		ug/L		48	40 - 140
Fluoranthene	2.00	1.32		ug/L		66	40 - 140
Fluorene	2.00	1.28		ug/L		64	40 - 140
Indeno[1,2,3-cd]pyrene	2.00	0.952		ug/L		48	40 - 140
Phenanthrene	2.00	1.13		ug/L		57	40 - 140
Pyrene	2.00	0.903		ug/L		45	40 - 140
1-Methylnaphthalene	2.00	1.27		ug/L		63	40 - 140
2-Methylnaphthalene	2.00	1.25		ug/L		62	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	50		18 - 147
2-Fluorobiphenyl	50		15 - 128
Nitrobenzene-d5	63		10 - 144

Lab Sample ID: LCSD 400-640140/23-A
Matrix: Water
Analysis Batch: 640637

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640140

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	2.00	1.59		ug/L		79	40 - 140	31	40
Acenaphthylene	2.00	1.67		ug/L		84	40 - 140	30	40
Anthracene	2.00	1.58		ug/L		79	40 - 140	26	40
Benzo[a]anthracene	2.00	1.47		ug/L		74	40 - 140	32	40
Benzo[a]pyrene	2.00	1.12		ug/L		56	40 - 140	22	40
Benzo[b]fluoranthene	2.00	1.20		ug/L		60	40 - 140	32	40
Benzo[g,h,i]perylene	2.00	1.25		ug/L		62	40 - 140	33	40
Benzo[k]fluoranthene	2.00	1.18		ug/L		59	40 - 140	38	40
Chrysene	2.00	1.43		ug/L		72	40 - 140	30	40
Dibenz(a,h)anthracene	2.00	1.34		ug/L		67	40 - 140	33	40
Fluoranthene	2.00	1.80		ug/L		90	40 - 140	31	40
Fluorene	2.00	1.73		ug/L		87	40 - 140	30	40

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

Lab Sample ID: LCSD 400-640140/23-A
Matrix: Water
Analysis Batch: 640637

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640140

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Indeno[1,2,3-cd]pyrene			2.00	1.33		ug/L		66	40 - 140	33	40
Phenanthrene			2.00	1.58		ug/L		79	40 - 140	33	40
Pyrene			2.00	1.30		ug/L		65	40 - 140	36	40
1-Methylnaphthalene			2.00	1.74		ug/L		87	40 - 140	32	40
2-Methylnaphthalene			2.00	1.70		ug/L		85	40 - 140	30	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*67*		*18 - 147*
2-Fluorobiphenyl	*67*		*15 - 128*
Nitrobenzene-d5	*85*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-639897/1-A
Matrix: Water
Analysis Batch: 639945

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 639897

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/06/23 12:59	09/06/23 15:55	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/06/23 12:59	09/06/23 15:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*70*		*51 - 149*	*09/06/23 12:59*	*09/06/23 15:55*	*1*

Lab Sample ID: LCS 400-639897/2-A
Matrix: Water
Analysis Batch: 639945

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 639897

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-D bromo-3-Chloropropane			0.101	0.0933		ug/L		93	60 - 140
1,2-D bromoethane			0.101	0.0725		ug/L		72	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*47*	*S1-*	*51 - 149*

Lab Sample ID: LCSD 400-639897/3-A
Matrix: Water
Analysis Batch: 639945

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 639897

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane			0.101	0.0970		ug/L		97	60 - 140	4	30
1,2-D bromoethane			0.101	0.0748		ug/L		74	60 - 140	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*55*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-640109/1-A
Matrix: Water
Analysis Batch: 640148

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640109

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/07/23 13:27	09/07/23 16:36	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/07/23 13:27	09/07/23 16:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*80*		*51 - 149*	*09/07/23 13:27*	*09/07/23 16:36*	*1*

Lab Sample ID: LCS 400-640109/2-A
Matrix: Water
Analysis Batch: 640148

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640109

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-D bromo-3-Chloropropane			0.101	0.107		ug/L		106	60 - 140		
1,2-D bromoethane			0.101	0.0993		ug/L		99	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*77*		*51 - 149*

Lab Sample ID: LCSD 400-640109/3-A
Matrix: Water
Analysis Batch: 640148

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640109

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane			0.101	0.112		ug/L		111	60 - 140	5	30
1,2-D bromoethane			0.101	0.102		ug/L		101	60 - 140	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*87*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____ 400-242836 COC

☐ 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: 8/31/2023
PO #	**GSAP Project ID**	PAGE: 1 of 2
60697537 – 3.3.2	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 – 3.3.2

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 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; loredana.fillmon@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☐ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

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-083123-8260-A	8/31/2023	0000	Water	2					2	X			
	TB-ROX-083123-8011-A	8/31/2023	0000	Water	2					2		X		
	MW5-ROX-083123	8/31/2023	1020	Water	6			2		8	X	X	X	X
	P114R-ROX-083123	8/31/2023	1235	Water	6			2		8	X	X	X	X
	MW13-ROX-083123	8/31/2023	1330	Water	6			2		8	X	X	X	X

Joe Mayer 8-31-23

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time
JOE MAYER	FEDEX: 5293 4337 5412, 5293 4337 5423	8/31/2023	1600
Relinquished by: (Signature)	Received by: (Signature)	Date: BP 9/1/23	Time: 918
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 13Oct22

1599777 1599778, 1599779

5.1°C IR10 3.5°C

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: 8/31/2023
PO #	**GSAP Project ID**	PAGE: 2 of 2
60697537 – 3.3.2	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 – 3.3.2

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, S. Beadle	

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; loredana.filimon@aecom.com

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

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-083123-8260-B	8/31/2023	0000	Water	2					2	X			
	TB-ROX-083123-8011-B	8/31/2023	0000	Water	2					2		X		
	P93C-ROX-083123	8/31/2023	0940	Water	6			2		8	X	X	X	X
	P93C-ROX-083123-DUP	8/31/2023	0940	Water	6			2		8	X	X	X	X
	P57-ROX-083123	8/31/2023	1200	Water	6			2		8	X	X	X	X
	T12-ROX-083123	8/31/2023	1310	Water	6			2		8	X	X	X	X

S. Beadle 8/31/23

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
MARY MASSA	FEDEX: See page 1	8/31/2023	1600
Relinquished by: (Signature)	Received by: (Signature) BP	Date: 9/1/23	Time 918
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time

Version: 12July23

CUSTODY SEALS: See page 1

5.1°C IR10 3.5°C

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-242836-1
SDG Number:

Login Number: 242836
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	5.1°C, 3.5°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: 400-242836-1
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	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	12-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-23
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 Monthly – August/September 2023 Data Review

Laboratory SDG: 400-242838-1

Data Reviewer: Adelina Gita

Peer Reviewer: Cheyana Cokley

Date Reviewed: 10/04/2023

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

Sample Identification	Sample Identification
TB-ROX-083123-8260-BP	TB-ROX-083123-8011-BP
MW23-ROX-083123	--

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 dimethyl phthalate was detected in the method blank. Benzenethiol LCS/LCSD recoveries were outside evaluation criteria. Several VOC MS/MSD recoveries were outside evaluation criteria in sample MW23-ROX-083123. The continuing calibration verification (CCV) for dichlorodifluoromethane, hexachlorocyclopentadiene, and 2-chloroethyl vinyl ether 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?

Yes

Blank ID	Parameter	Analyte	Concentration/Amount
MB 400-640140/1-A	SVOCs	Dimethyl phthalate	0.550 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
MW23-ROX-083123	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 400-640140/18-A/19-A	SVOCs	Benzenethiol	**2/3**	22	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-083123	SVOCs	Benzenethiol	**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, although not requested, sample MW23-ROX-083123 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-083123 MS/MSD	VOCs	1-Chlorohexane	**150/148**	1	56-136/30
MW23-ROX-083123 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW23-ROX-083123 MS /MSD	VOCs	Hexachlorobutadiene	**163/160**	2	31-149/36

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
MW23-ROX-083123	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 dichlorodifluoromethane, hexachlorocyclopentadiene, and 2-chloroethyl vinyl ether was outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table. 2-Chloroethyl vinyl ether in sample MW23-ROX-083123 was qualified in Section 7.0 of this data review due to MS/MSD recoveries outside evaluation criteria; no further qualification is required.

Sample ID	Parameter	Analyte	Qualification
MW23-ROX-083123	VOCs	Dichlorodifluoromethane	**UJ**
MW23-ROX-083123	SVOCs	Hexachlorocyclopentadiene	**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 9/14/2023 4:09:36 PM

JOB DESCRIPTION

ROXANA MONTHLY GW

JOB NUMBER

400-242838-1

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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9/14/2023 4:09:36 PM

Authorized for release by
Leah Klingensmith, Senior Project Manager
Leah.Klingensmith@et.eurofinsus.com
(615)301-5038

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Certification Summary 40

Job ID: 400-242838-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-242838-1

Receipt
The samples were received on 9/1/2023 9:18 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 3.5°C and 5.1°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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-640405 were outside control limits for 1-Chlorohexane and Hexachlorobutadiene due to high bias on this day of analysis.

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-083123-8260-BP (400-242838-1) and MW23-ROX-083123 (400-242838-3). 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 400-640405 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260D: The RPD for the matrix spike / matrix spike duplicate (MS/MSD) for 2-Chloroethyl vinyl ether was not calculable for analytical batch 400-640405 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-640405 recovered above the upper control limit for 1-Chlorohexane, Hexachlorobutadiene and n-Butylbenzene. The samples associated with this CCV were non-detects or not reported for the affected analytes; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-640405 recovered outside acceptance criteria, low biased, for 2-Chloroethyl vinyl ether 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.

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 continuing calibration verification (CCV) associated with batch 400-640672 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: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-640140 and analytical batch 400-640672 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 method blank for preparation batch 400-640140 and analytical batch 400-640672 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_SIM: The continuing calibration verification (CCV) associated with batch 400-640637 recovered above the upper control limit for Fluoranthene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Job ID: 400-242838-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

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 400-640148 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: 400-242838-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-242838-1	TB-ROX-083123-8260-BP	Water	08/31/23 12:00	09/01/23 09:18
400-242838-2	TB-ROX-083123-8011-BP	Water	08/31/23 12:00	09/01/23 09:18
400-242838-3	MW23-ROX-083123	Water	08/31/23 09:15	09/01/23 09:18

Detection Summary

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

Job ID: 400-242838-1

Client Sample ID: TB-ROX-083123-8260-BP — Lab Sample ID: 400-242838-1

No Detections.

Client Sample ID: TB-ROX-083123-8011-BP — Lab Sample ID: 400-242838-2

No Detections.

Client Sample ID: MW23-ROX-083123 — Lab Sample ID: 400-242838-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.89	J	1.0	0.22	ug/L	1		8260D	Total/NA
Dimethyl phthalate	0.50	J B	9.7	0.17	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: 400-242838-1

Client Sample ID: TB-ROX-083123-8260-BP
Date Collected: 08/31/23 12:00
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242838-1
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			09/10/23 15:41	1
Acrolein	ND		20	3.3	ug/L			09/10/23 15:41	1
Acrylonitrile	ND		10	2.8	ug/L			09/10/23 15:41	1
Benzene	ND		1.0	0.50	ug/L			09/10/23 15:41	1
Bromobenzene	ND		1.0	0.54	ug/L			09/10/23 15:41	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/10/23 15:41	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/10/23 15:41	1
Bromoform	ND		5.0	0.25	ug/L			09/10/23 15:41	1
Bromomethane	ND		1.0	0.98	ug/L			09/10/23 15:41	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/10/23 15:41	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/10/23 15:41	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/10/23 15:41	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/10/23 15:41	1
Chloroethane	ND		1.0	0.76	ug/L			09/10/23 15:41	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/10/23 15:41	1
Chloroform	ND		1.0	0.90	ug/L			09/10/23 15:41	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/10/23 15:41	1
Chloromethane	ND		1.0	0.90	ug/L			09/10/23 15:41	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/10/23 15:41	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/10/23 15:41	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/10/23 15:41	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/10/23 15:41	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/10/23 15:41	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/10/23 15:41	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/10/23 15:41	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/10/23 15:41	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/10/23 15:41	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 15:41	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 15:41	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 15:41	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 15:41	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/10/23 15:41	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/10/23 15:41	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/10/23 15:41	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/10/23 15:41	1
2-Hexanone	ND		25	1.4	ug/L			09/10/23 15:41	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/10/23 15:41	1
Methylene bromide	ND		5.0	0.22	ug/L			09/10/23 15:41	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/10/23 15:41	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/10/23 15:41	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/10/23 15:41	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/10/23 15:41	1
Naphthalene	ND		5.0	3.0	ug/L			09/10/23 15:41	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/10/23 15:41	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/10/23 15:41	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/10/23 15:41	1
o-Xylene	ND		5.0	0.60	ug/L			09/10/23 15:41	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/10/23 15:41	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/10/23 15:41	1

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

Job ID: 400-242838-1

Client Sample ID: TB-ROX-083123-8260-BP
Date Collected: 08/31/23 12:00
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242838-1
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			09/10/23 15:41	1
Styrene	ND		1.0	1.0	ug/L			09/10/23 15:41	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/10/23 15:41	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/10/23 15:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/10/23 15:41	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/10/23 15:41	1
Toluene	ND		1.0	0.90	ug/L			09/10/23 15:41	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 15:41	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/10/23 15:41	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/10/23 15:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/10/23 15:41	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/10/23 15:41	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/10/23 15:41	1
Trichloroethene	ND		1.0	0.15	ug/L			09/10/23 15:41	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/10/23 15:41	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/10/23 15:41	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/10/23 15:41	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/10/23 15:41	1
Vinyl acetate	ND		25	0.93	ug/L			09/10/23 15:41	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/10/23 15:41	1
Xylenes, Total	ND		10	1.6	ug/L			09/10/23 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 130*		*09/10/23 15:41*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*09/10/23 15:41*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*09/10/23 15:41*	*1*

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

Job ID: 400-242838-1

Client Sample ID: TB-ROX-083123-8011-BP
Date Collected: 08/31/23 12:00
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242838-2
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-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/07/23 13:27	09/07/23 18:59	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/07/23 13:27	09/07/23 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*	*p*	*51 - 149*	*09/07/23 13:27*	*09/07/23 18:59*	*1*

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

Job ID: 400-242838-1

Client Sample ID: MW23-ROX-083123
Date Collected: 08/31/23 09:15
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242838-3
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			09/10/23 14:03	1
Acrolein	ND		20	3.3	ug/L			09/10/23 14:03	1
Acrylonitrile	ND		10	2.8	ug/L			09/10/23 14:03	1
Benzene	ND		1.0	0.50	ug/L			09/10/23 14:03	1
Bromobenzene	ND		1.0	0.54	ug/L			09/10/23 14:03	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/10/23 14:03	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/10/23 14:03	1
Bromoform	ND		5.0	0.25	ug/L			09/10/23 14:03	1
Bromomethane	ND		1.0	0.98	ug/L			09/10/23 14:03	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/10/23 14:03	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/10/23 14:03	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/10/23 14:03	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/10/23 14:03	1
Chloroethane	ND		1.0	0.76	ug/L			09/10/23 14:03	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			09/10/23 14:03	1
Chloroform	ND		1.0	0.90	ug/L			09/10/23 14:03	1
1-Chlorohexane	ND	F1	1.0	0.32	ug/L			09/10/23 14:03	1
Chloromethane	ND		1.0	0.90	ug/L			09/10/23 14:03	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/10/23 14:03	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/10/23 14:03	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/10/23 14:03	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/10/23 14:03	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/10/23 14:03	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/10/23 14:03	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/10/23 14:03	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/10/23 14:03	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/10/23 14:03	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 14:03	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 14:03	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 14:03	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 14:03	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/10/23 14:03	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/10/23 14:03	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/10/23 14:03	1
Hexachlorobutadiene	ND	F1	5.0	0.90	ug/L			09/10/23 14:03	1
2-Hexanone	ND		25	1.4	ug/L			09/10/23 14:03	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/10/23 14:03	1
Methylene bromide	ND		5.0	0.22	ug/L			09/10/23 14:03	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/10/23 14:03	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/10/23 14:03	1
Methyl tert-butyl ether	**0.89**	**J**	1.0	0.22	ug/L			09/10/23 14:03	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/10/23 14:03	1
Naphthalene	ND		5.0	3.0	ug/L			09/10/23 14:03	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/10/23 14:03	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/10/23 14:03	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/10/23 14:03	1
o-Xylene	ND		5.0	0.60	ug/L			09/10/23 14:03	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/10/23 14:03	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/10/23 14:03	1

Client Sample ID: MW23-ROX-083123
Date Collected: 08/31/23 09:15
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242838-3
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			09/10/23 14:03	1
Styrene	ND		1.0	1.0	ug/L			09/10/23 14:03	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/10/23 14:03	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/10/23 14:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/10/23 14:03	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/10/23 14:03	1
Toluene	ND		1.0	0.90	ug/L			09/10/23 14:03	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 14:03	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/10/23 14:03	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/10/23 14:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/10/23 14:03	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/10/23 14:03	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/10/23 14:03	1
Trichloroethene	ND		1.0	0.15	ug/L			09/10/23 14:03	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/10/23 14:03	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/10/23 14:03	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/10/23 14:03	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/10/23 14:03	1
Vinyl acetate	ND		25	0.93	ug/L			09/10/23 14:03	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/10/23 14:03	1
Xylenes, Total	ND		10	1.6	ug/L			09/10/23 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*72 - 130*		*09/10/23 14:03*	*1*
Dibromofluoromethane	*95*		*75 - 126*		*09/10/23 14:03*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*09/10/23 14:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.096	ug/L		09/07/23 15:48	09/12/23 19:30	1
Acenaphthylene	ND		0.19	0.043	ug/L		09/07/23 15:48	09/12/23 19:30	1
Anthracene	ND		0.19	0.046	ug/L		09/07/23 15:48	09/12/23 19:30	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		09/07/23 15:48	09/12/23 19:30	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		09/07/23 15:48	09/12/23 19:30	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		09/07/23 15:48	09/12/23 19:30	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/07/23 15:48	09/12/23 19:30	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		09/07/23 15:48	09/12/23 19:30	1
Chrysene	ND		0.19	0.032	ug/L		09/07/23 15:48	09/12/23 19:30	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		09/07/23 15:48	09/12/23 19:30	1
Fluoranthene	ND		0.19	0.033	ug/L		09/07/23 15:48	09/12/23 19:30	1
Fluorene	ND		0.19	0.087	ug/L		09/07/23 15:48	09/12/23 19:30	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		09/07/23 15:48	09/12/23 19:30	1
Phenanthrene	ND		0.19	0.088	ug/L		09/07/23 15:48	09/12/23 19:30	1
Pyrene	ND		0.19	0.038	ug/L		09/07/23 15:48	09/12/23 19:30	1
1-Methylnaphthalene	ND		0.19	0.078	ug/L		09/07/23 15:48	09/12/23 19:30	1
2-Methylnaphthalene	ND		0.19	0.064	ug/L		09/07/23 15:48	09/12/23 19:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*69*		*18 - 147*	*09/07/23 15:48*	*09/12/23 19:30*	*1*
2-Fluorobiphenyl	*62*		*15 - 128*	*09/07/23 15:48*	*09/12/23 19:30*	*1*

Client Sample ID: MW23-ROX-083123
Date Collected: 08/31/23 09:15
Date Received: 09/01/23 09:18

Lab Sample ID: 400-242838-3
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*	*09/07/23 15:48*	*09/12/23 19:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	3.7	ug/L		09/07/23 15:48	09/12/23 21:15	1
Benzenethiol	ND	*-	9.7	1.7	ug/L		09/07/23 15:48	09/12/23 21:15	1
Benzoic acid	ND		29	7.1	ug/L		09/07/23 15:48	09/12/23 21:15	1
Benzyl alcohol	ND		9.7	1.9	ug/L		09/07/23 15:48	09/12/23 21:15	1
Bis(2-chloroethoxy)methane	ND		9.7	0.16	ug/L		09/07/23 15:48	09/12/23 21:15	1
Bis(2-chloroethyl)ether	ND		9.7	2.6	ug/L		09/07/23 15:48	09/12/23 21:15	1
bis (2-chloroisopropyl) ether	ND		9.7	0.16	ug/L		09/07/23 15:48	09/12/23 21:15	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.9	ug/L		09/07/23 15:48	09/12/23 21:15	1
4-Bromophenyl phenyl ether	ND		9.7	0.19	ug/L		09/07/23 15:48	09/12/23 21:15	1
Butyl benzyl phthalate	ND		9.7	0.18	ug/L		09/07/23 15:48	09/12/23 21:15	1
4-Chloroaniline	ND		9.7	3.3	ug/L		09/07/23 15:48	09/12/23 21:15	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		09/07/23 15:48	09/12/23 21:15	1
2-Chloronaphthalene	ND		9.7	0.14	ug/L		09/07/23 15:48	09/12/23 21:15	1
2-Chlorophenol	ND		9.7	2.1	ug/L		09/07/23 15:48	09/12/23 21:15	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		09/07/23 15:48	09/12/23 21:15	1
Dibenz[a,h]acridine	ND		9.7	0.97	ug/L		09/07/23 15:48	09/12/23 21:15	1
Dibenzofuran	ND		9.7	0.17	ug/L		09/07/23 15:48	09/12/23 21:15	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		09/07/23 15:48	09/12/23 21:15	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		09/07/23 15:48	09/12/23 21:15	1
Diethyl phthalate	ND		9.7	0.23	ug/L		09/07/23 15:48	09/12/23 21:15	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		09/07/23 15:48	09/12/23 21:15	1
Dimethyl phthalate	**0.50**	**J B**	9.7	0.17	ug/L		09/07/23 15:48	09/14/23 00:30	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		09/07/23 15:48	09/12/23 21:15	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.6	ug/L		09/07/23 15:48	09/12/23 21:15	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/07/23 15:48	09/12/23 21:15	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		09/07/23 15:48	09/12/23 21:15	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		09/07/23 15:48	09/12/23 21:15	1
Di-n-octyl phthalate	ND		9.7	0.17	ug/L		09/07/23 15:48	09/12/23 21:15	1
1,4-Dioxane	ND		9.7	0.97	ug/L		09/07/23 15:48	09/12/23 21:15	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		09/07/23 15:48	09/12/23 21:15	1
Hexachlorobenzene	ND		9.7	0.17	ug/L		09/07/23 15:48	09/12/23 21:15	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/07/23 15:48	09/12/23 21:15	1
Hexachloroethane	ND		9.7	4.1	ug/L		09/07/23 15:48	09/12/23 21:15	1
Indene	ND		9.7	0.97	ug/L		09/07/23 15:48	09/12/23 21:15	1
Isophorone	ND		9.7	0.14	ug/L		09/07/23 15:48	09/12/23 21:15	1
2-Methylphenol	ND		9.7	1.8	ug/L		09/07/23 15:48	09/12/23 21:15	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		09/07/23 15:48	09/12/23 21:15	1
2-Nitroaniline	ND		9.7	2.1	ug/L		09/07/23 15:48	09/12/23 21:15	1
3-Nitroaniline	ND		9.7	1.8	ug/L		09/07/23 15:48	09/12/23 21:15	1
4-Nitroaniline	ND		9.7	1.5	ug/L		09/07/23 15:48	09/12/23 21:15	1
Nitrobenzene	ND		9.7	0.13	ug/L		09/07/23 15:48	09/12/23 21:15	1
2-Nitrophenol	ND		9.7	5.1	ug/L		09/07/23 15:48	09/12/23 21:15	1
4-Nitrophenol	ND		9.7	2.0	ug/L		09/07/23 15:48	09/12/23 21:15	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		09/07/23 15:48	09/12/23 21:15	1

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

Job ID: 400-242838-1

Client Sample ID: MW23-ROX-083123

Lab Sample ID: 400-242838-3

Date Collected: 08/31/23 09:15

Matrix: Water

Date Received: 09/01/23 09:18

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	3.2	ug/L		09/07/23 15:48	09/12/23 21:15	1
N-Nitrosodiphenylamine	ND		9.7	0.18	ug/L		09/07/23 15:48	09/12/23 21:15	1
Pentachlorophenol	ND		19	1.4	ug/L		09/07/23 15:48	09/12/23 21:15	1
Phenol	ND		9.7	2.5	ug/L		09/07/23 15:48	09/12/23 21:15	1
Pyridine	ND		9.7	3.1	ug/L		09/07/23 15:48	09/12/23 21:15	1
Quinoline	ND		9.7	4.4	ug/L		09/07/23 15:48	09/12/23 21:15	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		09/07/23 15:48	09/12/23 21:15	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		09/07/23 15:48	09/12/23 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*46 - 124*	*09/07/23 15:48*	*09/12/23 21:15*	*1*
2-Fluorophenol	*26*		*13 - 113*	*09/07/23 15:48*	*09/12/23 21:15*	*1*
Nitrobenzene-d5	*62*		*36 - 126*	*09/07/23 15:48*	*09/12/23 21:15*	*1*
Phenol-d5	*43*		*17 - 127*	*09/07/23 15:48*	*09/12/23 21:15*	*1*
Terphenyl-d14	*93*		*44 - 149*	*09/07/23 15:48*	*09/12/23 21:15*	*1*
2,4,6-Tribromophenol	*69*		*26 - 150*	*09/07/23 15:48*	*09/12/23 21:15*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/07/23 13:27	09/07/23 19:19	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/07/23 13:27	09/07/23 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*51 - 149*	*09/07/23 13:27*	*09/07/23 19:19*	*1*

Definitions/Glossary

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

Job ID: 400-242838-1

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.
B	Compound was found in the blank and sample.
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: 400-242838-1

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)
400-242838-1	TB-ROX-083123-8260-BP	109	94	102
400-242838-3	MW23-ROX-083123	110	95	100
400-242838-3 MS	MW23-ROX-083123	105	92	101
400-242838-3 MSD	MW23-ROX-083123	105	92	101
LCS 400-640405/1002	Lab Control Sample	105	90	100
MB 400-640405/4	Method Blank	111	94	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)
400-242838-3	MW23-ROX-083123	71	26	62	43	93	69
LCS 400-640140/18-A	Lab Control Sample	78	59	69	66	87	66
LCS 400-640140/2-A	Lab Control Sample	80	60	64	68	87	79
LCSD 400-640140/19-A	Lab Control Sample Dup	89	65	76	74	100	70
LCSD 400-640140/3-A	Lab Control Sample Dup	77	53	65	64	81	80
MB 400-640140/1-A	Method Blank	72	33	63	50	82	61

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)
400-242838-3	MW23-ROX-083123	69	62	77
LCS 400-640140/22-A	Lab Control Sample	50	50	63
LCSD 400-640140/23-A	Lab Control Sample Dup	67	67	85
MB 400-640140/1-A	Method Blank	54	50	62

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: 400-242838-1

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)
400-242838-2	TB-ROX-083123-8011-BP	84 p
400-242838-3	MW23-ROX-083123	81
LCS 400-640109/2-A	Lab Control Sample	77
LCSD 400-640109/3-A	Lab Control Sample Dup	87
MB 400-640109/1-A	Method Blank	80

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-242838-1

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: 400-242838-1

Client Sample ID: TB-ROX-083123-8260-BP
Lab Sample ID: 400-242838-1
Date Collected: 08/31/23 12:00
Matrix: Water
Date Received: 09/01/23 09:18

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	640405	09/10/23 15:41	CAR	EET PEN

Client Sample ID: TB-ROX-083123-8011-BP
Lab Sample ID: 400-242838-2
Date Collected: 08/31/23 12:00
Matrix: Water
Date Received: 09/01/23 09:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.9 mL	35 mL	640109	09/07/23 13:27	PG	EET PEN
Total/NA	Analysis	8011		1			640148	09/07/23 18:59	PG	EET PEN

Client Sample ID: MW23-ROX-083123
Lab Sample ID: 400-242838-3
Date Collected: 08/31/23 09:15
Matrix: Water
Date Received: 09/01/23 09:18

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	640405	09/10/23 14:03	CAR	EET PEN
Total/NA	Prep	3520C			256.8 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640898	09/14/23 00:30	VC1	EET PEN
Total/NA	Prep	3520C			256.8 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 21:15	S1B	EET PEN
Total/NA	Prep	3520C			256.8 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 19:30	TH	EET PEN
Total/NA	Prep	8011			35.1 mL	35 mL	640109	09/07/23 13:27	PG	EET PEN
Total/NA	Analysis	8011		1			640148	09/07/23 19:19	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-640109/1-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	640109	09/07/23 13:27	PG	EET PEN
Total/NA	Analysis	8011		1			640148	09/07/23 16:36	PG	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-640140/1-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	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 17:01	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 14:41	TH	EET PEN

Lab Chronicle

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

Job ID: 400-242838-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-640405/4
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	640405	09/10/23 13:14	CAR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640109/2-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	640109	09/07/23 13:27	PG	EET PEN
Total/NA	Analysis	8011		1			640148	09/07/23 16:56	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640140/18-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	640140	09/08/23 12:54	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 18:05	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640140/22-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	640140	09/08/23 12:54	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 15:02	TH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640140/2-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	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 17:23	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640405/1002
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	640405	09/10/23 12:13	CAR	EET PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-640109/3-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	640109	09/07/23 13:27	PG	EET PEN
Total/NA	Analysis	8011		1			640148	09/07/23 17:17	PG	EET PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-640140/19-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	640140	09/08/23 12:54	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 18:26	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-640140/23-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/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	640140	09/08/23 12:54	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 16:43	TH	EET PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-640140/3-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	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 17:44	S1B	EET PEN

Client Sample ID: MW23-ROX-083123 — **Lab Sample ID: 400-242838-3 MS**
Date Collected: 08/31/23 09:15 — **Matrix: Water**
Date Received: 09/01/23 09:18

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	640405	09/10/23 14:27	CAR	EET PEN

Client Sample ID: MW23-ROX-083123 — **Lab Sample ID: 400-242838-3 MSD**
Date Collected: 08/31/23 09:15 — **Matrix: Water**
Date Received: 09/01/23 09:18

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	640405	09/10/23 14:52	CAR	EET PEN

Laboratory References:
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 640405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242838-1	TB-ROX-083123-8260-BP	Total/NA	Water	8260D	
400-242838-3	MW23-ROX-083123	Total/NA	Water	8260D	
MB 400-640405/4	Method Blank	Total/NA	Water	8260D	
LCS 400-640405/1002	Lab Control Sample	Total/NA	Water	8260D	
400-242838-3 MS	MW23-ROX-083123	Total/NA	Water	8260D	
400-242838-3 MSD	MW23-ROX-083123	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 640140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242838-3	MW23-ROX-083123	Total/NA	Water	3520C	
MB 400-640140/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-640140/18-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-640140/22-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-640140/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-640140/19-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-640140/23-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-640140/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 640637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242838-3	MW23-ROX-083123	Total/NA	Water	8270E SIM	640140
MB 400-640140/1-A	Method Blank	Total/NA	Water	8270E SIM	640140
LCS 400-640140/22-A	Lab Control Sample	Total/NA	Water	8270E SIM	640140
LCSD 400-640140/23-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	640140

Analysis Batch: 640672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242838-3	MW23-ROX-083123	Total/NA	Water	8270E	640140
MB 400-640140/1-A	Method Blank	Total/NA	Water	8270E	640140
LCS 400-640140/18-A	Lab Control Sample	Total/NA	Water	8270E	640140
LCS 400-640140/2-A	Lab Control Sample	Total/NA	Water	8270E	640140
LCSD 400-640140/19-A	Lab Control Sample Dup	Total/NA	Water	8270E	640140
LCSD 400-640140/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	640140

Analysis Batch: 640898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242838-3	MW23-ROX-083123	Total/NA	Water	8270E	640140

GC Semi VOA

Prep Batch: 640109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242838-2	TB-ROX-083123-8011-BP	Total/NA	Water	8011	
400-242838-3	MW23-ROX-083123	Total/NA	Water	8011	
MB 400-640109/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-640109/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-640109/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

QC Association Summary

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

Job ID: 400-242838-1

GC Semi VOA

Analysis Batch: 640148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242838-2	TB-ROX-083123-8011-BP	Total/NA	Water	8011	640109
400-242838-3	MW23-ROX-083123	Total/NA	Water	8011	640109
MB 400-640109/1-A	Method Blank	Total/NA	Water	8011	640109
LCS 400-640109/2-A	Lab Control Sample	Total/NA	Water	8011	640109
LCSD 400-640109/3-A	Lab Control Sample Dup	Total/NA	Water	8011	640109

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

Lab Sample ID: MB 400-640405/4
Matrix: Water
Analysis Batch: 640405

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			09/10/23 13:14	1
Acrolein	ND		20	3.3	ug/L			09/10/23 13:14	1
Acrylonitrile	ND		10	2.8	ug/L			09/10/23 13:14	1
Benzene	ND		1.0	0.50	ug/L			09/10/23 13:14	1
Bromobenzene	ND		1.0	0.54	ug/L			09/10/23 13:14	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/10/23 13:14	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/10/23 13:14	1
Bromoform	ND		5.0	0.25	ug/L			09/10/23 13:14	1
Bromomethane	ND		1.0	0.98	ug/L			09/10/23 13:14	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/10/23 13:14	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/10/23 13:14	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/10/23 13:14	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/10/23 13:14	1
Chloroethane	ND		1.0	0.76	ug/L			09/10/23 13:14	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/10/23 13:14	1
Chloroform	ND		1.0	0.90	ug/L			09/10/23 13:14	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/10/23 13:14	1
Chloromethane	ND		1.0	0.90	ug/L			09/10/23 13:14	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/10/23 13:14	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/10/23 13:14	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/10/23 13:14	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/10/23 13:14	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/10/23 13:14	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/10/23 13:14	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/10/23 13:14	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/10/23 13:14	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/10/23 13:14	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 13:14	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 13:14	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 13:14	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/10/23 13:14	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/10/23 13:14	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/10/23 13:14	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/10/23 13:14	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/10/23 13:14	1
2-Hexanone	ND		25	1.4	ug/L			09/10/23 13:14	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/10/23 13:14	1
Methylene bromide	ND		5.0	0.22	ug/L			09/10/23 13:14	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/10/23 13:14	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/10/23 13:14	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/10/23 13:14	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/10/23 13:14	1
Naphthalene	ND		5.0	3.0	ug/L			09/10/23 13:14	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/10/23 13:14	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/10/23 13:14	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/10/23 13:14	1
o-Xylene	ND		5.0	0.60	ug/L			09/10/23 13:14	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/10/23 13:14	1

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

Lab Sample ID: MB 400-640405/4
Matrix: Water
Analysis Batch: 640405

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			09/10/23 13:14	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			09/10/23 13:14	1
Styrene	ND		1.0	1.0	ug/L			09/10/23 13:14	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/10/23 13:14	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/10/23 13:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/10/23 13:14	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/10/23 13:14	1
Toluene	ND		1.0	0.90	ug/L			09/10/23 13:14	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/10/23 13:14	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/10/23 13:14	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/10/23 13:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/10/23 13:14	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/10/23 13:14	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/10/23 13:14	1
Trichloroethene	ND		1.0	0.15	ug/L			09/10/23 13:14	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/10/23 13:14	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/10/23 13:14	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/10/23 13:14	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/10/23 13:14	1
Vinyl acetate	ND		25	0.93	ug/L			09/10/23 13:14	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/10/23 13:14	1
Xylenes, Total	ND		10	1.6	ug/L			09/10/23 13:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*72 - 130*		*09/10/23 13:14*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*09/10/23 13:14*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/10/23 13:14*	*1*

Lab Sample ID: LCS 400-640405/1002
Matrix: Water
Analysis Batch: 640405

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	250	298		ug/L		119	38 - 160
Acrylonitrile	500	488		ug/L		98	64 - 142
Benzene	50.0	51.9		ug/L		104	70 - 130
Bromobenzene	50.0	52.0		ug/L		104	70 - 132
Bromochloromethane	50.0	44.6		ug/L		89	70 - 130
Bromodichloromethane	50.0	50.7		ug/L		101	67 - 133
Bromoform	50.0	51.6		ug/L		103	57 - 140
Bromomethane	25.0	23.1		ug/L		92	10 - 160
2-Butanone (MEK)	200	224		ug/L		112	61 - 145
Carbon disulfide	50.0	45.0		ug/L		90	61 - 137
Carbon tetrachloride	50.0	50.7		ug/L		101	61 - 137
Chlorobenzene	50.0	51.9		ug/L		104	70 - 130
Chloroethane	25.0	26.3		ug/L		105	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 400-640405/1002
Matrix: Water
Analysis Batch: 640405

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	48.8		ug/L		98	69 - 130
1-Chlorohexane	50.0	63.4		ug/L		127	69 - 130
Chloromethane	25.0	26.7		ug/L		107	58 - 137
cis-1,2-Dichloroethene	50.0	53.7		ug/L		107	68 - 130
cis-1,3-Dichloropropene	50.0	52.6		ug/L		105	69 - 132
Dibromochloromethane	50.0	49.3		ug/L		99	67 - 135
1,2-Dichlorobenzene	50.0	51.4		ug/L		103	67 - 130
1,3-Dichlorobenzene	50.0	53.9		ug/L		108	70 - 130
1,4-Dichlorobenzene	50.0	54.0		ug/L		108	70 - 130
Dichlorodifluoromethane	25.0	16.7		ug/L		67	41 - 146
1,1-Dichloroethane	50.0	51.9		ug/L		104	70 - 130
1,2-Dichloroethane	50.0	47.5		ug/L		95	69 - 130
1,1-Dichloroethene	50.0	48.3		ug/L		97	63 - 134
1,2-Dichloropropane	50.0	55.7		ug/L		111	70 - 130
1,3-Dichloropropane	50.0	51.8		ug/L		104	70 - 130
2,2-Dichloropropane	50.0	50.6		ug/L		101	52 - 135
1,1-Dichloropropene	50.0	52.8		ug/L		106	70 - 130
Ethylbenzene	50.0	54.6		ug/L		109	70 - 130
Ethyl methacrylate	50.0	50.6		ug/L		101	68 - 130
Hexachlorobutadiene	50.0	62.6		ug/L		125	53 - 140
2-Hexanone	200	256		ug/L		128	65 - 137
Isopropy benzene	50.0	53.5		ug/L		107	70 - 130
Methylene bromide	50.0	47.2		ug/L		94	70 - 130
Methylene Chloride	50.0	47.1		ug/L		94	66 - 135
4-Methyl-2-pentanone (MIBK)	200	211		ug/L		105	69 - 138
Methyl tert-butyl ether	50.0	46.3		ug/L		93	66 - 130
m-Xylene & p-Xylene	50.0	54.8		ug/L		110	70 - 130
Naphthalene	50.0	47.4		ug/L		95	47 - 149
n-Butylbenzene	50.0	60.1		ug/L		120	67 - 130
N-Propylbenzene	50.0	55.1		ug/L		110	70 - 130
o-Chlorotoluene	50.0	55.9		ug/L		112	70 - 130
o-Xylene	50.0	53.8		ug/L		108	70 - 130
p-Chlorotoluene	50.0	55.1		ug/L		110	70 - 130
p-Isopropyltoluene	50.0	56.2		ug/L		112	65 - 130
sec-Butylbenzene	50.0	56.4		ug/L		113	66 - 130
Styrene	50.0	51.0		ug/L		102	70 - 130
tert-Butylbenzene	50.0	54.7		ug/L		109	64 - 139
1,1,1,2-Tetrachloroethane	50.0	51.7		ug/L		103	67 - 131
1,1,2,2-Tetrachloroethane	50.0	48.6		ug/L		97	70 - 131
Tetrachloroethene	50.0	55.6		ug/L		111	65 - 130
Toluene	50.0	53.1		ug/L		106	70 - 130
trans-1,2-Dichloroethene	50.0	49.1		ug/L		98	70 - 130
trans-1,3-Dichloropropene	50.0	52.0		ug/L		104	63 - 130
1,2,3-Trichlorobenzene	50.0	55.0		ug/L		110	60 - 138
1,2,4-Trichlorobenzene	50.0	55.2		ug/L		110	60 - 140
1,1,1-Trichloroethane	50.0	48.9		ug/L		98	68 - 130
1,1,2-Trichloroethane	50.0	51.4		ug/L		103	70 - 130
Trichloroethene	50.0	49.6		ug/L		99	70 - 130
Trichlorofluoromethane	25.0	22.7		ug/L		91	65 - 138

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

Lab Sample ID: LCS 400-640405/1002
Matrix: Water
Analysis Batch: 640405

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	45.8		ug/L		92	70 - 130
1,2,4-Trimethy benzene	50.0	54.7		ug/L		109	70 - 130
1,3,5-Trimethy benzene	50.0	54.3		ug/L		109	69 - 130
Vinyl acetate	50.0	48.1		ug/L		96	26 - 160
Vinyl chloride	25.0	25.3		ug/L		101	59 - 136
Xylenes, Total	100	109		ug/L		109	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*72 - 130*
Dibromofluoromethane	*90*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

Lab Sample ID: 400-242838-3 MS
Matrix: Water
Analysis Batch: 640405

Client Sample ID: MW23-ROX-083123
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND		200	115		ug/L		57	43 - 150
Acrolein	ND		250	367		ug/L		147	38 - 150
Acrylonitrile	ND		500	625		ug/L		125	62 - 149
Benzene	ND		50.0	63.4		ug/L		127	56 - 142
Bromobenzene	ND		50.0	60.7		ug/L		121	59 - 136
Bromochloromethane	ND		50.0	55.5		ug/L		111	64 - 140
Bromodichloromethane	ND		50.0	61.5		ug/L		123	59 - 143
Bromoform	ND		50.0	60.1		ug/L		120	50 - 140
Bromomethane	ND		25.0	29.4		ug/L		118	10 - 150
2-Butanone (MEK)	ND		200	157		ug/L		79	55 - 150
Carbon disulfide	ND		50.0	66.2		ug/L		132	48 - 150
Carbon tetrachloride	ND		50.0	61.7		ug/L		123	55 - 145
Chlorobenzene	ND		50.0	61.9		ug/L		124	64 - 130
Chloroethane	ND		25.0	31.1		ug/L		124	50 - 150
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	58.5		ug/L		117	60 - 141
1-Chlorohexane	ND	F1	50.0	74.8	F1	ug/L		150	56 - 136
Chloromethane	ND		25.0	35.5		ug/L		142	49 - 148
cis-1,2-Dichloroethene	ND		50.0	65.3		ug/L		131	59 - 143
cis-1,3-Dichloropropene	ND		50.0	63.4		ug/L		127	57 - 140
Dibromochloromethane	ND		50.0	59.8		ug/L		120	56 - 143
1,2-Dichlorobenzene	ND		50.0	62.1		ug/L		124	52 - 137
1,3-Dichlorobenzene	ND		50.0	64.1		ug/L		128	54 - 135
1,4-Dichlorobenzene	ND		50.0	64.5		ug/L		129	53 - 135
Dichlorodifluoromethane	ND		25.0	28.8		ug/L		115	16 - 150
1,1-Dichloroethane	ND		50.0	66.3		ug/L		133	61 - 144
1,2-Dichloroethane	ND		50.0	58.8		ug/L		118	60 - 141
1,1-Dichloroethene	ND		50.0	61.9		ug/L		124	54 - 147
1,2-Dichloropropane	ND		50.0	66.8		ug/L		134	66 - 137
1,3-Dichloropropane	ND		50.0	62.3		ug/L		125	66 - 133
2,2-Dichloropropane	ND		50.0	61.3		ug/L		123	42 - 144

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

Lab Sample ID: 400-242838-3 MS
Matrix: Water
Analysis Batch: 640405

Client Sample ID: MW23-ROX-083123
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	64.3		ug/L		129	65 - 136
Ethylbenzene	ND		50.0	65.7		ug/L		131	58 - 131
Ethyl methacrylate	ND		50.0	60.3		ug/L		121	64 - 130
Hexachlorobutadiene	ND	F1	50.0	81.3	F1	ug/L		163	31 - 149
2-Hexanone	ND		200	198		ug/L		99	65 - 140
Isopropy benzene	ND		50.0	63.8		ug/L		128	56 - 133
Methylene bromide	ND		50.0	57.0		ug/L		114	63 - 138
Methylene Chloride	ND		50.0	59.6		ug/L		119	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	240		ug/L		120	63 - 146
Methyl tert-butyl ether	0.89	J	50.0	57.4		ug/L		113	59 - 137
m-Xylene & p-Xylene	ND		50.0	65.2		ug/L		130	57 - 130
Naphthalene	ND		50.0	60.1		ug/L		120	25 - 150
n-Butylbenzene	ND		50.0	70.8		ug/L		142	41 - 142
N-Propylbenzene	ND		50.0	64.2		ug/L		128	51 - 138
o-Chlorotoluene	ND		50.0	64.8		ug/L		130	53 - 134
o-Xylene	ND		50.0	64.2		ug/L		128	61 - 130
p-Chlorotoluene	ND		50.0	64.8		ug/L		130	54 - 133
p-Isopropyltoluene	ND		50.0	66.9		ug/L		134	48 - 139
sec-Butylbenzene	ND		50.0	66.2		ug/L		132	50 - 138
Styrene	ND		50.0	60.9		ug/L		122	58 - 131
tert-Butylbenzene	ND		50.0	72.4		ug/L		145	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	61.7		ug/L		123	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	57.9		ug/L		116	66 - 135
Tetrachloroethene	ND		50.0	60.0		ug/L		120	52 - 133
Toluene	ND		50.0	63.9		ug/L		128	65 - 130
trans-1,2-Dichloroethene	ND		50.0	60.9		ug/L		122	61 - 143
trans-1,3-Dichloropropene	ND		50.0	62.1		ug/L		124	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	69.4		ug/L		139	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	69.7		ug/L		139	39 - 148
1,1,1-Trichloroethane	ND		50.0	59.9		ug/L		120	57 - 142
1,1,2-Trichloroethane	ND		50.0	61.1		ug/L		122	66 - 131
Trichloroethene	ND		50.0	59.2		ug/L		118	64 - 136
Trichlorofluoromethane	ND		25.0	30.1		ug/L		120	54 - 150
1,2,3-Trichloropropane	ND		50.0	53.7		ug/L		107	65 - 133
1,2,4-Trimethy benzene	ND		50.0	64.3		ug/L		129	50 - 139
1,3,5-Trimethy benzene	ND		50.0	63.6		ug/L		127	52 - 135
Vinyl acetate	ND		50.0	58.1		ug/L		116	26 - 150
Vinyl chloride	ND		25.0	31.9		ug/L		128	46 - 150
Xylenes, Total	ND		100	129		ug/L		129	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*72 - 130*
Dibromofluoromethane	*92*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

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

Lab Sample ID: 400-242838-3 MSD
Matrix: Water
Analysis Batch: 640405

Client Sample ID: MW23-ROX-083123
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	116		ug/L		58	43 - 150	2	30
Acrolein	ND		250	354		ug/L		142	38 - 150	4	31
Acrylonitrile	ND		500	658		ug/L		132	62 - 149	5	30
Benzene	ND		50.0	63.8		ug/L		128	56 - 142	1	30
Bromobenzene	ND		50.0	60.3		ug/L		121	59 - 136	1	30
Bromochloromethane	ND		50.0	56.7		ug/L		113	64 - 140	2	30
Bromodichloromethane	ND		50.0	61.4		ug/L		123	59 - 143	0	30
Bromoform	ND		50.0	60.6		ug/L		121	50 - 140	1	30
Bromomethane	ND		25.0	26.8		ug/L		107	10 - 150	9	50
2-Butanone (MEK)	ND		200	170		ug/L		85	55 - 150	8	30
Carbon disulfide	ND		50.0	67.8		ug/L		136	48 - 150	2	30
Carbon tetrachloride	ND		50.0	60.9		ug/L		122	55 - 145	1	30
Chlorobenzene	ND		50.0	61.2		ug/L		122	64 - 130	1	30
Chloroethane	ND		25.0	29.1		ug/L		116	50 - 150	7	30
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	59.2		ug/L		118	60 - 141	1	30
1-Chlorohexane	ND	F1	50.0	74.0	F1	ug/L		148	56 - 136	1	30
Chloromethane	ND		25.0	33.6		ug/L		134	49 - 148	5	31
cis-1,2-Dichloroethene	ND		50.0	65.2		ug/L		130	59 - 143	0	30
cis-1,3-Dichloropropene	ND		50.0	63.3		ug/L		127	57 - 140	0	30
Dibromochloromethane	ND		50.0	59.3		ug/L		119	56 - 143	1	30
1,2-Dichlorobenzene	ND		50.0	61.5		ug/L		123	52 - 137	1	30
1,3-Dichlorobenzene	ND		50.0	63.2		ug/L		126	54 - 135	1	30
1,4-Dichlorobenzene	ND		50.0	63.1		ug/L		126	53 - 135	2	30
Dichlorodifluoromethane	ND		25.0	26.3		ug/L		105	16 - 150	9	31
1,1-Dichloroethane	ND		50.0	63.8		ug/L		128	61 - 144	4	30
1,2-Dichloroethane	ND		50.0	58.2		ug/L		116	60 - 141	1	30
1,1-Dichloroethene	ND		50.0	63.4		ug/L		127	54 - 147	2	30
1,2-Dichloropropane	ND		50.0	66.6		ug/L		133	66 - 137	0	30
1,3-Dichloropropane	ND		50.0	63.1		ug/L		126	66 - 133	1	30
2,2-Dichloropropane	ND		50.0	60.7		ug/L		121	42 - 144	1	31
1,1-Dichloropropene	ND		50.0	65.1		ug/L		130	65 - 136	1	30
Ethylbenzene	ND		50.0	64.7		ug/L		129	58 - 131	1	30
Ethyl methacrylate	ND		50.0	62.0		ug/L		124	64 - 130	3	30
Hexachlorobutadiene	ND	F1	50.0	80.1	F1	ug/L		160	31 - 149	2	36
2-Hexanone	ND		200	208		ug/L		104	65 - 140	5	30
Isopropy benzene	ND		50.0	62.7		ug/L		125	56 - 133	2	30
Methylene bromide	ND		50.0	58.1		ug/L		116	63 - 138	2	30
Methylene Chloride	ND		50.0	56.8		ug/L		114	60 - 146	5	32
4-Methyl-2-pentanone (MIBK)	ND		200	253		ug/L		126	63 - 146	5	30
Methyl tert-butyl ether	0.89	J	50.0	59.1		ug/L		116	59 - 137	3	30
m-Xylene & p-Xylene	ND		50.0	63.9		ug/L		128	57 - 130	2	30
Naphthalene	ND		50.0	61.3		ug/L		123	25 - 150	2	30
n-Butylbenzene	ND		50.0	70.2		ug/L		140	41 - 142	1	31
N-Propylbenzene	ND		50.0	63.6		ug/L		127	51 - 138	1	30
o-Chlorotoluene	ND		50.0	66.1		ug/L		132	53 - 134	2	30
o-Xylene	ND		50.0	63.9		ug/L		128	61 - 130	0	30
p-Chlorotoluene	ND		50.0	63.8		ug/L		128	54 - 133	2	30

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

Lab Sample ID: 400-242838-3 MSD
Matrix: Water
Analysis Batch: 640405

Client Sample ID: MW23-ROX-083123
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	66.0		ug/L		132	48 - 139	1	30
sec-Butylbenzene	ND		50.0	65.8		ug/L		132	50 - 138	1	30
Styrene	ND		50.0	60.2		ug/L		120	58 - 131	1	30
tert-Butylbenzene	ND		50.0	72.6		ug/L		145	54 - 146	0	30
1,1,1,2-Tetrachloroethane	ND		50.0	61.2		ug/L		122	59 - 137	1	30
1,1,2,2-Tetrachloroethane	ND		50.0	59.4		ug/L		119	66 - 135	3	30
Tetrachloroethene	ND		50.0	59.8		ug/L		120	52 - 133	0	30
Toluene	ND		50.0	63.0		ug/L		126	65 - 130	1	30
trans-1,2-Dichloroethene	ND		50.0	61.9		ug/L		124	61 - 143	2	30
trans-1,3-Dichloropropene	ND		50.0	61.2		ug/L		122	53 - 133	2	30
1,2,3-Trichlorobenzene	ND		50.0	68.3		ug/L		137	43 - 145	2	30
1,2,4-Trichlorobenzene	ND		50.0	67.4		ug/L		135	39 - 148	3	30
1,1,1-Trichloroethane	ND		50.0	60.3		ug/L		121	57 - 142	1	30
1,1,2-Trichloroethane	ND		50.0	61.7		ug/L		123	66 - 131	1	30
Trichloroethene	ND		50.0	59.3		ug/L		119	64 - 136	0	30
Trichlorofluoromethane	ND		25.0	27.6		ug/L		111	54 - 150	9	30
1,2,3-Trichloropropane	ND		50.0	55.3		ug/L		111	65 - 133	3	30
1,2,4-Trimethy benzene	ND		50.0	63.6		ug/L		127	50 - 139	1	30
1,3,5-Trimethy benzene	ND		50.0	63.6		ug/L		127	52 - 135	0	30
Vinyl acetate	ND		50.0	59.7		ug/L		119	26 - 150	3	33
Vinyl chloride	ND		25.0	30.4		ug/L		121	46 - 150	5	30
Xylenes, Total	ND		100	128		ug/L		128	59 - 130	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*72 - 130*
Dibromofluoromethane	*92*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

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

Lab Sample ID: MB 400-640140/1-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640140

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		09/07/23 15:48	09/12/23 17:01	1
Benzenethiol	ND		10	1.7	ug/L		09/07/23 15:48	09/12/23 17:01	1
Benzoic acid	ND		30	7.3	ug/L		09/07/23 15:48	09/12/23 17:01	1
Benzyl alcohol	ND		10	2.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		09/07/23 15:48	09/12/23 17:01	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		09/07/23 15:48	09/12/23 17:01	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		09/07/23 15:48	09/12/23 17:01	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		09/07/23 15:48	09/12/23 17:01	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		09/07/23 15:48	09/12/23 17:01	1
4-Chloroaniline	ND		10	3.4	ug/L		09/07/23 15:48	09/12/23 17:01	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		09/07/23 15:48	09/12/23 17:01	1
2-Chloronaphthalene	ND		10	0.14	ug/L		09/07/23 15:48	09/12/23 17:01	1
2-Chlorophenol	ND		10	2.2	ug/L		09/07/23 15:48	09/12/23 17:01	1

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

Lab Sample ID: MB 400-640140/1-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640140

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
Dibenzofuran	ND		10	0.17	ug/L		09/07/23 15:48	09/12/23 17:01	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		09/07/23 15:48	09/12/23 17:01	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
Diethyl phthalate	ND		10	0.24	ug/L		09/07/23 15:48	09/12/23 17:01	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		09/07/23 15:48	09/12/23 17:01	1
Dimethyl phthalate	0.550	J	10	0.17	ug/L		09/07/23 15:48	09/12/23 17:01	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		09/07/23 15:48	09/12/23 17:01	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		09/07/23 15:48	09/12/23 17:01	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		09/07/23 15:48	09/12/23 17:01	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		09/07/23 15:48	09/12/23 17:01	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		09/07/23 15:48	09/12/23 17:01	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		09/07/23 15:48	09/12/23 17:01	1
1,4-Dioxane	ND		10	1.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
Hexachlorobenzene	ND		10	0.17	ug/L		09/07/23 15:48	09/12/23 17:01	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/07/23 15:48	09/12/23 17:01	1
Hexachloroethane	ND		10	4.2	ug/L		09/07/23 15:48	09/12/23 17:01	1
Indene	ND		10	1.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
Isophorone	ND		10	0.14	ug/L		09/07/23 15:48	09/12/23 17:01	1
2-Methylphenol	ND		10	1.8	ug/L		09/07/23 15:48	09/12/23 17:01	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		09/07/23 15:48	09/12/23 17:01	1
2-Nitroaniline	ND		10	2.2	ug/L		09/07/23 15:48	09/12/23 17:01	1
3-Nitroaniline	ND		10	1.8	ug/L		09/07/23 15:48	09/12/23 17:01	1
4-Nitroaniline	ND		10	1.5	ug/L		09/07/23 15:48	09/12/23 17:01	1
Nitrobenzene	ND		10	0.13	ug/L		09/07/23 15:48	09/12/23 17:01	1
2-Nitrophenol	ND		10	5.2	ug/L		09/07/23 15:48	09/12/23 17:01	1
4-Nitrophenol	ND		10	2.1	ug/L		09/07/23 15:48	09/12/23 17:01	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		09/07/23 15:48	09/12/23 17:01	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		09/07/23 15:48	09/12/23 17:01	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		09/07/23 15:48	09/12/23 17:01	1
Pentachlorophenol	ND		20	1.4	ug/L		09/07/23 15:48	09/12/23 17:01	1
Phenol	ND		10	2.6	ug/L		09/07/23 15:48	09/12/23 17:01	1
Pyridine	ND		10	3.2	ug/L		09/07/23 15:48	09/12/23 17:01	1
Quinoline	ND		10	4.5	ug/L		09/07/23 15:48	09/12/23 17:01	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		09/07/23 15:48	09/12/23 17:01	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		09/07/23 15:48	09/12/23 17:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*46 - 124*	*09/07/23 15:48*	*09/12/23 17:01*	*1*
2-Fluorophenol	*33*		*13 - 113*	*09/07/23 15:48*	*09/12/23 17:01*	*1*
Nitrobenzene-d5	*63*		*36 - 126*	*09/07/23 15:48*	*09/12/23 17:01*	*1*
Phenol-d5	*50*		*17 - 127*	*09/07/23 15:48*	*09/12/23 17:01*	*1*
Terphenyl-d14	*82*		*44 - 149*	*09/07/23 15:48*	*09/12/23 17:01*	*1*
2,4,6-Tribromophenol	*61*		*26 - 150*	*09/07/23 15:48*	*09/12/23 17:01*	*1*

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

Lab Sample ID: LCS 400-640140/18-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640140

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	2.78	J *-	ug/L		2	10 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*46 - 124*
2-Fluorophenol	*59*		*13 - 113*
Nitrobenzene-d5	*69*		*36 - 126*
Phenol-d5	*66*		*17 - 127*
Terphenyl-d14	*87*		*44 - 149*
2,4,6-Tribromophenol	*66*		*26 - 150*

Lab Sample ID: LCS 400-640140/2-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640140

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Aniline			120	83.9		ug/L		70	21 - 120		
Benzoic acid			522	203		ug/L		39	10 - 144		
Benzyl alcohol			120	92.4		ug/L		77	28 - 120		
Bis(2-chloroethoxy)methane			120	79.0		ug/L		66	47 - 120		
Bis(2-chloroethyl)ether			120	80.1		ug/L		67	44 - 120		
bis (2-chloroisopropyl) ether			120	80.7		ug/L		67	33 - 121		
Bis(2-ethylhexyl) phthalate			120	87.1		ug/L		73	52 - 147		
4-Bromophenyl phenyl ether			120	107		ug/L		89	54 - 122		
Butyl benzyl phthalate			120	90.0		ug/L		75	54 - 133		
4-Chloroaniline			120	55.0		ug/L		46	26 - 120		
4-Chloro-3-methylphenol			120	95.2		ug/L		79	48 - 131		
2-Chloronaphthalene			120	96.3		ug/L		80	52 - 121		
2-Chlorophenol			120	88.8		ug/L		74	40 - 120		
4-Chlorophenyl phenyl ether			120	116		ug/L		97	56 - 125		
Dibenz[a,h]acridine			120	101		ug/L		84	31 - 150		
Dibenzofuran			120	103		ug/L		86	56 - 122		
3,3'-Dichlorobenzidine			160	141		ug/L		88	36 - 132		
2,4-Dichlorophenol			120	95.5		ug/L		80	49 - 120		
Diethyl phthalate			120	101		ug/L		84	50 - 137		
2,4-Dimethylphenol			120	88.9		ug/L		74	48 - 120		
Dimethyl phthalate			120	103		ug/L		86	57 - 124		
Di-n-butyl phthalate			120	102		ug/L		85	58 - 126		
4,6-Dinitro-ortho-cresol			240	125		ug/L		52	23 - 148		
2,4-Dinitrophenol			240	116		ug/L		48	10 - 150		
2,4-Dinitrotoluene			120	107		ug/L		89	54 - 142		
2,6-Dinitrotoluene			120	98.2		ug/L		82	55 - 130		
Di-n-octyl phthalate			120	86.9		ug/L		72	57 - 138		
1,4-Dioxane			120	62.5		ug/L		52	31 - 120		
1,2-Diphenylhydrazine (as Azobenzene)			120	80.9		ug/L		67	45 - 124		
Hexachlorobenzene			120	111		ug/L		92	52 - 129		
Hexachlorocyclopentadiene			120	33.6		ug/L		28	10 - 134		
Hexachloroethane			120	71.7		ug/L		60	20 - 120		

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

Lab Sample ID: LCS 400-640140/2-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640140

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Indene			120	87.1		ug/L		73	49 - 120		
Isophorone			120	84.7		ug/L		71	48 - 120		
2-Methylphenol			120	93.6		ug/L		78	46 - 124		
3 & 4 Methylphenol			120	95.2		ug/L		79	45 - 120		
2-Nitroaniline			120	91.4		ug/L		76	51 - 145		
3-Nitroaniline			120	91.6		ug/L		76	37 - 127		
4-Nitroaniline			120	96.8		ug/L		81	36 - 137		
Nitrobenzene			120	83.4		ug/L		70	45 - 120		
2-Nitrophenol			120	94.7		ug/L		79	40 - 124		
4-Nitrophenol			240	200		ug/L		83	23 - 146		
N-Nitrosodimethylamine			120	96.9		ug/L		81	29 - 137		
N-Nitrosodi-n-propylamine			120	93.7		ug/L		78	45 - 120		
N-Nitrosodiphenylamine			119	90.5		ug/L		76	54 - 120		
Pentachlorophenol			240	174		ug/L		73	31 - 130		
Phenol			120	96.5		ug/L		80	11 - 120		
Pyridine			240	125		ug/L		52	16 - 120		
Quinoline			120	108		ug/L		90	49 - 130		
2,4,5-Trichlorophenol			120	111		ug/L		92	51 - 136		
2,4,6-Trichlorophenol			120	100		ug/L		83	50 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*80*		*46 - 124*
2-Fluorophenol	*60*		*13 - 113*
Nitrobenzene-d5	*64*		*36 - 126*
Phenol-d5	*68*		*17 - 127*
Terphenyl-d14	*87*		*44 - 149*
2,4,6-Tribromophenol	*79*		*26 - 150*

Lab Sample ID: LCSD 400-640140/19-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640140

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	3.48	J *-	ug/L		3	10 - 120	22	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*89*		*46 - 124*
2-Fluorophenol	*65*		*13 - 113*
Nitrobenzene-d5	*76*		*36 - 126*
Phenol-d5	*74*		*17 - 127*
Terphenyl-d14	*100*		*44 - 149*
2,4,6-Tribromophenol	*70*		*26 - 150*

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

Lab Sample ID: LCSD 400-640140/3-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640140

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	70.2		ug/L		59	21 - 120	18	30
Benzoic acid			522	239		ug/L		46	10 - 144	16	30
Benzyl alcohol			120	86.9		ug/L		72	28 - 120	6	30
Bis(2-chloroethoxy)methane			120	75.9		ug/L		63	47 - 120	4	30
Bis(2-chloroethyl)ether			120	81.8		ug/L		68	44 - 120	2	30
bis (2-chloroisopropyl) ether			120	75.5		ug/L		63	33 - 121	7	30
Bis(2-ethylhexyl) phthalate			120	85.3		ug/L		71	52 - 147	2	30
4-Bromophenyl phenyl ether			120	102		ug/L		85	54 - 122	5	30
Butyl benzyl phthalate			120	84.5		ug/L		70	54 - 133	6	30
4-Chloroaniline			120	53.6		ug/L		45	26 - 120	3	30
4-Chloro-3-methylphenol			120	90.7		ug/L		76	48 - 131	5	30
2-Chloronaphthalene			120	92.5		ug/L		77	52 - 121	4	30
2-Chlorophenol			120	82.2		ug/L		69	40 - 120	8	30
4-Chlorophenyl phenyl ether			120	113		ug/L		94	56 - 125	3	30
Dibenz[a,h]acridine			120	103		ug/L		86	31 - 150	2	30
Dibenzofuran			120	99.4		ug/L		83	56 - 122	4	30
3,3'-Dichlorobenzidine			160	134		ug/L		84	36 - 132	5	30
2,4-Dichlorophenol			120	90.1		ug/L		75	49 - 120	6	30
Diethyl phthalate			120	98.0		ug/L		82	50 - 137	3	30
2,4-Dimethylphenol			120	87.3		ug/L		73	48 - 120	2	30
Dimethyl phthalate			120	100		ug/L		84	57 - 124	3	30
Di-n-butyl phthalate			120	94.0		ug/L		78	58 - 126	8	30
4,6-Dinitro-ortho-cresol			240	129		ug/L		54	23 - 148	3	30
2,4-Dinitrophenol			240	121		ug/L		51	10 - 150	5	30
2,4-Dinitrotoluene			120	104		ug/L		87	54 - 142	3	30
2,6-Dinitrotoluene			120	95.2		ug/L		79	55 - 130	3	30
Di-n-octyl phthalate			120	84.6		ug/L		70	57 - 138	3	30
1,4-Dioxane			120	59.4		ug/L		50	31 - 120	5	30
1,2-Diphenylhydrazine (as Azobenzene)			120	75.1		ug/L		63	45 - 124	7	30
Hexachlorobenzene			120	106		ug/L		88	52 - 129	5	30
Hexachlorocyclopentadiene			120	34.5		ug/L		29	10 - 134	3	30
Hexachloroethane			120	65.7		ug/L		55	20 - 120	9	30
Indene			120	82.1		ug/L		68	49 - 120	6	30
Isophorone			120	81.0		ug/L		68	48 - 120	4	30
2-Methylphenol			120	88.0		ug/L		73	46 - 124	6	30
3 & 4 Methylphenol			120	88.8		ug/L		74	45 - 120	7	30
2-Nitroaniline			120	88.7		ug/L		74	51 - 145	3	30
3-Nitroaniline			120	86.4		ug/L		72	37 - 127	6	30
4-Nitroaniline			120	99.3		ug/L		83	36 - 137	3	30
Nitrobenzene			120	78.2		ug/L		65	45 - 120	6	30
2-Nitrophenol			120	87.3		ug/L		73	40 - 124	8	30
4-Nitrophenol			240	177		ug/L		74	23 - 146	12	30
N-Nitrosodimethylamine			120	90.8		ug/L		76	29 - 137	7	30
N-Nitrosodi-n-propylamine			120	86.0		ug/L		72	45 - 120	9	30
N-Nitrosodiphenylamine			119	86.8		ug/L		73	54 - 120	4	30
Pentachlorophenol			240	160		ug/L		67	31 - 130	9	30
Phenol			120	88.7		ug/L		74	11 - 120	8	30
Pyridine			240	127		ug/L		53	16 - 120	1	30

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

Lab Sample ID: LCSD 400-640140/3-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640140

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Quinoline			120	104		ug/L		86	49 - 130	4	30
2,4,5-Trichlorophenol			120	107		ug/L		89	51 - 136	4	30
2,4,6-Trichlorophenol			120	97.4		ug/L		81	50 - 127	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*77*		*46 - 124*
2-Fluorophenol	*53*		*13 - 113*
Nitrobenzene-d5	*65*		*36 - 126*
Phenol-d5	*64*		*17 - 127*
Terphenyl-d14	*81*		*44 - 149*
2,4,6-Tribromophenol	*80*		*26 - 150*

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

Lab Sample ID: MB 400-640140/1-A
Matrix: Water
Analysis Batch: 640637

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640140

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		09/07/23 15:48	09/12/23 14:41	1
Acenaphthylene	ND		0.20	0.044	ug/L		09/07/23 15:48	09/12/23 14:41	1
Anthracene	ND		0.20	0.047	ug/L		09/07/23 15:48	09/12/23 14:41	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		09/07/23 15:48	09/12/23 14:41	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		09/07/23 15:48	09/12/23 14:41	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		09/07/23 15:48	09/12/23 14:41	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		09/07/23 15:48	09/12/23 14:41	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		09/07/23 15:48	09/12/23 14:41	1
Chrysene	ND		0.20	0.033	ug/L		09/07/23 15:48	09/12/23 14:41	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		09/07/23 15:48	09/12/23 14:41	1
Fluoranthene	ND		0.20	0.034	ug/L		09/07/23 15:48	09/12/23 14:41	1
Fluorene	ND		0.20	0.089	ug/L		09/07/23 15:48	09/12/23 14:41	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		09/07/23 15:48	09/12/23 14:41	1
Phenanthrene	ND		0.20	0.090	ug/L		09/07/23 15:48	09/12/23 14:41	1
Pyrene	ND		0.20	0.039	ug/L		09/07/23 15:48	09/12/23 14:41	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		09/07/23 15:48	09/12/23 14:41	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		09/07/23 15:48	09/12/23 14:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*54*		*18 - 147*	*09/07/23 15:48*	*09/12/23 14:41*	*1*
2-Fluorobiphenyl	*50*		*15 - 128*	*09/07/23 15:48*	*09/12/23 14:41*	*1*
Nitrobenzene-d5	*62*		*10 - 144*	*09/07/23 15:48*	*09/12/23 14:41*	*1*

Lab Sample ID: LCS 400-640140/22-A
Matrix: Water
Analysis Batch: 640637

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640140

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acenaphthene			2.00	1.17		ug/L		58	40 - 140		

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

Lab Sample ID: LCS 400-640140/22-A
Matrix: Water
Analysis Batch: 640637

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640140

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acenaphthylene			2.00	1.24		ug/L		62	40 - 140		
Anthracene			2.00	1.22		ug/L		61	40 - 140		
Benzo[a]anthracene			2.00	1.06		ug/L		53	40 - 140		
Benzo[a]pyrene			2.00	0.900		ug/L		45	40 - 140		
Benzo[b]fluoranthene			2.00	0.871		ug/L		44	40 - 140		
Benzo[g,h,i]perylene			2.00	0.896		ug/L		45	40 - 140		
Benzo[k]fluoranthene			2.00	0.802		ug/L		40	40 - 140		
Chrysene			2.00	1.06		ug/L		53	40 - 140		
Dibenz(a,h)anthracene			2.00	0.965		ug/L		48	40 - 140		
Fluoranthene			2.00	1.32		ug/L		66	40 - 140		
Fluorene			2.00	1.28		ug/L		64	40 - 140		
Indeno[1,2,3-cd]pyrene			2.00	0.952		ug/L		48	40 - 140		
Phenanthrene			2.00	1.13		ug/L		57	40 - 140		
Pyrene			2.00	0.903		ug/L		45	40 - 140		
1-Methylnaphthalene			2.00	1.27		ug/L		63	40 - 140		
2-Methylnaphthalene			2.00	1.25		ug/L		62	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*50*		*18 - 147*
2-Fluorobiphenyl	*50*		*15 - 128*
Nitrobenzene-d5	*63*		*10 - 144*

Lab Sample ID: LCSD 400-640140/23-A
Matrix: Water
Analysis Batch: 640637

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640140

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			2.00	1.59		ug/L		79	40 - 140	31	40
Acenaphthylene			2.00	1.67		ug/L		84	40 - 140	30	40
Anthracene			2.00	1.58		ug/L		79	40 - 140	26	40
Benzo[a]anthracene			2.00	1.47		ug/L		74	40 - 140	32	40
Benzo[a]pyrene			2.00	1.12		ug/L		56	40 - 140	22	40
Benzo[b]fluoranthene			2.00	1.20		ug/L		60	40 - 140	32	40
Benzo[g,h,i]perylene			2.00	1.25		ug/L		62	40 - 140	33	40
Benzo[k]fluoranthene			2.00	1.18		ug/L		59	40 - 140	38	40
Chrysene			2.00	1.43		ug/L		72	40 - 140	30	40
Dibenz(a,h)anthracene			2.00	1.34		ug/L		67	40 - 140	33	40
Fluoranthene			2.00	1.80		ug/L		90	40 - 140	31	40
Fluorene			2.00	1.73		ug/L		87	40 - 140	30	40
Indeno[1,2,3-cd]pyrene			2.00	1.33		ug/L		66	40 - 140	33	40
Phenanthrene			2.00	1.58		ug/L		79	40 - 140	33	40
Pyrene			2.00	1.30		ug/L		65	40 - 140	36	40
1-Methylnaphthalene			2.00	1.74		ug/L		87	40 - 140	32	40
2-Methylnaphthalene			2.00	1.70		ug/L		85	40 - 140	30	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*67*		*18 - 147*
2-Fluorobiphenyl	*67*		*15 - 128*

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

Lab Sample ID: LCSD 400-640140/23-A
Matrix: Water
Analysis Batch: 640637

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640140

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Nitrobenzene-d5	85		10 - 144

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-640109/1-A
Matrix: Water
Analysis Batch: 640148

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640109

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/07/23 13:27	09/07/23 16:36	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/07/23 13:27	09/07/23 16:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	80		51 - 149	09/07/23 13:27	09/07/23 16:36	1

Lab Sample ID: LCS 400-640109/2-A
Matrix: Water
Analysis Batch: 640148

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640109

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-D bromo-3-Chloropropane			0.101	0.107		ug/L		106	60 - 140		
1,2-D bromoethane			0.101	0.0993		ug/L		99	60 - 140		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	77		51 - 149

Lab Sample ID: LCSD 400-640109/3-A
Matrix: Water
Analysis Batch: 640148

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640109

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane			0.101	0.112		ug/L		111	60 - 140	5	30
1,2-D bromoethane			0.101	0.102		ug/L		101	60 - 140	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	87		51 - 149

Shell Oil Products US Chain Of Custody Record

AECOM

400-242838 COC

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 335- 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: 8/31/2023
PO #	**GSAP Project ID**	PAGE: 1 of 1
60697537 – 3.3.2	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 – 3.3.2

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:	SAMPLER NAME(S) (Print)	LAB USE ONLY
314-429-0100	314-429-0462	melissa.remiger@aecom.com	J. Mayer, T. Jenkins	

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; loredana.fillmon@aecom.com**

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

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 8270LL
	TB-ROX-083123-8260-BP	8/31/2023	0000	Water	2					2	X			
	TB-ROX-083123-8011-BP	8/31/2023	0000	Water	2					2		X		
	MW23-ROX-083123	8/31/2023	0915	Water	6			2		8	X	X	X	X

Joe Mayer 8-31-23

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time
JOE MAYER	FEDEX: 5293 4337 5412, 5293 4337 5423	8/31/2023	1600
Relinquished by: (Signature)	Received by: (Signature) BP	Date: 9/1/23	Time: 910
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time

Version: 13Oct22

CUSTODY SEALS: 1599776, 1599777, 1599778, 1599779

5.1°C IR10
3 <°/

9/14/2023

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc. Job Number: 400-242838-1

Login Number: 242838 **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	5.1°C, 3.5°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: 400-242838-1
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	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	12-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-23
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 Monthly Groundwater – August/September 2023 Data Review

Laboratory SDG: 400-242903-1

Data Reviewer: Andrei Niculau

Peer Reviewer: Cheyana Cokley

Date Reviewed: 10/4/2023

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

Sample Identification	Sample Identification
TB-ROX-090123-8260	MW14-ROX-090123
TB-ROX-090123-8011	ROST3MW-ROX-090123
MW14-ROX-090123-EB	ROST3MW-ROX-090123-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 dimethyl phthalate was detected in the method blank. Dimethyl phthalate and di-n-butyl phthalate were detected in the equipment blank. bis(2-Ethylhexyl) phthalate in sample MW14-ROX-090123 was re-extracted outside extraction time criteria. LCS/LCSD recoveries for benzenethiol were outside evaluation criteria. The SVOC surrogate recovery for 2-fluorophenol was outside criteria in sample MW14-ROX-090123 (RERA). The continuing calibration verification (CCV) for several analytes were outside evaluation criteria, biased low. The initial calibration verification (ICV) for 4,6-dinitro-ortho-cresol and 3,3'-dichlorobenzidine 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, bis(2-ethylhexyl) phthalate in sample MW14-ROX-090123 was re-extracted 5 days outside of extraction time criteria (7 days) and then re-analyzed for confirmation; the sample was re-extracted out of hold time and the results were non-detect. bis(2-Ethylhexyl) phthalate in sample MW14-ROX-090123 was reported from the confirmation run due to deemed laboratory contamination in the initial run. Data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-090123 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
MB 400-640140/1-A	SVOCs	Dimethyl phthalate	0.550 µg/L
MW14-ROX-090123-EB	SVOCs	Dimethyl phthalate	0.48 µg/L
MW14-ROX-090123-EB	SVOCs	Di-n-butyl phthalate	4.0 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
ROST3MW-ROX-090123	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 400-640140/18-A/19-A	SVOCs	Benzenethiol	**2/3**	22	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
MW14-ROX-090123	SVOCs	Benzenethiol	**UJ**
ROST3MW-ROX-090123	SVOCs	Benzenethiol	**UJ**
ROST3MW-ROX-090123-DUP	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW14-ROX-090123 RERA	SVOCs	2-Fluorophenol	**39**	46-124

Qualifications due to surrogate recoveries were not required if only one of three base/neutral and/or acid SVOC 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?

Yes

Field ID	Field Duplicate ID
ROST3MW-ROX-090123	ROST3MW-ROX-090123-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 for 4,6-dinitro-ortho-cresol and 3,3'-dichlorobenzidine was outside evaluation criteria, biased low. The continuing calibration verification (CCV) for several analytes was outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-090123	VOCs	Bromomethane	**UJ**
MW14-ROX-090123	VOCs	Chloroethane	**UJ**
MW14-ROX-090123	VOCs	Trichlorofluoromethane	**UJ**
MW14-ROX-090123	VOCs	1,1-Dichloroethene	**UJ**
ROST3MW-ROX-090123	VOCs	Bromomethane	**UJ**
ROST3MW-ROX-090123	VOCs	Chloroethane	**UJ**
ROST3MW-ROX-090123	VOCs	Trichlorofluoromethane	**UJ**
ROST3MW-ROX-090123	VOCs	1,1-Dichloroethene	**UJ**
ROST3MW-ROX-090123-DUP	VOCs	Bromomethane	**UJ**
ROST3MW-ROX-090123-DUP	VOCs	Chloroethane	**UJ**
ROST3MW-ROX-090123-DUP	VOCs	Trichlorofluoromethane	**UJ**
ROST3MW-ROX-090123-DUP	VOCs	1,1-Dichloroethene	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-090123	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
ROST3MW-ROX-090123	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
ROST3MW-ROX-090123-DUP	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW14-ROX-090123	SVOCs	3,3'-Dichlorobenzidine	**UJ**
ROST3MW-ROX-090123	SVOCs	3,3'-Dichlorobenzidine	**UJ**
ROST3MW-ROX-090123-DUP	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW14-ROX-090123	SVOCs	Hexachlorocyclopentadiene	**UJ**
ROST3MW-ROX-090123	SVOCs	Hexachlorocyclopentadiene	**UJ**
ROST3MW-ROX-090123-DUP	SVOCs	Hexachlorocyclopentadiene	**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 9/19/2023 9:35:00 AM

JOB DESCRIPTION

ROXANA MONTHLY GW

JOB NUMBER

400-242903-1

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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Authorized for release by
Leah Klingensmith, Senior Project Manager
Leah.Klingensmith@et.eurofinsus.com
(615)301-5038

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Job ID: 400-242903-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-242903-1

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 9/2/2023 7:54 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 1.5°C

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-640996 recovered outside acceptance criteria, low biased, for 1,1-Dichloroethene, Bromomethane, 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 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-090123-8260 (400-242903-1), MW14-ROX-090123-EB (400-242903-3), MW14-ROX-090123 (400-242903-4), ROST3MW-ROX-090123 (400-242903-5) and ROST3MW-ROX-090123-DUP (400-242903-6). 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 continuing calibration verification (CCV) associated with batch 400-640996 recovered above the upper control limit for Acrylonitrile. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

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

GC/MS Semi VOA
Method 8270E: The continuing calibration verification (CCV) associated with batch 400-640672 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: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-640140 and analytical batch 400-640672 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 method blank for preparation batch 400-640140 and analytical batch 400-640672 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: Two of six surrogates for the blank associated with preparation batch 400-640651 and analytical batch 400-641239 were outside of the lower control limit. There was no evidence of lab contamination for any target analyte, therefore the data have been reported.

Method 8270E: 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

Job ID: 400-242903-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

compounds outside limits: MW14-ROX-090123 (400-242903-4). These results have been reported and qualified.

Method 8270E: Sample MW14-ROX-090123 (400-242903-4) 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: The initial calibration verification (ICV) analyzed in batch 400-637784 was outside method criteria for the following analyte(s): 3,3'-Dichlorobenzidine and 4,6-Dinitro-ortho-cresol. 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 400-640637 recovered above the upper control limit for Fluoranthene. 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 400-640148 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: 400-242903-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-242903-1	TB-ROX-090123-8260	Water	09/01/23 12:00	09/02/23 07:54
400-242903-2	TB-ROX-090123-8011	Water	09/01/23 12:00	09/02/23 07:54
400-242903-3	MW14-ROX-090123-EB	Water	09/01/23 08:00	09/02/23 07:54
400-242903-4	MW14-ROX-090123	Water	09/01/23 08:00	09/02/23 07:54
400-242903-5	ROST3MW-ROX-090123	Water	09/01/23 12:10	09/02/23 07:54
400-242903-6	ROST3MW-ROX-090123-DUP	Water	09/01/23 12:10	09/02/23 07:54

Detection Summary

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

Job ID: 400-242903-1

Client Sample ID: TB-ROX-090123-8260 — Lab Sample ID: 400-242903-1

No Detections.

Client Sample ID: TB-ROX-090123-8011 — Lab Sample ID: 400-242903-2

No Detections.

Client Sample ID: MW14-ROX-090123-EB — Lab Sample ID: 400-242903-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dimethyl phthalate	0.48	J B	9.6	0.16	ug/L	1		8270E	Total/NA
Di-n-butyl phthalate	4.0	J	9.6	2.6	ug/L	1		8270E	Total/NA

Client Sample ID: MW14-ROX-090123 — Lab Sample ID: 400-242903-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	8.8	J	9.7	4.9	ug/L	1		8270E	Total/NA

Client Sample ID: ROST3MW-ROX-090123 — Lab Sample ID: 400-242903-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	10	J	25	10	ug/L	1		8260D	Total/NA
Phenanthrene	0.13	J	0.20	0.089	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	0.20		0.20	0.065	ug/L	1		8270E SIM	Total/NA
Bis(2-ethylhexyl) phthalate	5.6	J	9.9	4.9	ug/L	1		8270E	Total/NA
Diethyl phthalate	0.27	J	9.9	0.24	ug/L	1		8270E	Total/NA
Dimethyl phthalate	0.76	J B	9.9	0.17	ug/L	1		8270E	Total/NA

Client Sample ID: ROST3MW-ROX-090123-DUP — Lab Sample ID: 400-242903-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.090	J	0.20	0.088	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	0.11	J	0.20	0.065	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: 400-242903-1

Client Sample ID: TB-ROX-090123-8260
Date Collected: 09/01/23 12:00
Date Received: 09/02/23 07:54

Lab Sample ID: 400-242903-1
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			09/14/23 18:33	1
Acrolein	ND		20	3.3	ug/L			09/14/23 18:33	1
Acrylonitrile	ND		10	2.8	ug/L			09/14/23 18:33	1
Benzene	ND		1.0	0.50	ug/L			09/14/23 18:33	1
Bromobenzene	ND		1.0	0.54	ug/L			09/14/23 18:33	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/14/23 18:33	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/14/23 18:33	1
Bromoform	ND		5.0	0.25	ug/L			09/14/23 18:33	1
Bromomethane	ND		1.0	0.98	ug/L			09/14/23 18:33	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/14/23 18:33	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/14/23 18:33	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/14/23 18:33	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/14/23 18:33	1
Chloroethane	ND		1.0	0.76	ug/L			09/14/23 18:33	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/14/23 18:33	1
Chloroform	ND		1.0	0.90	ug/L			09/14/23 18:33	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/14/23 18:33	1
Chloromethane	ND		1.0	0.90	ug/L			09/14/23 18:33	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/14/23 18:33	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/14/23 18:33	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/14/23 18:33	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/14/23 18:33	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/14/23 18:33	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/14/23 18:33	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/14/23 18:33	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/14/23 18:33	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/14/23 18:33	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/14/23 18:33	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 18:33	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 18:33	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 18:33	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/14/23 18:33	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/14/23 18:33	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/14/23 18:33	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/14/23 18:33	1
2-Hexanone	ND		25	1.4	ug/L			09/14/23 18:33	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/14/23 18:33	1
Methylene bromide	ND		5.0	0.22	ug/L			09/14/23 18:33	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/14/23 18:33	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/14/23 18:33	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/14/23 18:33	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/14/23 18:33	1
Naphthalene	ND		5.0	3.0	ug/L			09/14/23 18:33	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/14/23 18:33	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/14/23 18:33	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/14/23 18:33	1
o-Xylene	ND		5.0	0.60	ug/L			09/14/23 18:33	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/14/23 18:33	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/14/23 18:33	1

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

Job ID: 400-242903-1

Client Sample ID: TB-ROX-090123-8260
Date Collected: 09/01/23 12:00
Date Received: 09/02/23 07:54

Lab Sample ID: 400-242903-1
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			09/14/23 18:33	1
Styrene	ND		1.0	1.0	ug/L			09/14/23 18:33	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/14/23 18:33	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/14/23 18:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/14/23 18:33	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/14/23 18:33	1
Toluene	ND		1.0	0.90	ug/L			09/14/23 18:33	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/14/23 18:33	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/14/23 18:33	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/14/23 18:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/14/23 18:33	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/14/23 18:33	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/14/23 18:33	1
Trichloroethene	ND		1.0	0.15	ug/L			09/14/23 18:33	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/14/23 18:33	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/14/23 18:33	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/14/23 18:33	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/14/23 18:33	1
Vinyl acetate	ND		25	0.93	ug/L			09/14/23 18:33	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/14/23 18:33	1
Xylenes, Total	ND		10	1.6	ug/L			09/14/23 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*09/14/23 18:33*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*09/14/23 18:33*	*1*
Toluene-d8 (Surr)	*104*		*64 - 132*		*09/14/23 18:33*	*1*

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

Job ID: 400-242903-1

Client Sample ID: TB-ROX-090123-8011
Date Collected: 09/01/23 12:00
Date Received: 09/02/23 07:54

Lab Sample ID: 400-242903-2
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-D bromo-3-Chloropropane	ND		0.031	0.017	ug/L		09/07/23 13:27	09/07/23 21:41	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/07/23 13:27	09/07/23 21:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*80*	*p*	*51 - 149*	*09/07/23 13:27*	*09/07/23 21:41*	*1*

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

Job ID: 400-242903-1

Client Sample ID: MW14-ROX-090123-EB

Date Collected: 09/01/23 08:00
Date Received: 09/02/23 07:54

Lab Sample ID: 400-242903-3

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			09/14/23 19:00	1
Acrolein	ND		20	3.3	ug/L			09/14/23 19:00	1
Acrylonitrile	ND		10	2.8	ug/L			09/14/23 19:00	1
Benzene	ND		1.0	0.50	ug/L			09/14/23 19:00	1
Bromobenzene	ND		1.0	0.54	ug/L			09/14/23 19:00	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/14/23 19:00	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/14/23 19:00	1
Bromoform	ND		5.0	0.25	ug/L			09/14/23 19:00	1
Bromomethane	ND		1.0	0.98	ug/L			09/14/23 19:00	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/14/23 19:00	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/14/23 19:00	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/14/23 19:00	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/14/23 19:00	1
Chloroethane	ND		1.0	0.76	ug/L			09/14/23 19:00	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/14/23 19:00	1
Chloroform	ND		1.0	0.90	ug/L			09/14/23 19:00	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/14/23 19:00	1
Chloromethane	ND		1.0	0.90	ug/L			09/14/23 19:00	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/14/23 19:00	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/14/23 19:00	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/14/23 19:00	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/14/23 19:00	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/14/23 19:00	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/14/23 19:00	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/14/23 19:00	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/14/23 19:00	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/14/23 19:00	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/14/23 19:00	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 19:00	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 19:00	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 19:00	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/14/23 19:00	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/14/23 19:00	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/14/23 19:00	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/14/23 19:00	1
2-Hexanone	ND		25	1.4	ug/L			09/14/23 19:00	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/14/23 19:00	1
Methylene bromide	ND		5.0	0.22	ug/L			09/14/23 19:00	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/14/23 19:00	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/14/23 19:00	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/14/23 19:00	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/14/23 19:00	1
Naphthalene	ND		5.0	3.0	ug/L			09/14/23 19:00	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/14/23 19:00	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/14/23 19:00	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/14/23 19:00	1
o-Xylene	ND		5.0	0.60	ug/L			09/14/23 19:00	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/14/23 19:00	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/14/23 19:00	1

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

Job ID: 400-242903-1

Client Sample ID: MW14-ROX-090123-EB
Date Collected: 09/01/23 08:00
Date Received: 09/02/23 07:54

Lab Sample ID: 400-242903-3
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			09/14/23 19:00	1
Styrene	ND		1.0	1.0	ug/L			09/14/23 19:00	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/14/23 19:00	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/14/23 19:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/14/23 19:00	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/14/23 19:00	1
Toluene	ND		1.0	0.90	ug/L			09/14/23 19:00	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/14/23 19:00	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/14/23 19:00	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/14/23 19:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/14/23 19:00	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/14/23 19:00	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/14/23 19:00	1
Trichloroethene	ND		1.0	0.15	ug/L			09/14/23 19:00	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/14/23 19:00	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/14/23 19:00	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/14/23 19:00	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/14/23 19:00	1
Vinyl acetate	ND		25	0.93	ug/L			09/14/23 19:00	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/14/23 19:00	1
Xylenes, Total	ND		10	1.6	ug/L			09/14/23 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*09/14/23 19:00*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*09/14/23 19:00*	*1*
Toluene-d8 (Surr)	*104*		*64 - 132*		*09/14/23 19:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.095	ug/L		09/08/23 11:20	09/12/23 20:33	1
Acenaphthylene	ND		0.19	0.042	ug/L		09/08/23 11:20	09/12/23 20:33	1
Anthracene	ND		0.19	0.045	ug/L		09/08/23 11:20	09/12/23 20:33	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		09/08/23 11:20	09/12/23 20:33	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		09/08/23 11:20	09/12/23 20:33	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		09/08/23 11:20	09/12/23 20:33	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/08/23 11:20	09/12/23 20:33	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		09/08/23 11:20	09/12/23 20:33	1
Chrysene	ND		0.19	0.032	ug/L		09/08/23 11:20	09/12/23 20:33	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		09/08/23 11:20	09/12/23 20:33	1
Fluoranthene	ND		0.19	0.033	ug/L		09/08/23 11:20	09/12/23 20:33	1
Fluorene	ND		0.19	0.086	ug/L		09/08/23 11:20	09/12/23 20:33	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		09/08/23 11:20	09/12/23 20:33	1
Phenanthrene	ND		0.19	0.087	ug/L		09/08/23 11:20	09/12/23 20:33	1
Pyrene	ND		0.19	0.038	ug/L		09/08/23 11:20	09/12/23 20:33	1
1-Methylnaphthalene	ND		0.19	0.077	ug/L		09/08/23 11:20	09/12/23 20:33	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		09/08/23 11:20	09/12/23 20:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*84*		*18 - 147*	*09/08/23 11:20*	*09/12/23 20:33*	*1*
2-Fluorobiphenyl	*70*		*15 - 128*	*09/08/23 11:20*	*09/12/23 20:33*	*1*

Client Sample ID: MW14-ROX-090123-EB

Date Collected: 09/01/23 08:00
Date Received: 09/02/23 07:54

Lab Sample ID: 400-242903-3

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*	*09/08/23 11:20*	*09/12/23 20:33*	*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		09/08/23 11:20	09/12/23 21:36	1
Benzenethiol	ND	*-	9.6	1.6	ug/L		09/08/23 11:20	09/12/23 21:36	1
Benzoic acid	ND		29	7.0	ug/L		09/08/23 11:20	09/12/23 21:36	1
Benzyl alcohol	ND		9.6	1.9	ug/L		09/08/23 11:20	09/12/23 21:36	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		09/08/23 11:20	09/12/23 21:36	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		09/08/23 11:20	09/12/23 21:36	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		09/08/23 11:20	09/12/23 21:36	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		09/08/23 11:20	09/12/23 21:36	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		09/08/23 11:20	09/12/23 21:36	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		09/08/23 11:20	09/12/23 21:36	1
4-Chloroaniline	ND		9.6	3.3	ug/L		09/08/23 11:20	09/12/23 21:36	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		09/08/23 11:20	09/12/23 21:36	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		09/08/23 11:20	09/12/23 21:36	1
2-Chlorophenol	ND		9.6	2.1	ug/L		09/08/23 11:20	09/12/23 21:36	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		09/08/23 11:20	09/12/23 21:36	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		09/08/23 11:20	09/12/23 21:36	1
Dibenzofuran	ND		9.6	0.16	ug/L		09/08/23 11:20	09/12/23 21:36	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		09/08/23 11:20	09/12/23 21:36	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		09/08/23 11:20	09/12/23 21:36	1
Diethyl phthalate	ND		9.6	0.23	ug/L		09/08/23 11:20	09/12/23 21:36	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		09/08/23 11:20	09/12/23 21:36	1
Dimethyl phthalate	**0.48**	**J B**	9.6	0.16	ug/L		09/08/23 11:20	09/14/23 00:54	1
Di-n-butyl phthalate	**4.0**	**J**	9.6	2.6	ug/L		09/08/23 11:20	09/12/23 21:36	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		09/08/23 11:20	09/12/23 21:36	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/08/23 11:20	09/12/23 21:36	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		09/08/23 11:20	09/12/23 21:36	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		09/08/23 11:20	09/12/23 21:36	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		09/08/23 11:20	09/12/23 21:36	1
1,4-Dioxane	ND		9.6	0.96	ug/L		09/08/23 11:20	09/12/23 21:36	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		09/08/23 11:20	09/12/23 21:36	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		09/08/23 11:20	09/12/23 21:36	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/08/23 11:20	09/12/23 21:36	1
Hexachloroethane	ND		9.6	4.0	ug/L		09/08/23 11:20	09/12/23 21:36	1
Indene	ND		9.6	0.96	ug/L		09/08/23 11:20	09/12/23 21:36	1
Isophorone	ND		9.6	0.13	ug/L		09/08/23 11:20	09/12/23 21:36	1
2-Methylphenol	ND		9.6	1.7	ug/L		09/08/23 11:20	09/12/23 21:36	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		09/08/23 11:20	09/12/23 21:36	1
2-Nitroaniline	ND		9.6	2.1	ug/L		09/08/23 11:20	09/12/23 21:36	1
3-Nitroaniline	ND		9.6	1.7	ug/L		09/08/23 11:20	09/12/23 21:36	1
4-Nitroaniline	ND		9.6	1.4	ug/L		09/08/23 11:20	09/12/23 21:36	1
Nitrobenzene	ND		9.6	0.13	ug/L		09/08/23 11:20	09/12/23 21:36	1
2-Nitrophenol	ND		9.6	5.0	ug/L		09/08/23 11:20	09/12/23 21:36	1
4-Nitrophenol	ND		9.6	2.0	ug/L		09/08/23 11:20	09/12/23 21:36	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		09/08/23 11:20	09/12/23 21:36	1

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

Job ID: 400-242903-1

Client Sample ID: MW14-ROX-090123-EB
Date Collected: 09/01/23 08:00
Date Received: 09/02/23 07:54

Lab Sample ID: 400-242903-3
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	3.2	ug/L		09/08/23 11:20	09/12/23 21:36	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		09/08/23 11:20	09/12/23 21:36	1
Pentachlorophenol	ND		19	1.3	ug/L		09/08/23 11:20	09/12/23 21:36	1
Phenol	ND		9.6	2.5	ug/L		09/08/23 11:20	09/12/23 21:36	1
Pyridine	ND		9.6	3.1	ug/L		09/08/23 11:20	09/12/23 21:36	1
Quinoline	ND		9.6	4.3	ug/L		09/08/23 11:20	09/12/23 21:36	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		09/08/23 11:20	09/12/23 21:36	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		09/08/23 11:20	09/12/23 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*46 - 124*	*09/08/23 11:20*	*09/12/23 21:36*	*1*
2-Fluorophenol	*55*		*13 - 113*	*09/08/23 11:20*	*09/12/23 21:36*	*1*
Nitrobenzene-d5	*67*		*36 - 126*	*09/08/23 11:20*	*09/12/23 21:36*	*1*
Phenol-d5	*63*		*17 - 127*	*09/08/23 11:20*	*09/12/23 21:36*	*1*
Terphenyl-d14	*96*		*44 - 149*	*09/08/23 11:20*	*09/12/23 21:36*	*1*
2,4,6-Tribromophenol	*61*		*26 - 150*	*09/08/23 11:20*	*09/12/23 21:36*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/07/23 13:27	09/07/23 22:02	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/07/23 13:27	09/07/23 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*	*p*	*51 - 149*	*09/07/23 13:27*	*09/07/23 22:02*	*1*

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

Job ID: 400-242903-1

Client Sample ID: MW14-ROX-090123
Date Collected: 09/01/23 08:00
Date Received: 09/02/23 07:54

Lab Sample ID: 400-242903-4
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			09/14/23 19:27	1
Acrolein	ND		20	3.3	ug/L			09/14/23 19:27	1
Acrylonitrile	ND		10	2.8	ug/L			09/14/23 19:27	1
Benzene	ND		1.0	0.50	ug/L			09/14/23 19:27	1
Bromobenzene	ND		1.0	0.54	ug/L			09/14/23 19:27	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/14/23 19:27	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/14/23 19:27	1
Bromoform	ND		5.0	0.25	ug/L			09/14/23 19:27	1
Bromomethane	ND	UJ	1.0	0.98	ug/L			09/14/23 19:27	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/14/23 19:27	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/14/23 19:27	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/14/23 19:27	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/14/23 19:27	1
Chloroethane	ND	UJ	1.0	0.76	ug/L			09/14/23 19:27	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/14/23 19:27	1
Chloroform	ND		1.0	0.90	ug/L			09/14/23 19:27	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/14/23 19:27	1
Chloromethane	ND		1.0	0.90	ug/L			09/14/23 19:27	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/14/23 19:27	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/14/23 19:27	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/14/23 19:27	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/14/23 19:27	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/14/23 19:27	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/14/23 19:27	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/14/23 19:27	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/14/23 19:27	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/14/23 19:27	1
1,1-Dichloroethene	ND	UJ	1.0	0.50	ug/L			09/14/23 19:27	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 19:27	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 19:27	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 19:27	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/14/23 19:27	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/14/23 19:27	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/14/23 19:27	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/14/23 19:27	1
2-Hexanone	ND		25	1.4	ug/L			09/14/23 19:27	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/14/23 19:27	1
Methylene bromide	ND		5.0	0.22	ug/L			09/14/23 19:27	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/14/23 19:27	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/14/23 19:27	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/14/23 19:27	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/14/23 19:27	1
Naphthalene	ND		5.0	3.0	ug/L			09/14/23 19:27	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/14/23 19:27	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/14/23 19:27	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/14/23 19:27	1
o-Xylene	ND		5.0	0.60	ug/L			09/14/23 19:27	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/14/23 19:27	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/14/23 19:27	1

Client Sample ID: MW14-ROX-090123
Date Collected: 09/01/23 08:00
Date Received: 09/02/23 07:54

Lab Sample ID: 400-242903-4
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			09/14/23 19:27	1
Styrene	ND		1.0	1.0	ug/L			09/14/23 19:27	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/14/23 19:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/14/23 19:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/14/23 19:27	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/14/23 19:27	1
Toluene	ND		1.0	0.90	ug/L			09/14/23 19:27	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/14/23 19:27	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/14/23 19:27	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/14/23 19:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/14/23 19:27	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/14/23 19:27	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/14/23 19:27	1
Trichloroethene	ND		1.0	0.15	ug/L			09/14/23 19:27	1
Trichlorofluoromethane	ND	UJ	1.0	0.52	ug/L			09/14/23 19:27	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/14/23 19:27	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/14/23 19:27	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/14/23 19:27	1
Vinyl acetate	ND		25	0.93	ug/L			09/14/23 19:27	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/14/23 19:27	1
Xylenes, Total	ND		10	1.6	ug/L			09/14/23 19:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*09/14/23 19:27*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*09/14/23 19:27*	*1*
Toluene-d8 (Surr)	*105*		*64 - 132*		*09/14/23 19:27*	*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	0.096	ug/L		09/08/23 11:20	09/12/23 20:54	1
Acenaphthylene	ND		0.19	0.043	ug/L		09/08/23 11:20	09/12/23 20:54	1
Anthracene	ND		0.19	0.046	ug/L		09/08/23 11:20	09/12/23 20:54	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		09/08/23 11:20	09/12/23 20:54	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		09/08/23 11:20	09/12/23 20:54	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		09/08/23 11:20	09/12/23 20:54	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/08/23 11:20	09/12/23 20:54	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		09/08/23 11:20	09/12/23 20:54	1
Chrysene	ND		0.19	0.032	ug/L		09/08/23 11:20	09/12/23 20:54	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		09/08/23 11:20	09/12/23 20:54	1
Fluoranthene	ND		0.19	0.033	ug/L		09/08/23 11:20	09/12/23 20:54	1
Fluorene	ND		0.19	0.086	ug/L		09/08/23 11:20	09/12/23 20:54	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		09/08/23 11:20	09/12/23 20:54	1
Phenanthrene	ND		0.19	0.087	ug/L		09/08/23 11:20	09/12/23 20:54	1
Pyrene	ND		0.19	0.038	ug/L		09/08/23 11:20	09/12/23 20:54	1
1-Methylnaphthalene	ND		0.19	0.078	ug/L		09/08/23 11:20	09/12/23 20:54	1
2-Methylnaphthalene	ND		0.19	0.064	ug/L		09/08/23 11:20	09/12/23 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*76*		*18 - 147*	*09/08/23 11:20*	*09/12/23 20:54*	*1*
2-Fluorobiphenyl	*63*		*15 - 128*	*09/08/23 11:20*	*09/12/23 20:54*	*1*

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

Job ID: 400-242903-1

Client Sample ID: MW14-ROX-090123
Date Collected: 09/01/23 08:00
Date Received: 09/02/23 07:54

Lab Sample ID: 400-242903-4
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	09/08/23 11:20	09/12/23 20:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	3.7	ug/L		09/08/23 11:20	09/12/23 21:57	1
Benzenethiol	ND	*- UJ	9.7	1.7	ug/L		09/08/23 11:20	09/12/23 21:57	1
Benzoic acid	ND		29	7.1	ug/L		09/08/23 11:20	09/12/23 21:57	1
Benzyl alcohol	ND		9.7	1.9	ug/L		09/08/23 11:20	09/12/23 21:57	1
Bis(2-chloroethoxy)methane	ND		9.7	0.16	ug/L		09/08/23 11:20	09/12/23 21:57	1
Bis(2-chloroethyl)ether	ND		9.7	2.6	ug/L		09/08/23 11:20	09/12/23 21:57	1
bis (2-chloroisopropyl) ether	ND		9.7	0.16	ug/L		09/08/23 11:20	09/12/23 21:57	1
Bis(2-ethylhexyl) phthalate	**8.8**	**J**	9.7	4.9	ug/L		09/08/23 11:20	09/12/23 21:57	1
4-Bromophenyl phenyl ether	ND		9.7	0.19	ug/L		09/08/23 11:20	09/12/23 21:57	1
Butyl benzyl phthalate	ND		9.7	0.18	ug/L		09/08/23 11:20	09/12/23 21:57	1
4-Chloroaniline	ND		9.7	3.3	ug/L		09/08/23 11:20	09/12/23 21:57	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		09/08/23 11:20	09/12/23 21:57	1
2-Chloronaphthalene	ND		9.7	0.14	ug/L		09/08/23 11:20	09/12/23 21:57	1
2-Chlorophenol	ND		9.7	2.1	ug/L		09/08/23 11:20	09/12/23 21:57	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		09/08/23 11:20	09/12/23 21:57	1
Dibenz[a,h]acridine	ND		9.7	0.97	ug/L		09/08/23 11:20	09/12/23 21:57	1
Dibenzofuran	ND		9.7	0.17	ug/L		09/08/23 11:20	09/12/23 21:57	1
3,3'-Dichlorobenzidine	ND	UJ	9.7	2.5	ug/L		09/08/23 11:20	09/12/23 21:57	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		09/08/23 11:20	09/12/23 21:57	1
Diethyl phthalate	ND		9.7	0.23	ug/L		09/08/23 11:20	09/12/23 21:57	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		09/08/23 11:20	09/12/23 21:57	1
Dimethyl phthalate	ND		9.7	0.17	ug/L		09/08/23 11:20	09/12/23 21:57	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		09/08/23 11:20	09/12/23 21:57	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.7	1.6	ug/L		09/08/23 11:20	09/12/23 21:57	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/08/23 11:20	09/12/23 21:57	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		09/08/23 11:20	09/12/23 21:57	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		09/08/23 11:20	09/12/23 21:57	1
Di-n-octyl phthalate	ND		9.7	0.17	ug/L		09/08/23 11:20	09/12/23 21:57	1
1,4-Dioxane	ND		9.7	0.97	ug/L		09/08/23 11:20	09/12/23 21:57	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		09/08/23 11:20	09/12/23 21:57	1
Hexachlorobenzene	ND		9.7	0.17	ug/L		09/08/23 11:20	09/12/23 21:57	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/08/23 11:20	09/12/23 21:57	1
Hexachloroethane	ND		9.7	4.1	ug/L		09/08/23 11:20	09/12/23 21:57	1
Indene	ND		9.7	0.97	ug/L		09/08/23 11:20	09/12/23 21:57	1
Isophorone	ND		9.7	0.14	ug/L		09/08/23 11:20	09/12/23 21:57	1
2-Methylphenol	ND		9.7	1.7	ug/L		09/08/23 11:20	09/12/23 21:57	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		09/08/23 11:20	09/12/23 21:57	1
2-Nitroaniline	ND		9.7	2.1	ug/L		09/08/23 11:20	09/12/23 21:57	1
3-Nitroaniline	ND		9.7	1.7	ug/L		09/08/23 11:20	09/12/23 21:57	1
4-Nitroaniline	ND		9.7	1.5	ug/L		09/08/23 11:20	09/12/23 21:57	1
Nitrobenzene	ND		9.7	0.13	ug/L		09/08/23 11:20	09/12/23 21:57	1
2-Nitrophenol	ND		9.7	5.1	ug/L		09/08/23 11:20	09/12/23 21:57	1
4-Nitrophenol	ND		9.7	2.0	ug/L		09/08/23 11:20	09/12/23 21:57	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		09/08/23 11:20	09/12/23 21:57	1

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

Job ID: 400-242903-1

Client Sample ID: MW14-ROX-090123
Date Collected: 09/01/23 08:00
Date Received: 09/02/23 07:54

Lab Sample ID: 400-242903-4
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	3.2	ug/L		09/08/23 11:20	09/12/23 21:57	1
N-Nitrosodiphenylamine	ND		9.7	0.17	ug/L		09/08/23 11:20	09/12/23 21:57	1
Pentachlorophenol	ND		19	1.4	ug/L		09/08/23 11:20	09/12/23 21:57	1
Phenol	ND		9.7	2.5	ug/L		09/08/23 11:20	09/12/23 21:57	1
Pyridine	ND		9.7	3.1	ug/L		09/08/23 11:20	09/12/23 21:57	1
Quinoline	ND		9.7	4.4	ug/L		09/08/23 11:20	09/12/23 21:57	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		09/08/23 11:20	09/12/23 21:57	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		09/08/23 11:20	09/12/23 21:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*46 - 124*	*09/08/23 11:20*	*09/12/23 21:57*	*1*
2-Fluorophenol	*41*		*13 - 113*	*09/08/23 11:20*	*09/12/23 21:57*	*1*
Nitrobenzene-d5	*65*		*36 - 126*	*09/08/23 11:20*	*09/12/23 21:57*	*1*
Phenol-d5	*60*		*17 - 127*	*09/08/23 11:20*	*09/12/23 21:57*	*1*
Terphenyl-d14	*88*		*44 - 149*	*09/08/23 11:20*	*09/12/23 21:57*	*1*
2,4,6-Tribromophenol	*68*		*26 - 150*	*09/08/23 11:20*	*09/12/23 21:57*	*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 UJ	9.8	4.9	ug/L		09/13/23 10:04	09/15/23 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*39*	*S1-*	*46 - 124*	*09/13/23 10:04*	*09/15/23 20:06*	*1*
Nitrobenzene-d5	*43*		*36 - 126*	*09/13/23 10:04*	*09/15/23 20:06*	*1*
Terphenyl-d14	*56*		*44 - 149*	*09/13/23 10:04*	*09/15/23 20:06*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/07/23 13:27	09/07/23 22:22	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/07/23 13:27	09/07/23 22:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*51 - 149*	*09/07/23 13:27*	*09/07/23 22:22*	*1*

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

Job ID: 400-242903-1

Client Sample ID: ROST3MW-ROX-090123

Date Collected: 09/01/23 12:10
Date Received: 09/02/23 07:54

Lab Sample ID: 400-242903-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**10**	**J**	25	10	ug/L			09/14/23 19:53	1
Acrolein	ND		20	3.3	ug/L			09/14/23 19:53	1
Acrylonitrile	ND		10	2.8	ug/L			09/14/23 19:53	1
Benzene	ND		1.0	0.50	ug/L			09/14/23 19:53	1
Bromobenzene	ND		1.0	0.54	ug/L			09/14/23 19:53	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/14/23 19:53	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/14/23 19:53	1
Bromoform	ND		5.0	0.25	ug/L			09/14/23 19:53	1
Bromomethane	ND	UJ	1.0	0.98	ug/L			09/14/23 19:53	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/14/23 19:53	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/14/23 19:53	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/14/23 19:53	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/14/23 19:53	1
Chloroethane	ND	UJ	1.0	0.76	ug/L			09/14/23 19:53	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/14/23 19:53	1
Chloroform	ND		1.0	0.90	ug/L			09/14/23 19:53	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/14/23 19:53	1
Chloromethane	ND		1.0	0.90	ug/L			09/14/23 19:53	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/14/23 19:53	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/14/23 19:53	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/14/23 19:53	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/14/23 19:53	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/14/23 19:53	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/14/23 19:53	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/14/23 19:53	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/14/23 19:53	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/14/23 19:53	1
1,1-Dichloroethene	ND	UJ	1.0	0.50	ug/L			09/14/23 19:53	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 19:53	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 19:53	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 19:53	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/14/23 19:53	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/14/23 19:53	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/14/23 19:53	1
Hexachlorobutadiene	ND	UJ	5.0	0.90	ug/L			09/14/23 19:53	1
2-Hexanone	ND		25	1.4	ug/L			09/14/23 19:53	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/14/23 19:53	1
Methylene bromide	ND		5.0	0.22	ug/L			09/14/23 19:53	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/14/23 19:53	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/14/23 19:53	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/14/23 19:53	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/14/23 19:53	1
Naphthalene	ND		5.0	3.0	ug/L			09/14/23 19:53	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/14/23 19:53	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/14/23 19:53	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/14/23 19:53	1
o-Xylene	ND		5.0	0.60	ug/L			09/14/23 19:53	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/14/23 19:53	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/14/23 19:53	1

Client Sample ID: ROST3MW-ROX-090123
Date Collected: 09/01/23 12:10
Date Received: 09/02/23 07:54

Lab Sample ID: 400-242903-5
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			09/14/23 19:53	1
Styrene	ND		1.0	1.0	ug/L			09/14/23 19:53	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/14/23 19:53	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/14/23 19:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/14/23 19:53	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/14/23 19:53	1
Toluene	ND		1.0	0.90	ug/L			09/14/23 19:53	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/14/23 19:53	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/14/23 19:53	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/14/23 19:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/14/23 19:53	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/14/23 19:53	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/14/23 19:53	1
Trichloroethene	ND		1.0	0.15	ug/L			09/14/23 19:53	1
Trichlorofluoromethane	ND	UJ	1.0	0.52	ug/L			09/14/23 19:53	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/14/23 19:53	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/14/23 19:53	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/14/23 19:53	1
Vinyl acetate	ND		25	0.93	ug/L			09/14/23 19:53	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/14/23 19:53	1
Xylenes, Total	ND		10	1.6	ug/L			09/14/23 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 130*		*09/14/23 19:53*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*09/14/23 19:53*	*1*
Toluene-d8 (Surr)	*105*		*64 - 132*		*09/14/23 19:53*	*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		09/08/23 11:20	09/15/23 12:39	1
Acenaphthylene	ND		0.20	0.044	ug/L		09/08/23 11:20	09/15/23 12:39	1
Anthracene	ND		0.20	0.046	ug/L		09/08/23 11:20	09/15/23 12:39	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		09/08/23 11:20	09/15/23 12:39	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		09/08/23 11:20	09/15/23 12:39	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		09/08/23 11:20	09/15/23 12:39	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		09/08/23 11:20	09/15/23 12:39	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		09/08/23 11:20	09/15/23 12:39	1
Chrysene	ND		0.20	0.033	ug/L		09/08/23 11:20	09/15/23 12:39	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		09/08/23 11:20	09/15/23 12:39	1
Fluoranthene	ND		0.20	0.034	ug/L		09/08/23 11:20	09/15/23 12:39	1
Fluorene	ND		0.20	0.088	ug/L		09/08/23 11:20	09/15/23 12:39	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		09/08/23 11:20	09/15/23 12:39	1
Phenanthrene	**0.13**	**J**	0.20	0.089	ug/L		09/08/23 11:20	09/15/23 12:39	1
Pyrene	ND		0.20	0.039	ug/L		09/08/23 11:20	09/15/23 12:39	1
1-Methylnaphthalene	**0.15**	**J**	0.20	0.079	ug/L		09/08/23 11:20	09/15/23 12:39	1
2-Methylnaphthalene	**0.20**		0.20	0.065	ug/L		09/08/23 11:20	09/15/23 12:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*127*		*18 - 147*	*09/08/23 11:20*	*09/15/23 12:39*	*1*
2-Fluorobiphenyl	*107*		*15 - 128*	*09/08/23 11:20*	*09/15/23 12:39*	*1*

Client Sample ID: ROST3MW-ROX-090123

Date Collected: 09/01/23 12:10
Date Received: 09/02/23 07:54

Lab Sample ID: 400-242903-5

Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	109		10 - 144	09/08/23 11:20	09/15/23 12:39	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		09/08/23 11:20	09/12/23 22:18	1
Benzenethiol	ND	*- UJ	9.9	1.7	ug/L		09/08/23 11:20	09/12/23 22:18	1
Benzoic acid	ND		30	7.2	ug/L		09/08/23 11:20	09/12/23 22:18	1
Benzyl alcohol	ND		9.9	2.0	ug/L		09/08/23 11:20	09/12/23 22:18	1
Bis(2-chloroethoxy)methane	ND		9.9	0.16	ug/L		09/08/23 11:20	09/12/23 22:18	1
Bis(2-chloroethyl)ether	ND		9.9	2.7	ug/L		09/08/23 11:20	09/12/23 22:18	1
bis (2-chloroisopropyl) ether	ND		9.9	0.16	ug/L		09/08/23 11:20	09/12/23 22:18	1
Bis(2-ethylhexyl) phthalate	**5.6**	**J**	9.9	4.9	ug/L		09/08/23 11:20	09/12/23 22:18	1
4-Bromophenyl phenyl ether	ND		9.9	0.20	ug/L		09/08/23 11:20	09/12/23 22:18	1
Butyl benzyl phthalate	ND		9.9	0.19	ug/L		09/08/23 11:20	09/12/23 22:18	1
4-Chloroaniline	ND		9.9	3.4	ug/L		09/08/23 11:20	09/12/23 22:18	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		09/08/23 11:20	09/12/23 22:18	1
2-Chloronaphthalene	ND		9.9	0.14	ug/L		09/08/23 11:20	09/12/23 22:18	1
2-Chlorophenol	ND		9.9	2.2	ug/L		09/08/23 11:20	09/12/23 22:18	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		09/08/23 11:20	09/12/23 22:18	1
Dibenz[a,h]acridine	ND		9.9	0.99	ug/L		09/08/23 11:20	09/12/23 22:18	1
Dibenzofuran	ND		9.9	0.17	ug/L		09/08/23 11:20	09/12/23 22:18	1
3,3'-Dichlorobenzidine	ND	UJ	9.9	2.6	ug/L		09/08/23 11:20	09/12/23 22:18	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		09/08/23 11:20	09/12/23 22:18	1
Diethyl phthalate	**0.27**	**J**	9.9	0.24	ug/L		09/08/23 11:20	09/12/23 22:18	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		09/08/23 11:20	09/12/23 22:18	1
Dimethyl phthalate	**0.76**	**J B** U	9.9	0.17	ug/L		09/08/23 11:20	09/14/23 01:19	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		09/08/23 11:20	09/12/23 22:18	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.9	1.6	ug/L		09/08/23 11:20	09/12/23 22:18	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		09/08/23 11:20	09/12/23 22:18	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		09/08/23 11:20	09/12/23 22:18	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		09/08/23 11:20	09/12/23 22:18	1
Di-n-octyl phthalate	ND		9.9	0.17	ug/L		09/08/23 11:20	09/12/23 22:18	1
1,4-Dioxane	ND		9.9	0.99	ug/L		09/08/23 11:20	09/12/23 22:18	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		09/08/23 11:20	09/12/23 22:18	1
Hexachlorobenzene	ND		9.9	0.17	ug/L		09/08/23 11:20	09/12/23 22:18	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/08/23 11:20	09/12/23 22:18	1
Hexachloroethane	ND		9.9	4.2	ug/L		09/08/23 11:20	09/12/23 22:18	1
Indene	ND		9.9	0.99	ug/L		09/08/23 11:20	09/12/23 22:18	1
Isophorone	ND		9.9	0.14	ug/L		09/08/23 11:20	09/12/23 22:18	1
2-Methylphenol	ND		9.9	1.8	ug/L		09/08/23 11:20	09/12/23 22:18	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		09/08/23 11:20	09/12/23 22:18	1
2-Nitroaniline	ND		9.9	2.2	ug/L		09/08/23 11:20	09/12/23 22:18	1
3-Nitroaniline	ND		9.9	1.8	ug/L		09/08/23 11:20	09/12/23 22:18	1
4-Nitroaniline	ND		9.9	1.5	ug/L		09/08/23 11:20	09/12/23 22:18	1
Nitrobenzene	ND		9.9	0.13	ug/L		09/08/23 11:20	09/12/23 22:18	1
2-Nitrophenol	ND		9.9	5.1	ug/L		09/08/23 11:20	09/12/23 22:18	1
4-Nitrophenol	ND		9.9	2.1	ug/L		09/08/23 11:20	09/12/23 22:18	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		09/08/23 11:20	09/12/23 22:18	1

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

Job ID: 400-242903-1

Client Sample ID: ROST3MW-ROX-090123

Lab Sample ID: 400-242903-5

Date Collected: 09/01/23 12:10

Matrix: Water

Date Received: 09/02/23 07:54

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		09/08/23 11:20	09/12/23 22:18	1
N-Nitrosodiphenylamine	ND		9.9	0.18	ug/L		09/08/23 11:20	09/12/23 22:18	1
Pentachlorophenol	ND		20	1.4	ug/L		09/08/23 11:20	09/12/23 22:18	1
Phenol	ND		9.9	2.6	ug/L		09/08/23 11:20	09/12/23 22:18	1
Pyridine	ND		9.9	3.2	ug/L		09/08/23 11:20	09/12/23 22:18	1
Quinoline	ND		9.9	4.5	ug/L		09/08/23 11:20	09/12/23 22:18	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		09/08/23 11:20	09/12/23 22:18	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		09/08/23 11:20	09/12/23 22:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*107*		*46 - 124*	*09/08/23 11:20*	*09/12/23 22:18*	*1*
2-Fluorophenol	*58*		*13 - 113*	*09/08/23 11:20*	*09/12/23 22:18*	*1*
Nitrobenzene-d5	*91*		*36 - 126*	*09/08/23 11:20*	*09/12/23 22:18*	*1*
Phenol-d5	*82*		*17 - 127*	*09/08/23 11:20*	*09/12/23 22:18*	*1*
Terphenyl-d14	*129*		*44 - 149*	*09/08/23 11:20*	*09/12/23 22:18*	*1*
2,4,6-Tribromophenol	*86*		*26 - 150*	*09/08/23 11:20*	*09/12/23 22:18*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.029	0.017	ug/L		09/07/23 13:27	09/07/23 22:42	1
1,2-D bromoethane	ND		0.019	0.015	ug/L		09/07/23 13:27	09/07/23 22:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*51 - 149*	*09/07/23 13:27*	*09/07/23 22:42*	*1*

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

Job ID: 400-242903-1

Client Sample ID: ROST3MW-ROX-090123-DUP
Date Collected: 09/01/23 12:10
Date Received: 09/02/23 07:54

Lab Sample ID: 400-242903-6
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			09/14/23 20:20	1
Acrolein	ND		20	3.3	ug/L			09/14/23 20:20	1
Acrylonitrile	ND		10	2.8	ug/L			09/14/23 20:20	1
Benzene	ND		1.0	0.50	ug/L			09/14/23 20:20	1
Bromobenzene	ND		1.0	0.54	ug/L			09/14/23 20:20	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/14/23 20:20	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/14/23 20:20	1
Bromoform	ND		5.0	0.25	ug/L			09/14/23 20:20	1
Bromomethane	ND	UJ	1.0	0.98	ug/L			09/14/23 20:20	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/14/23 20:20	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/14/23 20:20	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/14/23 20:20	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/14/23 20:20	1
Chloroethane	ND	UJ	1.0	0.76	ug/L			09/14/23 20:20	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/14/23 20:20	1
Chloroform	ND		1.0	0.90	ug/L			09/14/23 20:20	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/14/23 20:20	1
Chloromethane	ND		1.0	0.90	ug/L			09/14/23 20:20	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/14/23 20:20	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/14/23 20:20	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/14/23 20:20	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/14/23 20:20	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/14/23 20:20	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/14/23 20:20	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/14/23 20:20	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/14/23 20:20	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/14/23 20:20	1
1,1-Dichloroethene	ND	UJ	1.0	0.50	ug/L			09/14/23 20:20	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 20:20	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 20:20	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 20:20	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/14/23 20:20	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/14/23 20:20	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/14/23 20:20	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/14/23 20:20	1
2-Hexanone	ND		25	1.4	ug/L			09/14/23 20:20	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/14/23 20:20	1
Methylene bromide	ND		5.0	0.22	ug/L			09/14/23 20:20	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/14/23 20:20	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/14/23 20:20	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/14/23 20:20	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/14/23 20:20	1
Naphthalene	ND		5.0	3.0	ug/L			09/14/23 20:20	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/14/23 20:20	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/14/23 20:20	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/14/23 20:20	1
o-Xylene	ND		5.0	0.60	ug/L			09/14/23 20:20	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/14/23 20:20	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/14/23 20:20	1

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

Job ID: 400-242903-1

Client Sample ID: ROST3MW-ROX-090123-DUP

Lab Sample ID: 400-242903-6

Date Collected: 09/01/23 12:10

Matrix: Water

Date Received: 09/02/23 07:54

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			09/14/23 20:20	1
Styrene	ND		1.0	1.0	ug/L			09/14/23 20:20	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/14/23 20:20	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/14/23 20:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/14/23 20:20	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/14/23 20:20	1
Toluene	ND		1.0	0.90	ug/L			09/14/23 20:20	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/14/23 20:20	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/14/23 20:20	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/14/23 20:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/14/23 20:20	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/14/23 20:20	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/14/23 20:20	1
Trichloroethene	ND		1.0	0.15	ug/L			09/14/23 20:20	1
Trichlorofluoromethane	ND	UJ	1.0	0.52	ug/L			09/14/23 20:20	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/14/23 20:20	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/14/23 20:20	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/14/23 20:20	1
Vinyl acetate	ND		25	0.93	ug/L			09/14/23 20:20	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/14/23 20:20	1
Xylenes, Total	ND		10	1.6	ug/L			09/14/23 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 130*		*09/14/23 20:20*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*09/14/23 20:20*	*1*
Toluene-d8 (Surr)	*107*		*64 - 132*		*09/14/23 20:20*	*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		09/08/23 11:20	09/15/23 13:00	1
Acenaphthylene	ND		0.20	0.043	ug/L		09/08/23 11:20	09/15/23 13:00	1
Anthracene	ND		0.20	0.046	ug/L		09/08/23 11:20	09/15/23 13:00	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		09/08/23 11:20	09/15/23 13:00	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		09/08/23 11:20	09/15/23 13:00	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		09/08/23 11:20	09/15/23 13:00	1
Benzo[g,h,i]perylene	ND		0.20	0.026	ug/L		09/08/23 11:20	09/15/23 13:00	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		09/08/23 11:20	09/15/23 13:00	1
Chrysene	ND		0.20	0.032	ug/L		09/08/23 11:20	09/15/23 13:00	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		09/08/23 11:20	09/15/23 13:00	1
Fluoranthene	ND		0.20	0.033	ug/L		09/08/23 11:20	09/15/23 13:00	1
Fluorene	ND		0.20	0.087	ug/L		09/08/23 11:20	09/15/23 13:00	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		09/08/23 11:20	09/15/23 13:00	1
Phenanthrene	**0.090**	**J**	0.20	0.088	ug/L		09/08/23 11:20	09/15/23 13:00	1
Pyrene	ND		0.20	0.038	ug/L		09/08/23 11:20	09/15/23 13:00	1
1-Methylnaphthalene	ND		0.20	0.078	ug/L		09/08/23 11:20	09/15/23 13:00	1
2-Methylnaphthalene	**0.11**	**J**	0.20	0.065	ug/L		09/08/23 11:20	09/15/23 13:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*18 - 147*	*09/08/23 11:20*	*09/15/23 13:00*	*1*
2-Fluorobiphenyl	*77*		*15 - 128*	*09/08/23 11:20*	*09/15/23 13:00*	*1*

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

Job ID: 400-242903-1

Client Sample ID: ROST3MW-ROX-090123-DUP
Date Collected: 09/01/23 12:10
Date Received: 09/02/23 07:54

Lab Sample ID: 400-242903-6
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	09/08/23 11:20	09/15/23 13:00	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		09/08/23 11:20	09/12/23 22:39	1
Benzenethiol	ND	*- UJ	9.8	1.7	ug/L		09/08/23 11:20	09/12/23 22:39	1
Benzoic acid	ND		29	7.2	ug/L		09/08/23 11:20	09/12/23 22:39	1
Benzyl alcohol	ND		9.8	2.0	ug/L		09/08/23 11:20	09/12/23 22:39	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		09/08/23 11:20	09/12/23 22:39	1
Bis(2-chloroethyl)ether	ND		9.8	2.6	ug/L		09/08/23 11:20	09/12/23 22:39	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		09/08/23 11:20	09/12/23 22:39	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		09/08/23 11:20	09/12/23 22:39	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		09/08/23 11:20	09/12/23 22:39	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		09/08/23 11:20	09/12/23 22:39	1
4-Chloroaniline	ND		9.8	3.3	ug/L		09/08/23 11:20	09/12/23 22:39	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		09/08/23 11:20	09/12/23 22:39	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		09/08/23 11:20	09/12/23 22:39	1
2-Chlorophenol	ND		9.8	2.2	ug/L		09/08/23 11:20	09/12/23 22:39	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		09/08/23 11:20	09/12/23 22:39	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		09/08/23 11:20	09/12/23 22:39	1
Dibenzofuran	ND		9.8	0.17	ug/L		09/08/23 11:20	09/12/23 22:39	1
3,3'-Dichlorobenzidine	ND	UJ	9.8	2.6	ug/L		09/08/23 11:20	09/12/23 22:39	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		09/08/23 11:20	09/12/23 22:39	1
Diethyl phthalate	ND		9.8	0.24	ug/L		09/08/23 11:20	09/12/23 22:39	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		09/08/23 11:20	09/12/23 22:39	1
Dimethyl phthalate	ND		9.8	0.17	ug/L		09/08/23 11:20	09/12/23 22:39	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		09/08/23 11:20	09/12/23 22:39	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.8	1.6	ug/L		09/08/23 11:20	09/12/23 22:39	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/08/23 11:20	09/12/23 22:39	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		09/08/23 11:20	09/12/23 22:39	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		09/08/23 11:20	09/12/23 22:39	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		09/08/23 11:20	09/12/23 22:39	1
1,4-Dioxane	ND		9.8	0.98	ug/L		09/08/23 11:20	09/12/23 22:39	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		09/08/23 11:20	09/12/23 22:39	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		09/08/23 11:20	09/12/23 22:39	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/08/23 11:20	09/12/23 22:39	1
Hexachloroethane	ND		9.8	4.1	ug/L		09/08/23 11:20	09/12/23 22:39	1
Indene	ND		9.8	0.98	ug/L		09/08/23 11:20	09/12/23 22:39	1
Isophorone	ND		9.8	0.14	ug/L		09/08/23 11:20	09/12/23 22:39	1
2-Methylphenol	ND		9.8	1.8	ug/L		09/08/23 11:20	09/12/23 22:39	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		09/08/23 11:20	09/12/23 22:39	1
2-Nitroaniline	ND		9.8	2.2	ug/L		09/08/23 11:20	09/12/23 22:39	1
3-Nitroaniline	ND		9.8	1.8	ug/L		09/08/23 11:20	09/12/23 22:39	1
4-Nitroaniline	ND		9.8	1.5	ug/L		09/08/23 11:20	09/12/23 22:39	1
Nitrobenzene	ND		9.8	0.13	ug/L		09/08/23 11:20	09/12/23 22:39	1
2-Nitrophenol	ND		9.8	5.1	ug/L		09/08/23 11:20	09/12/23 22:39	1
4-Nitrophenol	ND		9.8	2.1	ug/L		09/08/23 11:20	09/12/23 22:39	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		09/08/23 11:20	09/12/23 22:39	1

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

Job ID: 400-242903-1

Client Sample ID: ROST3MW-ROX-090123-DUP
Date Collected: 09/01/23 12:10
Date Received: 09/02/23 07:54

Lab Sample ID: 400-242903-6
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	3.2	ug/L		09/08/23 11:20	09/12/23 22:39	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		09/08/23 11:20	09/12/23 22:39	1
Pentachlorophenol	ND		20	1.4	ug/L		09/08/23 11:20	09/12/23 22:39	1
Phenol	ND		9.8	2.6	ug/L		09/08/23 11:20	09/12/23 22:39	1
Pyridine	ND		9.8	3.1	ug/L		09/08/23 11:20	09/12/23 22:39	1
Quinoline	ND		9.8	4.4	ug/L		09/08/23 11:20	09/12/23 22:39	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		09/08/23 11:20	09/12/23 22:39	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		09/08/23 11:20	09/12/23 22:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*46 - 124*	*09/08/23 11:20*	*09/12/23 22:39*	*1*
2-Fluorophenol	*52*		*13 - 113*	*09/08/23 11:20*	*09/12/23 22:39*	*1*
Nitrobenzene-d5	*64*		*36 - 126*	*09/08/23 11:20*	*09/12/23 22:39*	*1*
Phenol-d5	*61*		*17 - 127*	*09/08/23 11:20*	*09/12/23 22:39*	*1*
Terphenyl-d14	*90*		*44 - 149*	*09/08/23 11:20*	*09/12/23 22:39*	*1*
2,4,6-Tribromophenol	*65*		*26 - 150*	*09/08/23 11:20*	*09/12/23 22:39*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/07/23 13:27	09/07/23 23:02	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/07/23 13:27	09/07/23 23:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*51 - 149*	*09/07/23 13:27*	*09/07/23 23:02*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Job ID: 400-242903-1
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.
B	Compound was found in the blank and sample.
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.

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: 400-242903-1

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)
400-242903-1	TB-ROX-090123-8260	104	107	104
400-242903-3	MW14-ROX-090123-EB	105	108	104
400-242903-4	MW14-ROX-090123	105	105	105
400-242903-5	ROST3MW-ROX-090123	107	102	105
400-242903-6	ROST3MW-ROX-090123-DUP	109	104	107
LCS 400-640996/1002	Lab Control Sample	108	103	104
MB 400-640996/4	Method Blank	107	107	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	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-242903-3	MW14-ROX-090123-EB	77	55	67	63	96	61
400-242903-4	MW14-ROX-090123	74	41	65	60	88	68
400-242903-4 - RERA	MW14-ROX-090123	39 S1-		43		56	
400-242903-5	ROST3MW-ROX-090123	107	58	91	82	129	86
400-242903-6	ROST3MW-ROX-090123-DUP	74	52	64	61	90	65
LCS 400-640140/18-A	Lab Control Sample	78	59	69	66	87	66
LCS 400-640140/2-A	Lab Control Sample	80	60	64	68	87	79
LCS 400-640651/2-A	Lab Control Sample	66		64		69	
LCSD 400-640140/19-A	Lab Control Sample Dup	89	65	76	74	100	70
LCSD 400-640140/3-A	Lab Control Sample Dup	77	53	65	64	81	80
LCSD 400-640651/3-A	Lab Control Sample Dup	70		57		73	
MB 400-640140/1-A	Method Blank	72	33	63	50	82	61
MB 400-640651/1-A	Method Blank	64		54		68	

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)
400-242903-3	MW14-ROX-090123-EB	84	70	83
400-242903-4	MW14-ROX-090123	76	63	82
400-242903-5	ROST3MW-ROX-090123	127	107	109
400-242903-6	ROST3MW-ROX-090123-DUP	81	77	74

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)
LCS 400-640140/22-A	Lab Control Sample	50	50	63
LCSD 400-640140/23-A	Lab Control Sample Dup	67	67	85
MB 400-640140/1-A	Method Blank	54	50	62

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)
400-242903-2	TB-ROX-090123-8011	80 p
400-242903-3	MW14-ROX-090123-EB	86 p
400-242903-4	MW14-ROX-090123	88
400-242903-5	ROST3MW-ROX-090123	81
400-242903-6	ROST3MW-ROX-090123-DUP	81
LCS 400-640109/2-A	Lab Control Sample	77
LCSD 400-640109/3-A	Lab Control Sample Dup	87
MB 400-640109/1-A	Method Blank	80

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-242903-1

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: 400-242903-1

Client Sample ID: TB-ROX-090123-8260
Lab Sample ID: 400-242903-1
Date Collected: 09/01/23 12:00
Matrix: Water
Date Received: 09/02/23 07:54

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	640996	09/14/23 18:33	CAR	EET PEN

Client Sample ID: TB-ROX-090123-8011
Lab Sample ID: 400-242903-2
Date Collected: 09/01/23 12:00
Matrix: Water
Date Received: 09/02/23 07:54

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	640109	09/07/23 13:27	PG	EET PEN
Total/NA	Analysis	8011		1			640148	09/07/23 21:41	PG	EET PEN

Client Sample ID: MW14-ROX-090123-EB
Lab Sample ID: 400-242903-3
Date Collected: 09/01/23 08:00
Matrix: Water
Date Received: 09/02/23 07:54

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	640996	09/14/23 19:00	CAR	EET PEN
Total/NA	Prep	3520C			260 mL	1 mL	640140	09/08/23 11:20	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640898	09/14/23 00:54	VC1	EET PEN
Total/NA	Prep	3520C			260 mL	1 mL	640140	09/08/23 11:20	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 21:36	S1B	EET PEN
Total/NA	Prep	3520C			260 mL	1 mL	640140	09/08/23 11:20	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 20:33	TH	EET PEN
Total/NA	Prep	8011			34.6 mL	35 mL	640109	09/07/23 13:27	PG	EET PEN
Total/NA	Analysis	8011		1			640148	09/07/23 22:02	PG	EET PEN

Client Sample ID: MW14-ROX-090123
Lab Sample ID: 400-242903-4
Date Collected: 09/01/23 08:00
Matrix: Water
Date Received: 09/02/23 07:54

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	640996	09/14/23 19:27	CAR	EET PEN
Total/NA	Prep	3520C	RERA		256 mL	1 mL	640651	09/13/23 10:04	BKL	EET PEN
Total/NA	Analysis	8270E	RERA	1	0.4 mL	0.4 mL	641241	09/15/23 20:06	S1B	EET PEN
Total/NA	Prep	3520C			257.4 mL	1 mL	640140	09/08/23 11:20	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 21:57	S1B	EET PEN
Total/NA	Prep	3520C			257.4 mL	1 mL	640140	09/08/23 11:20	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 20:54	TH	EET PEN
Total/NA	Prep	8011			34.6 mL	35 mL	640109	09/07/23 13:27	PG	EET PEN
Total/NA	Analysis	8011		1			640148	09/07/23 22:22	PG	EET PEN

Lab Chronicle

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

Job ID: 400-242903-1

Client Sample ID: ROST3MW-ROX-090123

Lab Sample ID: 400-242903-5

Date Collected: 09/01/23 12:10
Date Received: 09/02/23 07:54

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	640996	09/14/23 19:53	CAR	EET PEN
Total/NA	Prep	3520C			252.8 mL	1 mL	640140	09/08/23 11:20	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640898	09/14/23 01:19	VC1	EET PEN
Total/NA	Prep	3520C			252.8 mL	1 mL	640140	09/08/23 11:20	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 22:18	S1B	EET PEN
Total/NA	Prep	3520C			252.8 mL	1 mL	640140	09/08/23 11:20	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641154	09/15/23 12:39	KJA	EET PEN
Total/NA	Prep	8011			35.9 mL	35 mL	640109	09/07/23 13:27	PG	EET PEN
Total/NA	Analysis	8011		1			640148	09/07/23 22:42	PG	EET PEN

Client Sample ID: ROST3MW-ROX-090123-DUP

Lab Sample ID: 400-242903-6

Date Collected: 09/01/23 12:10
Date Received: 09/02/23 07:54

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	640996	09/14/23 20:20	CAR	EET PEN
Total/NA	Prep	3520C			254.8 mL	1 mL	640140	09/08/23 11:20	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 22:39	S1B	EET PEN
Total/NA	Prep	3520C			254.8 mL	1 mL	640140	09/08/23 11:20	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641154	09/15/23 13:00	KJA	EET PEN
Total/NA	Prep	8011			35.2 mL	35 mL	640109	09/07/23 13:27	PG	EET PEN
Total/NA	Analysis	8011		1			640148	09/07/23 23:02	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-640109/1-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	640109	09/07/23 13:27	PG	EET PEN
Total/NA	Analysis	8011		1			640148	09/07/23 16:36	PG	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-640140/1-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 17:01	S1B	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 14:41	TH	EET PEN

Lab Chronicle

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

Job ID: 400-242903-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-640651/1-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	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641239	09/15/23 17:33	VC1	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-640996/4
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	640996	09/14/23 11:50	CAR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640109/2-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	640109	09/07/23 13:27	PG	EET PEN
Total/NA	Analysis	8011		1			640148	09/07/23 16:56	PG	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640140/18-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	640140	09/08/23 12:54	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 18:05	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640140/22-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	640140	09/08/23 12:54	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 15:02	TH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640140/2-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	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 17:23	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640651/2-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	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641239	09/15/23 17:59	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640996/1002
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	640996	09/14/23 10:36	CAR	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-640109/3-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	640109	09/07/23 13:27	PG	EET PEN
Total/NA	Analysis	8011		1			640148	09/07/23 17:17	PG	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-640140/19-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	640140	09/08/23 12:54	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 18:26	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-640140/23-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	640140	09/08/23 12:54	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	640637	09/12/23 16:43	TH	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-640140/3-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	640140	09/07/23 15:48	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	640672	09/12/23 17:44	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-242903-1

Client Sample ID: Lab Control Sample Dup

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-640651/3-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	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641239	09/15/23 18:25	VC1	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 640996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242903-1	TB-ROX-090123-8260	Total/NA	Water	8260D	
400-242903-3	MW14-ROX-090123-EB	Total/NA	Water	8260D	
400-242903-4	MW14-ROX-090123	Total/NA	Water	8260D	
400-242903-5	ROST3MW-ROX-090123	Total/NA	Water	8260D	
400-242903-6	ROST3MW-ROX-090123-DUP	Total/NA	Water	8260D	
MB 400-640996/4	Method Blank	Total/NA	Water	8260D	
LCS 400-640996/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 640140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242903-3	MW14-ROX-090123-EB	Total/NA	Water	3520C	
400-242903-4	MW14-ROX-090123	Total/NA	Water	3520C	
400-242903-5	ROST3MW-ROX-090123	Total/NA	Water	3520C	
400-242903-6	ROST3MW-ROX-090123-DUP	Total/NA	Water	3520C	
MB 400-640140/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-640140/18-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-640140/22-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-640140/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-640140/19-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-640140/23-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-640140/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 640637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242903-3	MW14-ROX-090123-EB	Total/NA	Water	8270E SIM	640140
400-242903-4	MW14-ROX-090123	Total/NA	Water	8270E SIM	640140
MB 400-640140/1-A	Method Blank	Total/NA	Water	8270E SIM	640140
LCS 400-640140/22-A	Lab Control Sample	Total/NA	Water	8270E SIM	640140
LCSD 400-640140/23-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	640140

Prep Batch: 640651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242903-4 - RERA	MW14-ROX-090123	Total/NA	Water	3520C	
MB 400-640651/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-640651/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-640651/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 640672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242903-3	MW14-ROX-090123-EB	Total/NA	Water	8270E	640140
400-242903-4	MW14-ROX-090123	Total/NA	Water	8270E	640140
400-242903-5	ROST3MW-ROX-090123	Total/NA	Water	8270E	640140
400-242903-6	ROST3MW-ROX-090123-DUP	Total/NA	Water	8270E	640140
MB 400-640140/1-A	Method Blank	Total/NA	Water	8270E	640140
LCS 400-640140/18-A	Lab Control Sample	Total/NA	Water	8270E	640140
LCS 400-640140/2-A	Lab Control Sample	Total/NA	Water	8270E	640140
LCSD 400-640140/19-A	Lab Control Sample Dup	Total/NA	Water	8270E	640140
LCSD 400-640140/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	640140

GC/MS Semi VOA

Analysis Batch: 640898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242903-3	MW14-ROX-090123-EB	Total/NA	Water	8270E	640140
400-242903-5	ROST3MW-ROX-090123	Total/NA	Water	8270E	640140

Analysis Batch: 641154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242903-5	ROST3MW-ROX-090123	Total/NA	Water	8270E SIM	640140
400-242903-6	ROST3MW-ROX-090123-DUP	Total/NA	Water	8270E SIM	640140

Analysis Batch: 641239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-640651/1-A	Method Blank	Total/NA	Water	8270E	640651
LCS 400-640651/2-A	Lab Control Sample	Total/NA	Water	8270E	640651
LCSD 400-640651/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	640651

Analysis Batch: 641241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242903-4 - RERA	MW14-ROX-090123	Total/NA	Water	8270E	640651

GC Semi VOA

Prep Batch: 640109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242903-2	TB-ROX-090123-8011	Total/NA	Water	8011	
400-242903-3	MW14-ROX-090123-EB	Total/NA	Water	8011	
400-242903-4	MW14-ROX-090123	Total/NA	Water	8011	
400-242903-5	ROST3MW-ROX-090123	Total/NA	Water	8011	
400-242903-6	ROST3MW-ROX-090123-DUP	Total/NA	Water	8011	
MB 400-640109/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-640109/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-640109/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 640148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242903-2	TB-ROX-090123-8011	Total/NA	Water	8011	640109
400-242903-3	MW14-ROX-090123-EB	Total/NA	Water	8011	640109
400-242903-4	MW14-ROX-090123	Total/NA	Water	8011	640109
400-242903-5	ROST3MW-ROX-090123	Total/NA	Water	8011	640109
400-242903-6	ROST3MW-ROX-090123-DUP	Total/NA	Water	8011	640109
MB 400-640109/1-A	Method Blank	Total/NA	Water	8011	640109
LCS 400-640109/2-A	Lab Control Sample	Total/NA	Water	8011	640109
LCSD 400-640109/3-A	Lab Control Sample Dup	Total/NA	Water	8011	640109

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

Lab Sample ID: MB 400-640996/4
Matrix: Water
Analysis Batch: 640996

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			09/14/23 11:50	1
Acrolein	ND		20	3.3	ug/L			09/14/23 11:50	1
Acrylonitrile	ND		10	2.8	ug/L			09/14/23 11:50	1
Benzene	ND		1.0	0.50	ug/L			09/14/23 11:50	1
Bromobenzene	ND		1.0	0.54	ug/L			09/14/23 11:50	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/14/23 11:50	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/14/23 11:50	1
Bromoform	ND		5.0	0.25	ug/L			09/14/23 11:50	1
Bromomethane	ND		1.0	0.98	ug/L			09/14/23 11:50	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/14/23 11:50	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/14/23 11:50	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/14/23 11:50	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/14/23 11:50	1
Chloroethane	ND		1.0	0.76	ug/L			09/14/23 11:50	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/14/23 11:50	1
Chloroform	ND		1.0	0.90	ug/L			09/14/23 11:50	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/14/23 11:50	1
Chloromethane	ND		1.0	0.90	ug/L			09/14/23 11:50	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/14/23 11:50	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/14/23 11:50	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/14/23 11:50	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/14/23 11:50	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/14/23 11:50	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/14/23 11:50	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/14/23 11:50	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/14/23 11:50	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/14/23 11:50	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/14/23 11:50	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 11:50	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 11:50	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 11:50	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/14/23 11:50	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/14/23 11:50	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/14/23 11:50	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/14/23 11:50	1
2-Hexanone	ND		25	1.4	ug/L			09/14/23 11:50	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/14/23 11:50	1
Methylene bromide	ND		5.0	0.22	ug/L			09/14/23 11:50	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/14/23 11:50	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/14/23 11:50	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/14/23 11:50	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/14/23 11:50	1
Naphthalene	ND		5.0	3.0	ug/L			09/14/23 11:50	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/14/23 11:50	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/14/23 11:50	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/14/23 11:50	1
o-Xylene	ND		5.0	0.60	ug/L			09/14/23 11:50	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/14/23 11:50	1

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

Lab Sample ID: MB 400-640996/4
Matrix: Water
Analysis Batch: 640996

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			09/14/23 11:50	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			09/14/23 11:50	1
Styrene	ND		1.0	1.0	ug/L			09/14/23 11:50	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/14/23 11:50	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/14/23 11:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/14/23 11:50	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/14/23 11:50	1
Toluene	ND		1.0	0.90	ug/L			09/14/23 11:50	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/14/23 11:50	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/14/23 11:50	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/14/23 11:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/14/23 11:50	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/14/23 11:50	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/14/23 11:50	1
Trichloroethene	ND		1.0	0.15	ug/L			09/14/23 11:50	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/14/23 11:50	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/14/23 11:50	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/14/23 11:50	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/14/23 11:50	1
Vinyl acetate	ND		25	0.93	ug/L			09/14/23 11:50	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/14/23 11:50	1
Xylenes, Total	ND		10	1.6	ug/L			09/14/23 11:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 130*		*09/14/23 11:50*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*09/14/23 11:50*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*09/14/23 11:50*	*1*

Lab Sample ID: LCS 400-640996/1002
Matrix: Water
Analysis Batch: 640996

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	536		ug/L		107	38 - 160
Acrylonitrile	500	705		ug/L		141	64 - 142
Benzene	50.0	45.1		ug/L		90	70 - 130
Bromobenzene	50.0	47.0		ug/L		94	70 - 132
Bromochloromethane	50.0	42.3		ug/L		85	70 - 130
Bromodichloromethane	50.0	46.9		ug/L		94	67 - 133
Bromoform	50.0	48.5		ug/L		97	57 - 140
Bromomethane	50.0	17.7		ug/L		35	10 - 160
2-Butanone (MEK)	200	233		ug/L		116	61 - 145
Carbon disulfide	50.0	35.8		ug/L		72	61 - 137
Carbon tetrachloride	50.0	43.7		ug/L		87	61 - 137
Chlorobenzene	50.0	46.1		ug/L		92	70 - 130
Chloroethane	50.0	39.2		ug/L		78	55 - 141
2-Chloroethyl vinyl ether	50.0	49.9		ug/L		100	10 - 160

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

Lab Sample ID: LCS 400-640996/1002
Matrix: Water
Analysis Batch: 640996

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	46.3		ug/L		93	69 - 130
1-Chlorohexane	50.0	51.6		ug/L		103	69 - 130
Chloromethane	50.0	43.3		ug/L		87	58 - 137
cis-1,2-Dichloroethene	50.0	49.8		ug/L		100	68 - 130
cis-1,3-Dichloropropene	50.0	42.8		ug/L		86	69 - 132
Dibromochloromethane	50.0	46.1		ug/L		92	67 - 135
1,2-Dichlorobenzene	50.0	47.2		ug/L		94	67 - 130
1,3-Dichlorobenzene	50.0	47.1		ug/L		94	70 - 130
1,4-Dichlorobenzene	50.0	46.7		ug/L		93	70 - 130
Dichlorodifluoromethane	50.0	44.1		ug/L		88	41 - 146
1,1-Dichloroethane	50.0	59.2		ug/L		118	70 - 130
1,2-Dichloroethane	50.0	50.1		ug/L		100	69 - 130
1,1-Dichloroethene	50.0	36.2		ug/L		72	63 - 134
1,2-Dichloropropane	50.0	48.4		ug/L		97	70 - 130
1,3-Dichloropropane	50.0	51.1		ug/L		102	70 - 130
2,2-Dichloropropane	50.0	45.8		ug/L		92	52 - 135
1,1-Dichloropropene	50.0	44.6		ug/L		89	70 - 130
Ethylbenzene	50.0	46.8		ug/L		94	70 - 130
Ethyl methacrylate	50.0	51.7		ug/L		103	68 - 130
Hexachlorobutadiene	50.0	49.4		ug/L		99	53 - 140
2-Hexanone	200	254		ug/L		127	65 - 137
Isopropy benzene	50.0	45.6		ug/L		91	70 - 130
Methylene bromide	50.0	46.8		ug/L		94	70 - 130
Methylene Chloride	50.0	51.5		ug/L		103	66 - 135
4-Methyl-2-pentanone (MIBK)	200	222		ug/L		111	69 - 138
Methyl tert-butyl ether	50.0	54.1		ug/L		108	66 - 130
m-Xylene & p-Xylene	50.0	45.9		ug/L		92	70 - 130
Naphthalene	50.0	49.1		ug/L		98	47 - 149
n-Butylbenzene	50.0	47.9		ug/L		96	67 - 130
N-Propylbenzene	50.0	48.2		ug/L		96	70 - 130
o-Chlorotoluene	50.0	47.6		ug/L		95	70 - 130
o-Xylene	50.0	44.7		ug/L		89	70 - 130
p-Chlorotoluene	50.0	49.7		ug/L		99	70 - 130
p-Isopropyltoluene	50.0	47.0		ug/L		94	65 - 130
sec-Butylbenzene	50.0	48.9		ug/L		98	66 - 130
Styrene	50.0	44.5		ug/L		89	70 - 130
tert-Butylbenzene	50.0	48.4		ug/L		97	64 - 139
1,1,1,2-Tetrachloroethane	50.0	46.1		ug/L		92	67 - 131
1,1,2,2-Tetrachloroethane	50.0	54.0		ug/L		108	70 - 131
Tetrachloroethene	50.0	43.2		ug/L		86	65 - 130
Toluene	50.0	45.2		ug/L		90	70 - 130
trans-1,2-Dichloroethene	50.0	53.6		ug/L		107	70 - 130
trans-1,3-Dichloropropene	50.0	50.1		ug/L		100	63 - 130
1,2,3-Trichlorobenzene	50.0	47.3		ug/L		95	60 - 138
1,2,4-Trichlorobenzene	50.0	47.3		ug/L		95	60 - 140
1,1,1-Trichloroethane	50.0	45.2		ug/L		90	68 - 130
1,1,2-Trichloroethane	50.0	50.3		ug/L		101	70 - 130
Trichloroethene	50.0	42.3		ug/L		85	70 - 130
Trichlorofluoromethane	50.0	39.7		ug/L		79	65 - 138

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

Lab Sample ID: LCS 400-640996/1002
Matrix: Water
Analysis Batch: 640996

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	54.8		ug/L		110	70 - 130
1,2,4-Trimethy benzene	50.0	46.4		ug/L		93	70 - 130
1,3,5-Trimethy benzene	50.0	47.3		ug/L		95	69 - 130
Vinyl acetate	100	120		ug/L		120	26 - 160
Vinyl chloride	50.0	41.9		ug/L		84	59 - 136
Xylenes, Total	100	90.6		ug/L		91	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*108*		*72 - 130*
Dibromofluoromethane	*103*		*75 - 126*
Toluene-d8 (Surr)	*104*		*64 - 132*

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

Lab Sample ID: MB 400-640140/1-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640140

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		09/07/23 15:48	09/12/23 17:01	1
Benzenethiol	ND		10	1.7	ug/L		09/07/23 15:48	09/12/23 17:01	1
Benzoic acid	ND		30	7.3	ug/L		09/07/23 15:48	09/12/23 17:01	1
Benzyl alcohol	ND		10	2.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		09/07/23 15:48	09/12/23 17:01	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		09/07/23 15:48	09/12/23 17:01	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		09/07/23 15:48	09/12/23 17:01	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		09/07/23 15:48	09/12/23 17:01	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		09/07/23 15:48	09/12/23 17:01	1
4-Chloroaniline	ND		10	3.4	ug/L		09/07/23 15:48	09/12/23 17:01	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		09/07/23 15:48	09/12/23 17:01	1
2-Chloronaphthalene	ND		10	0.14	ug/L		09/07/23 15:48	09/12/23 17:01	1
2-Chlorophenol	ND		10	2.2	ug/L		09/07/23 15:48	09/12/23 17:01	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
Dibenzofuran	ND		10	0.17	ug/L		09/07/23 15:48	09/12/23 17:01	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		09/07/23 15:48	09/12/23 17:01	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
Diethyl phthalate	ND		10	0.24	ug/L		09/07/23 15:48	09/12/23 17:01	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		09/07/23 15:48	09/12/23 17:01	1
Dimethyl phthalate	0.550	J	10	0.17	ug/L		09/07/23 15:48	09/12/23 17:01	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		09/07/23 15:48	09/12/23 17:01	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		09/07/23 15:48	09/12/23 17:01	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		09/07/23 15:48	09/12/23 17:01	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		09/07/23 15:48	09/12/23 17:01	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		09/07/23 15:48	09/12/23 17:01	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		09/07/23 15:48	09/12/23 17:01	1
1,4-Dioxane	ND		10	1.0	ug/L		09/07/23 15:48	09/12/23 17:01	1

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

Lab Sample ID: MB 400-640140/1-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640140

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
Hexachlorobenzene	ND		10	0.17	ug/L		09/07/23 15:48	09/12/23 17:01	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/07/23 15:48	09/12/23 17:01	1
Hexachloroethane	ND		10	4.2	ug/L		09/07/23 15:48	09/12/23 17:01	1
Indene	ND		10	1.0	ug/L		09/07/23 15:48	09/12/23 17:01	1
Isophorone	ND		10	0.14	ug/L		09/07/23 15:48	09/12/23 17:01	1
2-Methylphenol	ND		10	1.8	ug/L		09/07/23 15:48	09/12/23 17:01	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		09/07/23 15:48	09/12/23 17:01	1
2-Nitroaniline	ND		10	2.2	ug/L		09/07/23 15:48	09/12/23 17:01	1
3-Nitroaniline	ND		10	1.8	ug/L		09/07/23 15:48	09/12/23 17:01	1
4-Nitroaniline	ND		10	1.5	ug/L		09/07/23 15:48	09/12/23 17:01	1
Nitrobenzene	ND		10	0.13	ug/L		09/07/23 15:48	09/12/23 17:01	1
2-Nitrophenol	ND		10	5.2	ug/L		09/07/23 15:48	09/12/23 17:01	1
4-Nitrophenol	ND		10	2.1	ug/L		09/07/23 15:48	09/12/23 17:01	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		09/07/23 15:48	09/12/23 17:01	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		09/07/23 15:48	09/12/23 17:01	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		09/07/23 15:48	09/12/23 17:01	1
Pentachlorophenol	ND		20	1.4	ug/L		09/07/23 15:48	09/12/23 17:01	1
Phenol	ND		10	2.6	ug/L		09/07/23 15:48	09/12/23 17:01	1
Pyridine	ND		10	3.2	ug/L		09/07/23 15:48	09/12/23 17:01	1
Quinoline	ND		10	4.5	ug/L		09/07/23 15:48	09/12/23 17:01	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		09/07/23 15:48	09/12/23 17:01	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		09/07/23 15:48	09/12/23 17:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*46 - 124*	*09/07/23 15:48*	*09/12/23 17:01*	*1*
2-Fluorophenol	*33*		*13 - 113*	*09/07/23 15:48*	*09/12/23 17:01*	*1*
Nitrobenzene-d5	*63*		*36 - 126*	*09/07/23 15:48*	*09/12/23 17:01*	*1*
Phenol-d5	*50*		*17 - 127*	*09/07/23 15:48*	*09/12/23 17:01*	*1*
Terphenyl-d14	*82*		*44 - 149*	*09/07/23 15:48*	*09/12/23 17:01*	*1*
2,4,6-Tribromophenol	*61*		*26 - 150*	*09/07/23 15:48*	*09/12/23 17:01*	*1*

Lab Sample ID: LCS 400-640140/18-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640140

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	2.78	J *-	ug/L		2	10 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*46 - 124*
2-Fluorophenol	*59*		*13 - 113*
Nitrobenzene-d5	*69*		*36 - 126*
Phenol-d5	*66*		*17 - 127*
Terphenyl-d14	*87*		*44 - 149*
2,4,6-Tribromophenol	*66*		*26 - 150*

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

Lab Sample ID: LCS 400-640140/2-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640140

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	83.9		ug/L		70	21 - 120
Benzoic acid	522	203		ug/L		39	10 - 144
Benzyl alcohol	120	92.4		ug/L		77	28 - 120
Bis(2-chloroethoxy)methane	120	79.0		ug/L		66	47 - 120
Bis(2-chloroethyl)ether	120	80.1		ug/L		67	44 - 120
bis (2-chloroisopropyl) ether	120	80.7		ug/L		67	33 - 121
Bis(2-ethylhexyl) phthalate	120	87.1		ug/L		73	52 - 147
4-Bromophenyl phenyl ether	120	107		ug/L		89	54 - 122
Butyl benzyl phthalate	120	90.0		ug/L		75	54 - 133
4-Chloroaniline	120	55.0		ug/L		46	26 - 120
4-Chloro-3-methylphenol	120	95.2		ug/L		79	48 - 131
2-Chloronaphthalene	120	96.3		ug/L		80	52 - 121
2-Chlorophenol	120	88.8		ug/L		74	40 - 120
4-Chlorophenyl phenyl ether	120	116		ug/L		97	56 - 125
Dibenz[a,h]acridine	120	101		ug/L		84	31 - 150
Dibenzofuran	120	103		ug/L		86	56 - 122
3,3'-Dichlorobenzidine	160	141		ug/L		88	36 - 132
2,4-Dichlorophenol	120	95.5		ug/L		80	49 - 120
Diethyl phthalate	120	101		ug/L		84	50 - 137
2,4-Dimethylphenol	120	88.9		ug/L		74	48 - 120
Dimethyl phthalate	120	103		ug/L		86	57 - 124
Di-n-butyl phthalate	120	102		ug/L		85	58 - 126
4,6-Dinitro-ortho-cresol	240	125		ug/L		52	23 - 148
2,4-Dinitrophenol	240	116		ug/L		48	10 - 150
2,4-Dinitrotoluene	120	107		ug/L		89	54 - 142
2,6-Dinitrotoluene	120	98.2		ug/L		82	55 - 130
Di-n-octyl phthalate	120	86.9		ug/L		72	57 - 138
1,4-Dioxane	120	62.5		ug/L		52	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	80.9		ug/L		67	45 - 124
Hexachlorobenzene	120	111		ug/L		92	52 - 129
Hexachlorocyclopentadiene	120	33.6		ug/L		28	10 - 134
Hexachloroethane	120	71.7		ug/L		60	20 - 120
Indene	120	87.1		ug/L		73	49 - 120
Isophorone	120	84.7		ug/L		71	48 - 120
2-Methylphenol	120	93.6		ug/L		78	46 - 124
3 & 4 Methylphenol	120	95.2		ug/L		79	45 - 120
2-Nitroaniline	120	91.4		ug/L		76	51 - 145
3-Nitroaniline	120	91.6		ug/L		76	37 - 127
4-Nitroaniline	120	96.8		ug/L		81	36 - 137
Nitrobenzene	120	83.4		ug/L		70	45 - 120
2-Nitrophenol	120	94.7		ug/L		79	40 - 124
4-Nitrophenol	240	200		ug/L		83	23 - 146
N-Nitrosodimethylamine	120	96.9		ug/L		81	29 - 137
N-Nitrosodi-n-propylamine	120	93.7		ug/L		78	45 - 120
N-Nitrosodiphenylamine	119	90.5		ug/L		76	54 - 120
Pentachlorophenol	240	174		ug/L		73	31 - 130
Phenol	120	96.5		ug/L		80	11 - 120
Pyridine	240	125		ug/L		52	16 - 120

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

Lab Sample ID: LCS 400-640140/2-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640140

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	111		ug/L		92	51 - 136		
2,4,6-Trichlorophenol			120	100		ug/L		83	50 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*80*		*46 - 124*
2-Fluorophenol	*60*		*13 - 113*
Nitrobenzene-d5	*64*		*36 - 126*
Phenol-d5	*68*		*17 - 127*
Terphenyl-d14	*87*		*44 - 149*
2,4,6-Tribromophenol	*79*		*26 - 150*

Lab Sample ID: LCSD 400-640140/19-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640140

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	3.48	J *-	ug/L		3	10 - 120	22	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*89*		*46 - 124*
2-Fluorophenol	*65*		*13 - 113*
Nitrobenzene-d5	*76*		*36 - 126*
Phenol-d5	*74*		*17 - 127*
Terphenyl-d14	*100*		*44 - 149*
2,4,6-Tribromophenol	*70*		*26 - 150*

Lab Sample ID: LCSD 400-640140/3-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640140

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	70.2		ug/L		59	21 - 120	18	30
Benzoic acid			522	239		ug/L		46	10 - 144	16	30
Benzyl alcohol			120	86.9		ug/L		72	28 - 120	6	30
Bis(2-chloroethoxy)methane			120	75.9		ug/L		63	47 - 120	4	30
Bis(2-chloroethyl)ether			120	81.8		ug/L		68	44 - 120	2	30
bis (2-chloroisopropyl) ether			120	75.5		ug/L		63	33 - 121	7	30
Bis(2-ethylhexyl) phthalate			120	85.3		ug/L		71	52 - 147	2	30
4-Bromophenyl phenyl ether			120	102		ug/L		85	54 - 122	5	30
Butyl benzyl phthalate			120	84.5		ug/L		70	54 - 133	6	30
4-Chloroaniline			120	53.6		ug/L		45	26 - 120	3	30
4-Chloro-3-methylphenol			120	90.7		ug/L		76	48 - 131	5	30
2-Chloronaphthalene			120	92.5		ug/L		77	52 - 121	4	30
2-Chlorophenol			120	82.2		ug/L		69	40 - 120	8	30
4-Chlorophenyl phenyl ether			120	113		ug/L		94	56 - 125	3	30
Dibenz[a,h]acridine			120	103		ug/L		86	31 - 150	2	30
Dibenzofuran			120	99.4		ug/L		83	56 - 122	4	30

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

Lab Sample ID: LCSD 400-640140/3-A
Matrix: Water
Analysis Batch: 640672

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640140

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine			160	134		ug/L		84	36 - 132	5	30
2,4-Dichlorophenol			120	90.1		ug/L		75	49 - 120	6	30
Diethyl phthalate			120	98.0		ug/L		82	50 - 137	3	30
2,4-Dimethylphenol			120	87.3		ug/L		73	48 - 120	2	30
Dimethyl phthalate			120	100		ug/L		84	57 - 124	3	30
Di-n-butyl phthalate			120	94.0		ug/L		78	58 - 126	8	30
4,6-Dinitro-ortho-cresol			240	129		ug/L		54	23 - 148	3	30
2,4-Dinitrophenol			240	121		ug/L		51	10 - 150	5	30
2,4-Dinitrotoluene			120	104		ug/L		87	54 - 142	3	30
2,6-Dinitrotoluene			120	95.2		ug/L		79	55 - 130	3	30
Di-n-octyl phthalate			120	84.6		ug/L		70	57 - 138	3	30
1,4-Dioxane			120	59.4		ug/L		50	31 - 120	5	30
1,2-Diphenylhydrazine (as Azobenzene)			120	75.1		ug/L		63	45 - 124	7	30
Hexachlorobenzene			120	106		ug/L		88	52 - 129	5	30
Hexachlorocyclopentadiene			120	34.5		ug/L		29	10 - 134	3	30
Hexachloroethane			120	65.7		ug/L		55	20 - 120	9	30
Indene			120	82.1		ug/L		68	49 - 120	6	30
Isophorone			120	81.0		ug/L		68	48 - 120	4	30
2-Methylphenol			120	88.0		ug/L		73	46 - 124	6	30
3 & 4 Methylphenol			120	88.8		ug/L		74	45 - 120	7	30
2-Nitroaniline			120	88.7		ug/L		74	51 - 145	3	30
3-Nitroaniline			120	86.4		ug/L		72	37 - 127	6	30
4-Nitroaniline			120	99.3		ug/L		83	36 - 137	3	30
Nitrobenzene			120	78.2		ug/L		65	45 - 120	6	30
2-Nitrophenol			120	87.3		ug/L		73	40 - 124	8	30
4-Nitrophenol			240	177		ug/L		74	23 - 146	12	30
N-Nitrosodimethylamine			120	90.8		ug/L		76	29 - 137	7	30
N-Nitrosodi-n-propylamine			120	86.0		ug/L		72	45 - 120	9	30
N-Nitrosodiphenylamine			119	86.8		ug/L		73	54 - 120	4	30
Pentachlorophenol			240	160		ug/L		67	31 - 130	9	30
Phenol			120	88.7		ug/L		74	11 - 120	8	30
Pyridine			240	127		ug/L		53	16 - 120	1	30
Quinoline			120	104		ug/L		86	49 - 130	4	30
2,4,5-Trichlorophenol			120	107		ug/L		89	51 - 136	4	30
2,4,6-Trichlorophenol			120	97.4		ug/L		81	50 - 127	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*77*		*46 - 124*
2-Fluorophenol	*53*		*13 - 113*
Nitrobenzene-d5	*65*		*36 - 126*
Phenol-d5	*64*		*17 - 127*
Terphenyl-d14	*81*		*44 - 149*
2,4,6-Tribromophenol	*80*		*26 - 150*

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

Lab Sample ID: MB 400-640651/1-A
Matrix: Water
Analysis Batch: 641239

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640651

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		09/12/23 10:32	09/15/23 17:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*64*		*46 - 124*	*09/12/23 10:32*	*09/15/23 17:33*	*1*
Nitrobenzene-d5	*54*		*36 - 126*	*09/12/23 10:32*	*09/15/23 17:33*	*1*
Terphenyl-d14	*68*		*44 - 149*	*09/12/23 10:32*	*09/15/23 17:33*	*1*

Lab Sample ID: LCS 400-640651/2-A
Matrix: Water
Analysis Batch: 641239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640651

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Bis(2-ethylhexyl) phthalate			120	93.0		ug/L		78	52 - 147		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*46 - 124*
Nitrobenzene-d5	*64*		*36 - 126*
Terphenyl-d14	*69*		*44 - 149*

Lab Sample ID: LCSD 400-640651/3-A
Matrix: Water
Analysis Batch: 641239

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640651

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate			120	100		ug/L		83	52 - 147	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*70*		*46 - 124*
Nitrobenzene-d5	*57*		*36 - 126*
Terphenyl-d14	*73*		*44 - 149*

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

Lab Sample ID: MB 400-640140/1-A
Matrix: Water
Analysis Batch: 640637

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640140

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		09/07/23 15:48	09/12/23 14:41	1
Acenaphthylene	ND		0.20	0.044	ug/L		09/07/23 15:48	09/12/23 14:41	1
Anthracene	ND		0.20	0.047	ug/L		09/07/23 15:48	09/12/23 14:41	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		09/07/23 15:48	09/12/23 14:41	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		09/07/23 15:48	09/12/23 14:41	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		09/07/23 15:48	09/12/23 14:41	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		09/07/23 15:48	09/12/23 14:41	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		09/07/23 15:48	09/12/23 14:41	1
Chrysene	ND		0.20	0.033	ug/L		09/07/23 15:48	09/12/23 14:41	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		09/07/23 15:48	09/12/23 14:41	1

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

Lab Sample ID: MB 400-640140/1-A
Matrix: Water
Analysis Batch: 640637

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640140

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		0.20	0.034	ug/L		09/07/23 15:48	09/12/23 14:41	1
Fluorene	ND		0.20	0.089	ug/L		09/07/23 15:48	09/12/23 14:41	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		09/07/23 15:48	09/12/23 14:41	1
Phenanthrene	ND		0.20	0.090	ug/L		09/07/23 15:48	09/12/23 14:41	1
Pyrene	ND		0.20	0.039	ug/L		09/07/23 15:48	09/12/23 14:41	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		09/07/23 15:48	09/12/23 14:41	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		09/07/23 15:48	09/12/23 14:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*54*		*18 - 147*	*09/07/23 15:48*	*09/12/23 14:41*	*1*
2-Fluorobiphenyl	*50*		*15 - 128*	*09/07/23 15:48*	*09/12/23 14:41*	*1*
Nitrobenzene-d5	*62*		*10 - 144*	*09/07/23 15:48*	*09/12/23 14:41*	*1*

Lab Sample ID: LCS 400-640140/22-A
Matrix: Water
Analysis Batch: 640637

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640140

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	2.00	1.17		ug/L		58	40 - 140
Acenaphthylene	2.00	1.24		ug/L		62	40 - 140
Anthracene	2.00	1.22		ug/L		61	40 - 140
Benzo[a]anthracene	2.00	1.06		ug/L		53	40 - 140
Benzo[a]pyrene	2.00	0.900		ug/L		45	40 - 140
Benzo[b]fluoranthene	2.00	0.871		ug/L		44	40 - 140
Benzo[g,h,i]perylene	2.00	0.896		ug/L		45	40 - 140
Benzo[k]fluoranthene	2.00	0.802		ug/L		40	40 - 140
Chrysene	2.00	1.06		ug/L		53	40 - 140
Dibenz(a,h)anthracene	2.00	0.965		ug/L		48	40 - 140
Fluoranthene	2.00	1.32		ug/L		66	40 - 140
Fluorene	2.00	1.28		ug/L		64	40 - 140
Indeno[1,2,3-cd]pyrene	2.00	0.952		ug/L		48	40 - 140
Phenanthrene	2.00	1.13		ug/L		57	40 - 140
Pyrene	2.00	0.903		ug/L		45	40 - 140
1-Methylnaphthalene	2.00	1.27		ug/L		63	40 - 140
2-Methylnaphthalene	2.00	1.25		ug/L		62	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*50*		*18 - 147*
2-Fluorobiphenyl	*50*		*15 - 128*
Nitrobenzene-d5	*63*		*10 - 144*

Lab Sample ID: LCSD 400-640140/23-A
Matrix: Water
Analysis Batch: 640637

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640140

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	2.00	1.59		ug/L		79	40 - 140	31	40
Acenaphthylene	2.00	1.67		ug/L		84	40 - 140	30	40

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

Lab Sample ID: LCSD 400-640140/23-A
Matrix: Water
Analysis Batch: 640637

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640140

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Anthracene			2.00	1.58		ug/L		79	40 - 140	26	40
Benzo[a]anthracene			2.00	1.47		ug/L		74	40 - 140	32	40
Benzo[a]pyrene			2.00	1.12		ug/L		56	40 - 140	22	40
Benzo[b]fluoranthene			2.00	1.20		ug/L		60	40 - 140	32	40
Benzo[g,h,i]perylene			2.00	1.25		ug/L		62	40 - 140	33	40
Benzo[k]fluoranthene			2.00	1.18		ug/L		59	40 - 140	38	40
Chrysene			2.00	1.43		ug/L		72	40 - 140	30	40
Dibenz(a,h)anthracene			2.00	1.34		ug/L		67	40 - 140	33	40
Fluoranthene			2.00	1.80		ug/L		90	40 - 140	31	40
Fluorene			2.00	1.73		ug/L		87	40 - 140	30	40
Indeno[1,2,3-cd]pyrene			2.00	1.33		ug/L		66	40 - 140	33	40
Phenanthrene			2.00	1.58		ug/L		79	40 - 140	33	40
Pyrene			2.00	1.30		ug/L		65	40 - 140	36	40
1-Methylnaphthalene			2.00	1.74		ug/L		87	40 - 140	32	40
2-Methylnaphthalene			2.00	1.70		ug/L		85	40 - 140	30	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*67*		*18 - 147*
2-Fluorobiphenyl	*67*		*15 - 128*
Nitrobenzene-d5	*85*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-640109/1-A
Matrix: Water
Analysis Batch: 640148

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640109

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/07/23 13:27	09/07/23 16:36	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/07/23 13:27	09/07/23 16:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*80*		*51 - 149*	*09/07/23 13:27*	*09/07/23 16:36*	*1*

Lab Sample ID: LCS 400-640109/2-A
Matrix: Water
Analysis Batch: 640148

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640109

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-D bromo-3-Chloropropane			0.101	0.107		ug/L		106	60 - 140
1,2-D bromoethane			0.101	0.0993		ug/L		99	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*77*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-640109/3-A
Matrix: Water
Analysis Batch: 640148

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640109

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane			0.101	0.112		ug/L		111	60 - 140	5	30
1,2-D bromoethane			0.101	0.102		ug/L		101	60 - 140	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*87*		*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: 9/1/2023
PO #	**GSAP Project ID**	PAGE: ___1__ of ___1____
60697537 – 3.3 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 – 3.3.2
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): S. Beadle, 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; loredana.fillmon@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

400-242903 COC

FIELD NOTES:
1.5°C 1188
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-090123-8260	9/1/2023	0000	Water	2					2	X			
	TB-ROX-090123-8011	9/1/2023	0000	Water	2					2		X		
	MW14-ROX-090123-EB	9/1/2023	0800	Water	6			2		8	X	X	X	X
	MW14-ROX-090123	9/1/2023	1000	Water	6			2		8	X	X	X	X
	ROST3MW-ROX-090123	9/1/2023	1210	Water	6			2		8	X	X	X	X
	ROST3MW-ROX-090123-DUP	9/1/2023	1210	Water	6			2		8	X	X	X	X

9/1/23

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
SAM BEADLE	FEDEX: 5293 4337 5434	9/1/2023	1600
Relinquished by: (Signature)	Received by: (Signature) EQ1S	Date 9/2/23	Time 754
Relinquished by: (Signature)	Received by: (Signature)	Date	Time

Version: 12July23

CUSTODY SEALS: 1599780, 1599781

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc. Job Number: 400-242903-1

Login Number: 242903 **List Source: Eurofins Pensacola**
List Number: 1
Creator: Perez, Trina M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Job ID: 400-242903-1
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	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	12-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-23
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 Monthly August/September 2023 Data Review

Laboratory SDG: 400-242975-1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 10/11/2023

Guidance: USEPA National Functional Guidelines for Organic Superfund Methods Data Review 2020

Sample Identification	Sample Identification
TB-ROX-090523-8260	TB-ROX-090523-8011
MW27-ROX-090523	MW9-ROX-090523
MW10-ROX-090523	MW2-ROX-090523

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 SVOCs were re-extracted outside extraction time criteria in sample MW2-ROX-090523. 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. VOCs in sample MW2-ROX-090523 were diluted due to the abundance of non-target analytes. The initial calibration verifications (ICV) for 4,6-dinitro-ortho-cresol, and 3,3'-dichlorobenzidine and 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?

No, SVOCs in sample MW2-ROX-090523 were re-extracted 6 days outside of extraction time criteria (7 days) due to initial failing acid surrogate recoveries. Holding time exceedances were not greater than two times (2X) criteria; both sets of data are reported. Therefore, using professional judgement, acid SVOCs in sample MW2-ROX-090523 were reported from the secondary run due to failing acid surrogate recoveries in the initial run. Qualifications due to surrogate recovery are reported in Section 6.0 of this data review. Basic SVOCs compounds in sample MW2-ROX-090523 were reported from the initial run due to extraction time exceedance in the re-extracted secondary run.

Sample ID	Parameter	Analyte	Qualification
MW2-ROX-090523-RERA	SVOCs	Benzoic acid	**UJ**
MW2-ROX-090523-RERA	SVOCs	Benzyl alcohol	**UJ**
MW2-ROX-090523-RERA	SVOCs	4-Chloro-3-methylphenol	**UJ**
MW2-ROX-090523-RERA	SVOCs	2-Chlorophenol	**UJ**
MW2-ROX-090523-RERA	SVOCs	2,4-Dichlorophenol	**UJ**
MW2-ROX-090523-RERA	SVOCs	2,4-Dimethylphenol	**UJ**
MW2-ROX-090523-RERA	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW2-ROX-090523-RERA	SVOCs	2,4-Dinitrophenol	**UJ**
MW2-ROX-090523-RERA	SVOCs	2-Methylphenol	**UJ**
MW2-ROX-090523-RERA	SVOCs	3 & 4 Methylphenol	**UJ**
MW2-ROX-090523-RERA	SVOCs	2-Nitrophenol	**UJ**
MW2-ROX-090523-RERA	SVOCs	4-Nitrophenol	**UJ**
MW2-ROX-090523-RERA	SVOCs	Pentachlorophenol	**UJ**
MW2-ROX-090523-RERA	SVOCs	Phenol	**UJ**
MW2-ROX-090523-RERA	SVOCs	2,4,5-Trichlorophenol	**UJ**
MW2-ROX-090523-RERA	SVOCs	2,4,6-Trichlorophenol	**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 400-640651/17-A/18-A	SVOCs	Benzenethiol	**2/3**	28	10-120/30
LCS/LCSD 400-640651/2-A/3-A	SVOCs	Aniline	**2/2**	4	21-120/30
LCS/LCSD 400-640651/2-A/3-A	SVOCs	Benzoic acid	**9/4**	**91**	10-144/30
LCS/LCSD 400-641408/4-A/5-A	SVOCs	Benzenethiol	**2/8**	**122**	10-120/30
LCS/LCSD 400-640651/2-A/3-A	SVOCs	Bis(2-chloroethyl)ether	115/**127**	10	44-120/30

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/LCSD 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, aniline, and benzoic acid below evaluation criteria; benzenethiol, aniline, and benzoic acid have been identified as poor performing analytes under Method 8270. Benzoic acid in sample MW2-ROX-090523 has been qualified due to hold time exceedances in Section 3.0 of this data review; no further qualification is needed.

Sample ID	Parameter	Analyte	Qualification
MW27-ROX-090523	SVOCs	Benzenethiol	UJ
MW9-ROX-090523	SVOCs	Benzenethiol	UJ
MW10-ROX-090523	SVOCs	Benzenethiol	UJ
MW2-ROX-090523	SVOCs	Benzenethiol	UJ
MW27-ROX-090523	SVOCs	Aniline	UJ
MW9-ROX-090523	SVOCs	Aniline	UJ
MW10-ROX-090523	SVOCs	Aniline	UJ
MW2-ROX-090523	SVOCs	Aniline	UJ
MW27-ROX-090523	SVOCs	Benzoic acid	UJ
MW9-ROX-090523	SVOCs	Benzoic acid	UJ
MW10-ROX-090523	SVOCs	Benzoic acid	UJ

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW27-ROX-090523	SVOCs	2-Fluorobiphenyl	**41**	46-124
MW27-ROX-090523	SVOCs	2-Fluorophenol	**11**	13-113
MW9-ROX-090523	SVOCs	2-Fluorobiphenyl	**45**	46-124
MW9-ROX-090523	SVOCs	2-Fluorophenol	**7**	13-113
MW2-ROX-090523	SVOCs	2-Fluorophenol	**0**	13-113
MW2-ROX-090523	SVOCs	Phenol-d5	**0.7**	17-127
MW2-ROX-090523	SVOCs	2,4,6-Tribromophenol	**0**	26-150
MB 400-640651/1-A	SVOCs	2-Fluorophenol	**3**	13-113
MB 400-640651/1-A	SVOCs	Phenol-d5	**8**	17-127
MB 400-641408/1-A	SVOCs	2-Fluorophenol	**9**	13-113

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. Acid SVOCs in sample MW2-ROX-090523 were reported from the secondary run due to failing acid surrogate recoveries in the initial run. Analytical data from the initial run of sample MW2-ROX-090523 that required qualification based on surrogate data are included in the table below.

Sample ID	Parameter	Analyte	Qualification
MW2-ROX-090523	SVOCs	Benzoic acid	R
MW2-ROX-090523	SVOCs	Benzyl alcohol	R
MW2-ROX-090523	SVOCs	4-Chloro-3-methylphenol	R
MW2-ROX-090523	SVOCs	2-Chlorophenol	R
MW2-ROX-090523	SVOCs	2,4-Dichlorophenol	R
MW2-ROX-090523	SVOCs	2,4-Dimethylphenol	R
MW2-ROX-090523	SVOCs	4,6-Dinitro-ortho-cresol	R
MW2-ROX-090523	SVOCs	2,4-Dinitrophenol	R
MW2-ROX-090523	SVOCs	2-Methylphenol	R

Sample ID	Parameter	Analyte	Qualification
MW2-ROX-090523	SVOCs	3 & 4 Methylphenol	**R**
MW2-ROX-090523	SVOCs	2-Nitrophenol	**R**
MW2-ROX-090523	SVOCs	4-Nitrophenol	**R**
MW2-ROX-090523	SVOCs	Pentachlorophenol	**R**
MW2-ROX-090523	SVOCs	Phenol	**R**
MW2-ROX-090523	SVOCs	2,4,5-Trichlorophenol	**R**
MW2-ROX-090523	SVOCs	2,4,6-Trichlorophenol	**R**

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

Were MS/MSD samples analyzed as part of this SDG?

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

For samples that were diluted and nondetect, were undiluted results also reported?

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, initial calibration verifications (ICV) for 4,6-dinitro-ortho-cresol, and 3,3'-dichlorobenzidine and the continuing calibration verifications (CCV) for bromomethane, carbon disulfide, chloroethane, trichlorofluoromethane, 1,1-dichloroethene, hexachlorocyclopentadiene, and 1,4-dioxane were outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW27-ROX-090523	VOCs	Bromomethane	**UJ**
MW27-ROX-090523	VOCs	Chloroethane	**UJ**
MW27-ROX-090523	VOCs	Trichlorofluoromethane	**UJ**
MW27-ROX-090523	VOCs	1,1-Dichloroethene	**UJ**
MW9-ROX-090523	VOCs	Bromomethane	**UJ**
MW9-ROX-090523	VOCs	Chloroethane	**UJ**
MW9-ROX-090523	VOCs	Trichlorofluoromethane	**UJ**
MW9-ROX-090523	VOCs	1,1-Dichloroethene	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW10-ROX-090523	VOCs	Bromomethane	UJ
MW10-ROX-090523	VOCs	Chloroethane	UJ
MW10-ROX-090523	VOCs	Trichlorofluoromethane	UJ
MW10-ROX-090523	VOCs	1,1-Dichloroethene	UJ
MW2-ROX-090523	VOCs	Bromomethane	UJ
MW2-ROX-090523	VOCs	Chloroethane	UJ
MW2-ROX-090523	VOCs	Trichlorofluoromethane	UJ
MW2-ROX-090523	VOCs	1,1-Dichloroethene	UJ
MW27-ROX-090523	VOCs	Carbon Disulfide	UJ
MW9-ROX-090523	VOCs	Carbon Disulfide	UJ
MW10-ROX-090523	VOCs	Carbon Disulfide	UJ
MW2-ROX-090523	VOCs	Carbon Disulfide	UJ
MW27-ROX-090523	SVOCs	4,6-Dinitro-ortho-cresol	UJ
MW27-ROX-090523	SVOCs	3,3'-Dichlorobenzidine	UJ
MW9-ROX-090523	SVOCs	4,6-Dinitro-ortho-cresol	UJ
MW9-ROX-090523	SVOCs	3,3'-Dichlorobenzidine	UJ
MW10-ROX-090523	SVOCs	4,6-Dinitro-ortho-cresol	UJ
MW10-ROX-090523	SVOCs	3,3'-Dichlorobenzidine	UJ
MW27-ROX-090523	SVOCs	Hexachlorocyclopentadiene	UJ
MW9-ROX-090523	SVOCs	Hexachlorocyclopentadiene	UJ
MW10-ROX-090523	SVOCs	Hexachlorocyclopentadiene	UJ
MW2-ROX-090523	SVOCs	1,4-Dioxane	UJ
MW2-ROX-090523	SVOCs	Hexachlorocyclopentadiene	UJ

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ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
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St. Louis, Missouri 63102
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JOB DESCRIPTION

ROXANA MONTHLY GW

JOB NUMBER

400-242975-1

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 ID: 400-242975-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-242975-1

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 9/6/2023 9:09 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 3.3°C

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-640996 recovered outside acceptance criteria, low biased, for 1,1-Dichloroethene, Bromomethane, 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 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-090523-8260 (400-242975-1), MW27-ROX-090523 (400-242975-3), MW9-ROX-090523 (400-242975-4), MW10-ROX-090523 (400-242975-5) and MW2-ROX-090523 (400-242975-6). 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 continuing calibration verification (CCV) associated with batch 400-640996 recovered above the upper control limit for Acrylonitrile. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

Method 8260D: The following sample was diluted due to the abundance of non-target analytes: MW2-ROX-090523 (400-242975-6). 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: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 400-640651.

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-640651 and analytical batch 400-641055 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 400-641055 recovered above the upper control limit for 2,4-Dinitrotoluene, 2,4,5-Trichlorophenol, 4-Nitrophenol, 4-Chlorophenyl phenyl ether, 4-Bromophenyl phenyl ether, 2-Nitrophenol and Hexachlorobenzene. 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 400-641055 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the

Job ID: 400-242975-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

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 acid and one base 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: MW27-ROX-090523 (400-242975-3) and MW9-ROX-090523 (400-242975-4). 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 400-640651 and analytical batch 400-641239 recovered outside control limits for the following analyte(s): Benzoic acid. Benzoic acid 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 400-640651 and analytical batch 400-641239 recovered outside control limits for the following analytes: Benzoic acid.

Method 8270E: The following analyte(s) recovered outside control limits for the LCS and LCSD associated with preparation batch 400-640651 and analytical batch 400-641239: Aniline and Bis(2-chloroethyl)ether. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method 8270E: Two of six surrogates for the blank associated with preparation batch 400-640651 and analytical batch 400-641239 were outside of the lower control limit. There was no evidence of lab contamination for any target analyte, therefore the data have been reported.

Method 8270E: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 400-641408.

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 400-641408/1-A). 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 400-641408 and analytical batch 400-641903 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 400-641408 and analytical batch 400-641903 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-641903 recovered above the upper control limit for 2,4,5-Trichlorophenol, 4-Chlorophenyl phenyl ether, Hexachlorobenzene, 2,4-Dinitrotoluene, Dibenzofuran, 4-Bromophenyl phenyl ether and 2-Nitrophenol. 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 400-641903 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: The continuing calibration verification (CCV) associated with batch 400-641239 recovered above the upper control limit for Indene. 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 400-641239 recovered above the upper control limit for 4-Nitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Job ID: 400-242975-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-641239 recovered outside acceptance criteria, low biased, for 1,4-Dioxane 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: Surrogate recovery for the following sample was outside control limits: MW2-ROX-090523 (400-242975-6). Re-extraction and/or re-analysis was performed outside of holding time with acceptable results. Both sets of data have been reported.

Method 8270E_SIM: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 400-640651.

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: 400-242975-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-242975-1	TB-ROX-090523-8260	Water	09/05/23 12:00	09/06/23 09:09
400-242975-2	TB-ROX-090523-8011	Water	09/05/23 12:00	09/06/23 09:09
400-242975-3	MW27-ROX-090523	Water	09/05/23 08:50	09/06/23 09:09
400-242975-4	MW9-ROX-090523	Water	09/05/23 09:50	09/06/23 09:09
400-242975-5	MW10-ROX-090523	Water	09/05/23 10:45	09/06/23 09:09
400-242975-6	MW2-ROX-090523	Water	09/05/23 12:15	09/06/23 09:09

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

Client Sample ID: TB-ROX-090523-8260 — Lab Sample ID: 400-242975-1

No Detections.

Client Sample ID: TB-ROX-090523-8011 — Lab Sample ID: 400-242975-2

No Detections.

Client Sample ID: MW27-ROX-090523 — Lab Sample ID: 400-242975-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dibenz[a,h]acridine	2.2	J	9.6	0.96	ug/L	1		8270E	Total/NA

Client Sample ID: MW9-ROX-090523 — Lab Sample ID: 400-242975-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dibenz[a,h]acridine	2.0	J	9.7	0.97	ug/L	1		8270E	Total/NA

Client Sample ID: MW10-ROX-090523 — Lab Sample ID: 400-242975-5

No Detections.

Client Sample ID: MW2-ROX-090523 — Lab Sample ID: 400-242975-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	18	J	130	13	ug/L	5		8260D	Total/NA
Ethylbenzene	320		5.0	2.5	ug/L	5		8260D	Total/NA
Isopropy benzene	12		5.0	2.7	ug/L	5		8260D	Total/NA
m-Xylene & p-Xylene	170		25	3.2	ug/L	5		8260D	Total/NA
Naphthalene	25		25	15	ug/L	5		8260D	Total/NA
N-Propylbenzene	12		5.0	3.5	ug/L	5		8260D	Total/NA
o-Xylene	12	J	25	3.0	ug/L	5		8260D	Total/NA
1,2,4-Trimethy benzene	43		5.0	4.1	ug/L	5		8260D	Total/NA
1,3,5-Trimethy benzene	13		5.0	2.8	ug/L	5		8260D	Total/NA
Xylenes, Total	190		50	8.0	ug/L	5		8260D	Total/NA
1-Methylnaphthalene	9.9		0.19	0.077	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	21		0.19	0.063	ug/L	1		8270E SIM	Total/NA
Diethyl phthalate	0.52	J	9.6	0.23	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: 400-242975-1

Client Sample ID: TB-ROX-090523-8260
Date Collected: 09/05/23 12:00
Date Received: 09/06/23 09:09

Lab Sample ID: 400-242975-1
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			09/14/23 20:47	1
Acrolein	ND		20	3.3	ug/L			09/14/23 20:47	1
Acrylonitrile	ND		10	2.8	ug/L			09/14/23 20:47	1
Benzene	ND		1.0	0.50	ug/L			09/14/23 20:47	1
Bromobenzene	ND		1.0	0.54	ug/L			09/14/23 20:47	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/14/23 20:47	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/14/23 20:47	1
Bromoform	ND		5.0	0.25	ug/L			09/14/23 20:47	1
Bromomethane	ND		1.0	0.98	ug/L			09/14/23 20:47	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/14/23 20:47	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/14/23 20:47	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/14/23 20:47	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/14/23 20:47	1
Chloroethane	ND		1.0	0.76	ug/L			09/14/23 20:47	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/14/23 20:47	1
Chloroform	ND		1.0	0.90	ug/L			09/14/23 20:47	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/14/23 20:47	1
Chloromethane	ND		1.0	0.90	ug/L			09/14/23 20:47	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/14/23 20:47	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/14/23 20:47	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/14/23 20:47	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/14/23 20:47	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/14/23 20:47	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/14/23 20:47	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/14/23 20:47	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/14/23 20:47	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/14/23 20:47	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/14/23 20:47	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 20:47	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 20:47	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 20:47	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/14/23 20:47	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/14/23 20:47	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/14/23 20:47	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/14/23 20:47	1
2-Hexanone	ND		25	1.4	ug/L			09/14/23 20:47	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/14/23 20:47	1
Methylene bromide	ND		5.0	0.22	ug/L			09/14/23 20:47	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/14/23 20:47	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/14/23 20:47	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/14/23 20:47	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/14/23 20:47	1
Naphthalene	ND		5.0	3.0	ug/L			09/14/23 20:47	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/14/23 20:47	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/14/23 20:47	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/14/23 20:47	1
o-Xylene	ND		5.0	0.60	ug/L			09/14/23 20:47	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/14/23 20:47	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/14/23 20:47	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

Client Sample ID: TB-ROX-090523-8260
Date Collected: 09/05/23 12:00
Date Received: 09/06/23 09:09

Lab Sample ID: 400-242975-1
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			09/14/23 20:47	1
Styrene	ND		1.0	1.0	ug/L			09/14/23 20:47	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/14/23 20:47	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/14/23 20:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/14/23 20:47	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/14/23 20:47	1
Toluene	ND		1.0	0.90	ug/L			09/14/23 20:47	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/14/23 20:47	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/14/23 20:47	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/14/23 20:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/14/23 20:47	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/14/23 20:47	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/14/23 20:47	1
Trichloroethene	ND		1.0	0.15	ug/L			09/14/23 20:47	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/14/23 20:47	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/14/23 20:47	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/14/23 20:47	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/14/23 20:47	1
Vinyl acetate	ND		25	0.93	ug/L			09/14/23 20:47	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/14/23 20:47	1
Xylenes, Total	ND		10	1.6	ug/L			09/14/23 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*09/14/23 20:47*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*09/14/23 20:47*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*09/14/23 20:47*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

Client Sample ID: TB-ROX-090523-8011
Date Collected: 09/05/23 12:00
Date Received: 09/06/23 09:09

Lab Sample ID: 400-242975-2
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-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/12/23 08:25	09/12/23 19:58	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/12/23 08:25	09/12/23 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*51 - 149*	*09/12/23 08:25*	*09/12/23 19:58*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

Client Sample ID: MW27-ROX-090523
Date Collected: 09/05/23 08:50
Date Received: 09/06/23 09:09

Lab Sample ID: 400-242975-3
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			09/14/23 21:13	1
Acrolein	ND		20	3.3	ug/L			09/14/23 21:13	1
Acrylonitrile	ND		10	2.8	ug/L			09/14/23 21:13	1
Benzene	ND		1.0	0.50	ug/L			09/14/23 21:13	1
Bromobenzene	ND		1.0	0.54	ug/L			09/14/23 21:13	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/14/23 21:13	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/14/23 21:13	1
Bromoform	ND		5.0	0.25	ug/L			09/14/23 21:13	1
Bromomethane	ND		1.0	0.98	ug/L			09/14/23 21:13	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/14/23 21:13	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/14/23 21:13	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/14/23 21:13	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/14/23 21:13	1
Chloroethane	ND		1.0	0.76	ug/L			09/14/23 21:13	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/14/23 21:13	1
Chloroform	ND		1.0	0.90	ug/L			09/14/23 21:13	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/14/23 21:13	1
Chloromethane	ND		1.0	0.90	ug/L			09/14/23 21:13	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/14/23 21:13	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/14/23 21:13	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/14/23 21:13	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/14/23 21:13	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/14/23 21:13	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/14/23 21:13	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/14/23 21:13	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/14/23 21:13	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/14/23 21:13	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/14/23 21:13	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 21:13	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 21:13	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 21:13	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/14/23 21:13	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/14/23 21:13	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/14/23 21:13	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/14/23 21:13	1
2-Hexanone	ND		25	1.4	ug/L			09/14/23 21:13	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/14/23 21:13	1
Methylene bromide	ND		5.0	0.22	ug/L			09/14/23 21:13	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/14/23 21:13	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/14/23 21:13	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/14/23 21:13	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/14/23 21:13	1
Naphthalene	ND		5.0	3.0	ug/L			09/14/23 21:13	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/14/23 21:13	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/14/23 21:13	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/14/23 21:13	1
o-Xylene	ND		5.0	0.60	ug/L			09/14/23 21:13	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/14/23 21:13	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/14/23 21:13	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

Client Sample ID: MW27-ROX-090523
Date Collected: 09/05/23 08:50
Date Received: 09/06/23 09:09

Lab Sample ID: 400-242975-3
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			09/14/23 21:13	1
Styrene	ND		1.0	1.0	ug/L			09/14/23 21:13	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/14/23 21:13	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/14/23 21:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/14/23 21:13	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/14/23 21:13	1
Toluene	ND		1.0	0.90	ug/L			09/14/23 21:13	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/14/23 21:13	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/14/23 21:13	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/14/23 21:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/14/23 21:13	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/14/23 21:13	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/14/23 21:13	1
Trichloroethene	ND		1.0	0.15	ug/L			09/14/23 21:13	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/14/23 21:13	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/14/23 21:13	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/14/23 21:13	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/14/23 21:13	1
Vinyl acetate	ND		25	0.93	ug/L			09/14/23 21:13	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/14/23 21:13	1
Xylenes, Total	ND		10	1.6	ug/L			09/14/23 21:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*09/14/23 21:13*	*1*
Dibromofluoromethane	*110*		*75 - 126*		*09/14/23 21:13*	*1*
Toluene-d8 (Surr)	*104*		*64 - 132*		*09/14/23 21:13*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.095	ug/L		09/12/23 10:32	09/14/23 20:46	1
Acenaphthylene	ND		0.19	0.042	ug/L		09/12/23 10:32	09/14/23 20:46	1
Anthracene	ND		0.19	0.045	ug/L		09/12/23 10:32	09/14/23 20:46	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		09/12/23 10:32	09/14/23 20:46	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		09/12/23 10:32	09/14/23 20:46	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		09/12/23 10:32	09/14/23 20:46	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/12/23 10:32	09/14/23 20:46	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		09/12/23 10:32	09/14/23 20:46	1
Chrysene	ND		0.19	0.032	ug/L		09/12/23 10:32	09/14/23 20:46	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		09/12/23 10:32	09/14/23 20:46	1
Fluoranthene	ND		0.19	0.033	ug/L		09/12/23 10:32	09/14/23 20:46	1
Fluorene	ND		0.19	0.086	ug/L		09/12/23 10:32	09/14/23 20:46	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		09/12/23 10:32	09/14/23 20:46	1
Phenanthrene	ND		0.19	0.087	ug/L		09/12/23 10:32	09/14/23 20:46	1
Pyrene	ND		0.19	0.038	ug/L		09/12/23 10:32	09/14/23 20:46	1
1-Methylnaphthalene	ND		0.19	0.077	ug/L		09/12/23 10:32	09/14/23 20:46	1
2-Methylnaphthalene	ND		0.19	0.064	ug/L		09/12/23 10:32	09/14/23 20:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*122*		*18 - 147*	*09/12/23 10:32*	*09/14/23 20:46*	*1*
2-Fluorobiphenyl	*92*		*15 - 128*	*09/12/23 10:32*	*09/14/23 20:46*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

Client Sample ID: MW27-ROX-090523
Date Collected: 09/05/23 08:50
Date Received: 09/06/23 09:09

Lab Sample ID: 400-242975-3
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	09/12/23 10:32	09/14/23 20:46	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		09/12/23 10:32	09/14/23 17:35	1
Benzenethiol	ND	*-	9.6	1.6	ug/L		09/12/23 10:32	09/14/23 17:35	1
Benzoic acid	ND	*- *1	29	7.0	ug/L		09/12/23 10:32	09/14/23 17:35	1
Benzyl alcohol	ND		9.6	1.9	ug/L		09/12/23 10:32	09/14/23 17:35	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		09/12/23 10:32	09/14/23 17:35	1
Bis(2-chloroethyl)ether	ND	*+	9.6	2.6	ug/L		09/12/23 10:32	09/14/23 17:35	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		09/12/23 10:32	09/14/23 17:35	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		09/12/23 10:32	09/14/23 17:35	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		09/12/23 10:32	09/14/23 17:35	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		09/12/23 10:32	09/14/23 17:35	1
4-Chloroaniline	ND		9.6	3.3	ug/L		09/12/23 10:32	09/14/23 17:35	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		09/12/23 10:32	09/14/23 17:35	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		09/12/23 10:32	09/14/23 17:35	1
2-Chlorophenol	ND		9.6	2.1	ug/L		09/12/23 10:32	09/14/23 17:35	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		09/12/23 10:32	09/14/23 17:35	1
Dibenz[a,h]acridine	**2.2**	**J**	9.6	0.96	ug/L		09/12/23 10:32	09/14/23 17:35	1
Dibenzofuran	ND		9.6	0.16	ug/L		09/12/23 10:32	09/14/23 17:35	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		09/12/23 10:32	09/14/23 17:35	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		09/12/23 10:32	09/14/23 17:35	1
Diethyl phthalate	ND		9.6	0.23	ug/L		09/12/23 10:32	09/14/23 17:35	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		09/12/23 10:32	09/14/23 17:35	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		09/12/23 10:32	09/14/23 17:35	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		09/12/23 10:32	09/14/23 17:35	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		09/12/23 10:32	09/14/23 17:35	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/12/23 10:32	09/14/23 17:35	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		09/12/23 10:32	09/14/23 17:35	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		09/12/23 10:32	09/14/23 17:35	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		09/12/23 10:32	09/14/23 17:35	1
1,4-Dioxane	ND		9.6	0.96	ug/L		09/12/23 10:32	09/14/23 17:35	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		09/12/23 10:32	09/14/23 17:35	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		09/12/23 10:32	09/14/23 17:35	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/12/23 10:32	09/14/23 17:35	1
Hexachloroethane	ND		9.6	4.0	ug/L		09/12/23 10:32	09/14/23 17:35	1
Indene	ND		9.6	0.96	ug/L		09/12/23 10:32	09/14/23 17:35	1
Isophorone	ND		9.6	0.13	ug/L		09/12/23 10:32	09/14/23 17:35	1
2-Methylphenol	ND		9.6	1.7	ug/L		09/12/23 10:32	09/14/23 17:35	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		09/12/23 10:32	09/14/23 17:35	1
2-Nitroaniline	ND		9.6	2.1	ug/L		09/12/23 10:32	09/14/23 17:35	1
3-Nitroaniline	ND		9.6	1.7	ug/L		09/12/23 10:32	09/14/23 17:35	1
4-Nitroaniline	ND		9.6	1.4	ug/L		09/12/23 10:32	09/14/23 17:35	1
Nitrobenzene	ND		9.6	0.13	ug/L		09/12/23 10:32	09/14/23 17:35	1
2-Nitrophenol	ND		9.6	5.0	ug/L		09/12/23 10:32	09/14/23 17:35	1
4-Nitrophenol	ND		9.6	2.0	ug/L		09/12/23 10:32	09/14/23 17:35	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		09/12/23 10:32	09/14/23 17:35	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

Client Sample ID: MW27-ROX-090523
Date Collected: 09/05/23 08:50
Date Received: 09/06/23 09:09

Lab Sample ID: 400-242975-3
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	3.2	ug/L		09/12/23 10:32	09/14/23 17:35	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		09/12/23 10:32	09/14/23 17:35	1
Pentachlorophenol	ND		19	1.3	ug/L		09/12/23 10:32	09/14/23 17:35	1
Phenol	ND		9.6	2.5	ug/L		09/12/23 10:32	09/14/23 17:35	1
Pyridine	ND		9.6	3.1	ug/L		09/12/23 10:32	09/14/23 17:35	1
Quinoline	ND		9.6	4.3	ug/L		09/12/23 10:32	09/14/23 17:35	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		09/12/23 10:32	09/14/23 17:35	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		09/12/23 10:32	09/14/23 17:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*41*	*S1-*	*46 - 124*	*09/12/23 10:32*	*09/14/23 17:35*	*1*
2-Fluorophenol	*11*	*S1-*	*13 - 113*	*09/12/23 10:32*	*09/14/23 17:35*	*1*
Nitrobenzene-d5	*37*		*36 - 126*	*09/12/23 10:32*	*09/14/23 17:35*	*1*
Phenol-d5	*27*		*17 - 127*	*09/12/23 10:32*	*09/14/23 17:35*	*1*
Terphenyl-d14	*47*		*44 - 149*	*09/12/23 10:32*	*09/14/23 17:35*	*1*
2,4,6-Tribromophenol	*43*		*26 - 150*	*09/12/23 10:32*	*09/14/23 17:35*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.029	0.017	ug/L		09/12/23 08:25	09/12/23 20:20	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/12/23 08:25	09/12/23 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*51 - 149*	*09/12/23 08:25*	*09/12/23 20:20*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

Client Sample ID: MW9-ROX-090523
Date Collected: 09/05/23 09:50
Date Received: 09/06/23 09:09

Lab Sample ID: 400-242975-4
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			09/14/23 21:40	1
Acrolein	ND		20	3.3	ug/L			09/14/23 21:40	1
Acrylonitrile	ND		10	2.8	ug/L			09/14/23 21:40	1
Benzene	ND		1.0	0.50	ug/L			09/14/23 21:40	1
Bromobenzene	ND		1.0	0.54	ug/L			09/14/23 21:40	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/14/23 21:40	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/14/23 21:40	1
Bromoform	ND		5.0	0.25	ug/L			09/14/23 21:40	1
Bromomethane	ND		1.0	0.98	ug/L			09/14/23 21:40	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/14/23 21:40	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/14/23 21:40	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/14/23 21:40	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/14/23 21:40	1
Chloroethane	ND		1.0	0.76	ug/L			09/14/23 21:40	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/14/23 21:40	1
Chloroform	ND		1.0	0.90	ug/L			09/14/23 21:40	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/14/23 21:40	1
Chloromethane	ND		1.0	0.90	ug/L			09/14/23 21:40	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/14/23 21:40	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/14/23 21:40	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/14/23 21:40	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/14/23 21:40	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/14/23 21:40	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/14/23 21:40	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/14/23 21:40	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/14/23 21:40	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/14/23 21:40	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/14/23 21:40	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 21:40	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 21:40	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 21:40	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/14/23 21:40	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/14/23 21:40	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/14/23 21:40	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/14/23 21:40	1
2-Hexanone	ND		25	1.4	ug/L			09/14/23 21:40	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/14/23 21:40	1
Methylene bromide	ND		5.0	0.22	ug/L			09/14/23 21:40	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/14/23 21:40	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/14/23 21:40	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/14/23 21:40	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/14/23 21:40	1
Naphthalene	ND		5.0	3.0	ug/L			09/14/23 21:40	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/14/23 21:40	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/14/23 21:40	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/14/23 21:40	1
o-Xylene	ND		5.0	0.60	ug/L			09/14/23 21:40	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/14/23 21:40	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/14/23 21:40	1

Client Sample ID: MW9-ROX-090523
Date Collected: 09/05/23 09:50
Date Received: 09/06/23 09:09

Lab Sample ID: 400-242975-4
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			09/14/23 21:40	1
Styrene	ND		1.0	1.0	ug/L			09/14/23 21:40	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/14/23 21:40	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/14/23 21:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/14/23 21:40	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/14/23 21:40	1
Toluene	ND		1.0	0.90	ug/L			09/14/23 21:40	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/14/23 21:40	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/14/23 21:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/14/23 21:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/14/23 21:40	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/14/23 21:40	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/14/23 21:40	1
Trichloroethene	ND		1.0	0.15	ug/L			09/14/23 21:40	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/14/23 21:40	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/14/23 21:40	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/14/23 21:40	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/14/23 21:40	1
Vinyl acetate	ND		25	0.93	ug/L			09/14/23 21:40	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/14/23 21:40	1
Xylenes, Total	ND		10	1.6	ug/L			09/14/23 21:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*09/14/23 21:40*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*09/14/23 21:40*	*1*
Toluene-d8 (Surr)	*104*		*64 - 132*		*09/14/23 21:40*	*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		09/12/23 10:32	09/14/23 21:07	1
Acenaphthylene	ND		0.19	0.043	ug/L		09/12/23 10:32	09/14/23 21:07	1
Anthracene	ND		0.19	0.046	ug/L		09/12/23 10:32	09/14/23 21:07	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		09/12/23 10:32	09/14/23 21:07	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		09/12/23 10:32	09/14/23 21:07	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		09/12/23 10:32	09/14/23 21:07	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/12/23 10:32	09/14/23 21:07	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		09/12/23 10:32	09/14/23 21:07	1
Chrysene	ND		0.19	0.032	ug/L		09/12/23 10:32	09/14/23 21:07	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		09/12/23 10:32	09/14/23 21:07	1
Fluoranthene	ND		0.19	0.033	ug/L		09/12/23 10:32	09/14/23 21:07	1
Fluorene	ND		0.19	0.086	ug/L		09/12/23 10:32	09/14/23 21:07	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		09/12/23 10:32	09/14/23 21:07	1
Phenanthrene	ND		0.19	0.087	ug/L		09/12/23 10:32	09/14/23 21:07	1
Pyrene	ND		0.19	0.038	ug/L		09/12/23 10:32	09/14/23 21:07	1
1-Methylnaphthalene	ND		0.19	0.078	ug/L		09/12/23 10:32	09/14/23 21:07	1
2-Methylnaphthalene	ND		0.19	0.064	ug/L		09/12/23 10:32	09/14/23 21:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*107*		*18 - 147*	*09/12/23 10:32*	*09/14/23 21:07*	*1*
2-Fluorobiphenyl	*91*		*15 - 128*	*09/12/23 10:32*	*09/14/23 21:07*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

Client Sample ID: MW9-ROX-090523
Date Collected: 09/05/23 09:50
Date Received: 09/06/23 09:09

Lab Sample ID: 400-242975-4
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*	*09/12/23 10:32*	*09/14/23 21:07*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*-	9.7	3.7	ug/L		09/12/23 10:32	09/14/23 17:57	1
Benzenethiol	ND	*-	9.7	1.6	ug/L		09/12/23 10:32	09/14/23 17:57	1
Benzoic acid	ND	*- *1	29	7.1	ug/L		09/12/23 10:32	09/14/23 17:57	1
Benzyl alcohol	ND		9.7	1.9	ug/L		09/12/23 10:32	09/14/23 17:57	1
Bis(2-chloroethoxy)methane	ND		9.7	0.16	ug/L		09/12/23 10:32	09/14/23 17:57	1
Bis(2-chloroethyl)ether	ND	*+	9.7	2.6	ug/L		09/12/23 10:32	09/14/23 17:57	1
bis (2-chloroisopropyl) ether	ND		9.7	0.16	ug/L		09/12/23 10:32	09/14/23 17:57	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.9	ug/L		09/12/23 10:32	09/14/23 17:57	1
4-Bromophenyl phenyl ether	ND		9.7	0.19	ug/L		09/12/23 10:32	09/14/23 17:57	1
Butyl benzyl phthalate	ND		9.7	0.18	ug/L		09/12/23 10:32	09/14/23 17:57	1
4-Chloroaniline	ND		9.7	3.3	ug/L		09/12/23 10:32	09/14/23 17:57	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		09/12/23 10:32	09/14/23 17:57	1
2-Chloronaphthalene	ND		9.7	0.14	ug/L		09/12/23 10:32	09/14/23 17:57	1
2-Chlorophenol	ND		9.7	2.1	ug/L		09/12/23 10:32	09/14/23 17:57	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		09/12/23 10:32	09/14/23 17:57	1
Dibenz[a,h]acridine	**2.0**	**J**	9.7	0.97	ug/L		09/12/23 10:32	09/14/23 17:57	1
Dibenzofuran	ND		9.7	0.16	ug/L		09/12/23 10:32	09/14/23 17:57	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		09/12/23 10:32	09/14/23 17:57	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		09/12/23 10:32	09/14/23 17:57	1
Diethyl phthalate	ND		9.7	0.23	ug/L		09/12/23 10:32	09/14/23 17:57	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		09/12/23 10:32	09/14/23 17:57	1
Dimethyl phthalate	ND		9.7	0.16	ug/L		09/12/23 10:32	09/14/23 17:57	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		09/12/23 10:32	09/14/23 17:57	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.6	ug/L		09/12/23 10:32	09/14/23 17:57	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/12/23 10:32	09/14/23 17:57	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		09/12/23 10:32	09/14/23 17:57	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		09/12/23 10:32	09/14/23 17:57	1
Di-n-octyl phthalate	ND		9.7	0.16	ug/L		09/12/23 10:32	09/14/23 17:57	1
1,4-Dioxane	ND		9.7	0.97	ug/L		09/12/23 10:32	09/14/23 17:57	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		09/12/23 10:32	09/14/23 17:57	1
Hexachlorobenzene	ND		9.7	0.16	ug/L		09/12/23 10:32	09/14/23 17:57	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/12/23 10:32	09/14/23 17:57	1
Hexachloroethane	ND		9.7	4.1	ug/L		09/12/23 10:32	09/14/23 17:57	1
Indene	ND		9.7	0.97	ug/L		09/12/23 10:32	09/14/23 17:57	1
Isophorone	ND		9.7	0.14	ug/L		09/12/23 10:32	09/14/23 17:57	1
2-Methylphenol	ND		9.7	1.7	ug/L		09/12/23 10:32	09/14/23 17:57	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		09/12/23 10:32	09/14/23 17:57	1
2-Nitroaniline	ND		9.7	2.1	ug/L		09/12/23 10:32	09/14/23 17:57	1
3-Nitroaniline	ND		9.7	1.7	ug/L		09/12/23 10:32	09/14/23 17:57	1
4-Nitroaniline	ND		9.7	1.5	ug/L		09/12/23 10:32	09/14/23 17:57	1
Nitrobenzene	ND		9.7	0.13	ug/L		09/12/23 10:32	09/14/23 17:57	1
2-Nitrophenol	ND		9.7	5.0	ug/L		09/12/23 10:32	09/14/23 17:57	1
4-Nitrophenol	ND		9.7	2.0	ug/L		09/12/23 10:32	09/14/23 17:57	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		09/12/23 10:32	09/14/23 17:57	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

Client Sample ID: MW9-ROX-090523
Date Collected: 09/05/23 09:50
Date Received: 09/06/23 09:09

Lab Sample ID: 400-242975-4
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	3.2	ug/L		09/12/23 10:32	09/14/23 17:57	1
N-Nitrosodiphenylamine	ND		9.7	0.17	ug/L		09/12/23 10:32	09/14/23 17:57	1
Pentachlorophenol	ND		19	1.4	ug/L		09/12/23 10:32	09/14/23 17:57	1
Phenol	ND		9.7	2.5	ug/L		09/12/23 10:32	09/14/23 17:57	1
Pyridine	ND		9.7	3.1	ug/L		09/12/23 10:32	09/14/23 17:57	1
Quinoline	ND		9.7	4.4	ug/L		09/12/23 10:32	09/14/23 17:57	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		09/12/23 10:32	09/14/23 17:57	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		09/12/23 10:32	09/14/23 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*45*	*S1-*	*46 - 124*	*09/12/23 10:32*	*09/14/23 17:57*	*1*
2-Fluorophenol	*7*	*S1-*	*13 - 113*	*09/12/23 10:32*	*09/14/23 17:57*	*1*
Nitrobenzene-d5	*42*		*36 - 126*	*09/12/23 10:32*	*09/14/23 17:57*	*1*
Phenol-d5	*20*		*17 - 127*	*09/12/23 10:32*	*09/14/23 17:57*	*1*
Terphenyl-d14	*51*		*44 - 149*	*09/12/23 10:32*	*09/14/23 17:57*	*1*
2,4,6-Tribromophenol	*43*		*26 - 150*	*09/12/23 10:32*	*09/14/23 17:57*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/12/23 08:25	09/12/23 20:41	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/12/23 08:25	09/12/23 20:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*51 - 149*	*09/12/23 08:25*	*09/12/23 20:41*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

Client Sample ID: MW10-ROX-090523
Date Collected: 09/05/23 10:45
Date Received: 09/06/23 09:09

Lab Sample ID: 400-242975-5
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			09/14/23 22:07	1
Acrolein	ND		20	3.3	ug/L			09/14/23 22:07	1
Acrylonitrile	ND		10	2.8	ug/L			09/14/23 22:07	1
Benzene	ND		1.0	0.50	ug/L			09/14/23 22:07	1
Bromobenzene	ND		1.0	0.54	ug/L			09/14/23 22:07	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/14/23 22:07	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/14/23 22:07	1
Bromoform	ND		5.0	0.25	ug/L			09/14/23 22:07	1
Bromomethane	ND		1.0	0.98	ug/L			09/14/23 22:07	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/14/23 22:07	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/14/23 22:07	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/14/23 22:07	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/14/23 22:07	1
Chloroethane	ND		1.0	0.76	ug/L			09/14/23 22:07	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/14/23 22:07	1
Chloroform	ND		1.0	0.90	ug/L			09/14/23 22:07	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/14/23 22:07	1
Chloromethane	ND		1.0	0.90	ug/L			09/14/23 22:07	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/14/23 22:07	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/14/23 22:07	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/14/23 22:07	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/14/23 22:07	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/14/23 22:07	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/14/23 22:07	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/14/23 22:07	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/14/23 22:07	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/14/23 22:07	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/14/23 22:07	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 22:07	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 22:07	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 22:07	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/14/23 22:07	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/14/23 22:07	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/14/23 22:07	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/14/23 22:07	1
2-Hexanone	ND		25	1.4	ug/L			09/14/23 22:07	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/14/23 22:07	1
Methylene bromide	ND		5.0	0.22	ug/L			09/14/23 22:07	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/14/23 22:07	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/14/23 22:07	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/14/23 22:07	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/14/23 22:07	1
Naphthalene	ND		5.0	3.0	ug/L			09/14/23 22:07	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/14/23 22:07	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/14/23 22:07	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/14/23 22:07	1
o-Xylene	ND		5.0	0.60	ug/L			09/14/23 22:07	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/14/23 22:07	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/14/23 22:07	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

Client Sample ID: MW10-ROX-090523
Date Collected: 09/05/23 10:45
Date Received: 09/06/23 09:09

Lab Sample ID: 400-242975-5
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			09/14/23 22:07	1
Styrene	ND		1.0	1.0	ug/L			09/14/23 22:07	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/14/23 22:07	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/14/23 22:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/14/23 22:07	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/14/23 22:07	1
Toluene	ND		1.0	0.90	ug/L			09/14/23 22:07	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/14/23 22:07	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/14/23 22:07	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/14/23 22:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/14/23 22:07	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/14/23 22:07	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/14/23 22:07	1
Trichloroethene	ND		1.0	0.15	ug/L			09/14/23 22:07	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/14/23 22:07	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/14/23 22:07	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/14/23 22:07	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/14/23 22:07	1
Vinyl acetate	ND		25	0.93	ug/L			09/14/23 22:07	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/14/23 22:07	1
Xylenes, Total	ND		10	1.6	ug/L			09/14/23 22:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 130*		*09/14/23 22:07*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*09/14/23 22:07*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*09/14/23 22:07*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.094	ug/L		09/12/23 10:32	09/14/23 21:27	1
Acenaphthylene	ND		0.19	0.042	ug/L		09/12/23 10:32	09/14/23 21:27	1
Anthracene	ND		0.19	0.045	ug/L		09/12/23 10:32	09/14/23 21:27	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		09/12/23 10:32	09/14/23 21:27	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		09/12/23 10:32	09/14/23 21:27	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		09/12/23 10:32	09/14/23 21:27	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/12/23 10:32	09/14/23 21:27	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		09/12/23 10:32	09/14/23 21:27	1
Chrysene	ND		0.19	0.031	ug/L		09/12/23 10:32	09/14/23 21:27	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		09/12/23 10:32	09/14/23 21:27	1
Fluoranthene	ND		0.19	0.032	ug/L		09/12/23 10:32	09/14/23 21:27	1
Fluorene	ND		0.19	0.084	ug/L		09/12/23 10:32	09/14/23 21:27	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		09/12/23 10:32	09/14/23 21:27	1
Phenanthrene	ND		0.19	0.085	ug/L		09/12/23 10:32	09/14/23 21:27	1
Pyrene	ND		0.19	0.037	ug/L		09/12/23 10:32	09/14/23 21:27	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		09/12/23 10:32	09/14/23 21:27	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		09/12/23 10:32	09/14/23 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*120*		*18 - 147*	*09/12/23 10:32*	*09/14/23 21:27*	*1*
2-Fluorobiphenyl	*88*		*15 - 128*	*09/12/23 10:32*	*09/14/23 21:27*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

Client Sample ID: MW10-ROX-090523

Date Collected: 09/05/23 10:45
Date Received: 09/06/23 09:09

Lab Sample ID: 400-242975-5

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*66*		*10 - 144*	*09/12/23 10:32*	*09/14/23 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		09/12/23 10:32	09/14/23 18:18	1
Benzenethiol	ND	*-	9.5	1.6	ug/L		09/12/23 10:32	09/14/23 18:18	1
Benzoic acid	ND	*- *1	28	6.9	ug/L		09/12/23 10:32	09/14/23 18:18	1
Benzyl alcohol	ND		9.5	1.9	ug/L		09/12/23 10:32	09/14/23 18:18	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		09/12/23 10:32	09/14/23 18:18	1
Bis(2-chloroethyl)ether	ND	*+	9.5	2.6	ug/L		09/12/23 10:32	09/14/23 18:18	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		09/12/23 10:32	09/14/23 18:18	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		09/12/23 10:32	09/14/23 18:18	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		09/12/23 10:32	09/14/23 18:18	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		09/12/23 10:32	09/14/23 18:18	1
4-Chloroaniline	ND		9.5	3.2	ug/L		09/12/23 10:32	09/14/23 18:18	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		09/12/23 10:32	09/14/23 18:18	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		09/12/23 10:32	09/14/23 18:18	1
2-Chlorophenol	ND		9.5	2.1	ug/L		09/12/23 10:32	09/14/23 18:18	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		09/12/23 10:32	09/14/23 18:18	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		09/12/23 10:32	09/14/23 18:18	1
Dibenzofuran	ND		9.5	0.16	ug/L		09/12/23 10:32	09/14/23 18:18	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		09/12/23 10:32	09/14/23 18:18	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		09/12/23 10:32	09/14/23 18:18	1
Diethyl phthalate	ND		9.5	0.23	ug/L		09/12/23 10:32	09/14/23 18:18	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		09/12/23 10:32	09/14/23 18:18	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		09/12/23 10:32	09/14/23 18:18	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		09/12/23 10:32	09/14/23 18:18	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		09/12/23 10:32	09/14/23 18:18	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		09/12/23 10:32	09/14/23 18:18	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		09/12/23 10:32	09/14/23 18:18	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		09/12/23 10:32	09/14/23 18:18	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		09/12/23 10:32	09/14/23 18:18	1
1,4-Dioxane	ND		9.5	0.95	ug/L		09/12/23 10:32	09/14/23 18:18	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		09/12/23 10:32	09/14/23 18:18	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		09/12/23 10:32	09/14/23 18:18	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/12/23 10:32	09/14/23 18:18	1
Hexachloroethane	ND		9.5	4.0	ug/L		09/12/23 10:32	09/14/23 18:18	1
Indene	ND		9.5	0.95	ug/L		09/12/23 10:32	09/14/23 18:18	1
Isophorone	ND		9.5	0.13	ug/L		09/12/23 10:32	09/14/23 18:18	1
2-Methylphenol	ND		9.5	1.7	ug/L		09/12/23 10:32	09/14/23 18:18	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/12/23 10:32	09/14/23 18:18	1
2-Nitroaniline	ND		9.5	2.1	ug/L		09/12/23 10:32	09/14/23 18:18	1
3-Nitroaniline	ND		9.5	1.7	ug/L		09/12/23 10:32	09/14/23 18:18	1
4-Nitroaniline	ND		9.5	1.4	ug/L		09/12/23 10:32	09/14/23 18:18	1
Nitrobenzene	ND		9.5	0.12	ug/L		09/12/23 10:32	09/14/23 18:18	1
2-Nitrophenol	ND		9.5	4.9	ug/L		09/12/23 10:32	09/14/23 18:18	1
4-Nitrophenol	ND		9.5	2.0	ug/L		09/12/23 10:32	09/14/23 18:18	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		09/12/23 10:32	09/14/23 18:18	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

Client Sample ID: MW10-ROX-090523
Date Collected: 09/05/23 10:45
Date Received: 09/06/23 09:09

Lab Sample ID: 400-242975-5
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		9.5	3.1	ug/L		09/12/23 10:32	09/14/23 18:18	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		09/12/23 10:32	09/14/23 18:18	1
Pentachlorophenol	ND		19	1.3	ug/L		09/12/23 10:32	09/14/23 18:18	1
Phenol	ND		9.5	2.5	ug/L		09/12/23 10:32	09/14/23 18:18	1
Pyridine	ND		9.5	3.0	ug/L		09/12/23 10:32	09/14/23 18:18	1
Quinoline	ND		9.5	4.3	ug/L		09/12/23 10:32	09/14/23 18:18	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		09/12/23 10:32	09/14/23 18:18	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		09/12/23 10:32	09/14/23 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*46 - 124*	*09/12/23 10:32*	*09/14/23 18:18*	*1*
2-Fluorophenol	*19*		*13 - 113*	*09/12/23 10:32*	*09/14/23 18:18*	*1*
Nitrobenzene-d5	*54*		*36 - 126*	*09/12/23 10:32*	*09/14/23 18:18*	*1*
Phenol-d5	*41*		*17 - 127*	*09/12/23 10:32*	*09/14/23 18:18*	*1*
Terphenyl-d14	*84*		*44 - 149*	*09/12/23 10:32*	*09/14/23 18:18*	*1*
2,4,6-Tribromophenol	*53*		*26 - 150*	*09/12/23 10:32*	*09/14/23 18:18*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.031	0.018	ug/L		09/12/23 08:25	09/12/23 21:24	1
1,2-D bromoethane	ND		0.021	0.015	ug/L		09/12/23 08:25	09/12/23 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*09/12/23 08:25*	*09/12/23 21:24*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

Client Sample ID: MW2-ROX-090523
Date Collected: 09/05/23 12:15
Date Received: 09/06/23 09:09

Lab Sample ID: 400-242975-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130	50	ug/L			09/14/23 22:34	5
Acrolein	ND		100	17	ug/L			09/14/23 22:34	5
Acrylonitrile	ND		50	14	ug/L			09/14/23 22:34	5
Benzene	ND		5.0	2.5	ug/L			09/14/23 22:34	5
Bromobenzene	ND		5.0	2.7	ug/L			09/14/23 22:34	5
Bromochloromethane	ND		5.0	1.1	ug/L			09/14/23 22:34	5
Bromodichloromethane	ND		5.0	2.5	ug/L			09/14/23 22:34	5
Bromoform	ND		25	1.3	ug/L			09/14/23 22:34	5
Bromomethane	ND		5.0	4.9	ug/L			09/14/23 22:34	5
2-Butanone (MEK)	**18**	**J**	130	13	ug/L			09/14/23 22:34	5
Carbon disulfide	ND		5.0	2.5	ug/L			09/14/23 22:34	5
Carbon tetrachloride	ND		5.0	0.95	ug/L			09/14/23 22:34	5
Chlorobenzene	ND		5.0	4.5	ug/L			09/14/23 22:34	5
Chloroethane	ND		5.0	3.8	ug/L			09/14/23 22:34	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			09/14/23 22:34	5
Chloroform	ND		5.0	4.5	ug/L			09/14/23 22:34	5
1-Chlorohexane	ND		5.0	1.6	ug/L			09/14/23 22:34	5
Chloromethane	ND		5.0	4.5	ug/L			09/14/23 22:34	5
cis-1,2-Dichloroethene	ND		5.0	1.0	ug/L			09/14/23 22:34	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			09/14/23 22:34	5
Dibromochloromethane	ND		5.0	1.2	ug/L			09/14/23 22:34	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			09/14/23 22:34	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			09/14/23 22:34	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			09/14/23 22:34	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			09/14/23 22:34	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			09/14/23 22:34	5
1,2-Dichloroethane	ND		5.0	0.95	ug/L			09/14/23 22:34	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			09/14/23 22:34	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			09/14/23 22:34	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			09/14/23 22:34	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			09/14/23 22:34	5
1,1-Dichloropropene	ND		5.0	2.5	ug/L			09/14/23 22:34	5
Ethylbenzene	**320**		5.0	2.5	ug/L			09/14/23 22:34	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			09/14/23 22:34	5
Hexachlorobutadiene	ND		25	4.5	ug/L			09/14/23 22:34	5
2-Hexanone	ND		130	7.0	ug/L			09/14/23 22:34	5
Isopropylbenzene	**12**		5.0	2.7	ug/L			09/14/23 22:34	5
Methylene bromide	ND		25	1.1	ug/L			09/14/23 22:34	5
Methylene Chloride	ND		25	15	ug/L			09/14/23 22:34	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			09/14/23 22:34	5
Methyl tert-butyl ether	ND		5.0	1.1	ug/L			09/14/23 22:34	5
m-Xylene & p-Xylene	**170**		25	3.2	ug/L			09/14/23 22:34	5
Naphthalene	**25**		25	15	ug/L			09/14/23 22:34	5
n-Butylbenzene	ND		5.0	3.8	ug/L			09/14/23 22:34	5
N-Propylbenzene	**12**		5.0	3.5	ug/L			09/14/23 22:34	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			09/14/23 22:34	5
o-Xylene	**12**	**J**	25	3.0	ug/L			09/14/23 22:34	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			09/14/23 22:34	5
p-Isopropyltoluene	ND		5.0	3.6	ug/L			09/14/23 22:34	5

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

Client Sample ID: MW2-ROX-090523
Date Collected: 09/05/23 12:15
Date Received: 09/06/23 09:09

Lab Sample ID: 400-242975-6
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		5.0	3.5	ug/L			09/14/23 22:34	5
Styrene	ND		5.0	5.0	ug/L			09/14/23 22:34	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			09/14/23 22:34	5
1,1,1,2-Tetrachloroethane	ND		5.0	0.80	ug/L			09/14/23 22:34	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			09/14/23 22:34	5
Tetrachloroethene	ND		5.0	4.5	ug/L			09/14/23 22:34	5
Toluene	ND		5.0	4.5	ug/L			09/14/23 22:34	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			09/14/23 22:34	5
trans-1,3-Dichloropropene	ND		25	1.0	ug/L			09/14/23 22:34	5
1,2,3-Trichlorobenzene	ND		5.0	4.5	ug/L			09/14/23 22:34	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			09/14/23 22:34	5
1,1,1-Trichloroethane	ND		5.0	0.90	ug/L			09/14/23 22:34	5
1,1,2-Trichloroethane	ND		25	1.1	ug/L			09/14/23 22:34	5
Trichloroethene	ND		5.0	0.75	ug/L			09/14/23 22:34	5
Trichlorofluoromethane	ND		5.0	2.6	ug/L			09/14/23 22:34	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			09/14/23 22:34	5
1,2,4-Trimethylbenzene	**43**		5.0	4.1	ug/L			09/14/23 22:34	5
1,3,5-Trimethylbenzene	**13**		5.0	2.8	ug/L			09/14/23 22:34	5
Vinyl acetate	ND		130	4.7	ug/L			09/14/23 22:34	5
Vinyl chloride	ND		5.0	2.5	ug/L			09/14/23 22:34	5
Xylenes, Total	**190**		50	8.0	ug/L			09/14/23 22:34	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 130*		*09/14/23 22:34*	*5*
Dibromofluoromethane	*102*		*75 - 126*		*09/14/23 22:34*	*5*
Toluene-d8 (Surr)	*110*		*64 - 132*		*09/14/23 22:34*	*5*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.095	ug/L		09/12/23 10:32	09/14/23 21:48	1
Acenaphthylene	ND		0.19	0.042	ug/L		09/12/23 10:32	09/14/23 21:48	1
Anthracene	ND		0.19	0.045	ug/L		09/12/23 10:32	09/14/23 21:48	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		09/12/23 10:32	09/14/23 21:48	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		09/12/23 10:32	09/14/23 21:48	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		09/12/23 10:32	09/14/23 21:48	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/12/23 10:32	09/14/23 21:48	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		09/12/23 10:32	09/14/23 21:48	1
Chrysene	ND		0.19	0.032	ug/L		09/12/23 10:32	09/14/23 21:48	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		09/12/23 10:32	09/14/23 21:48	1
Fluoranthene	ND		0.19	0.033	ug/L		09/12/23 10:32	09/14/23 21:48	1
Fluorene	ND		0.19	0.085	ug/L		09/12/23 10:32	09/14/23 21:48	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		09/12/23 10:32	09/14/23 21:48	1
Phenanthrene	ND		0.19	0.086	ug/L		09/12/23 10:32	09/14/23 21:48	1
Pyrene	ND		0.19	0.037	ug/L		09/12/23 10:32	09/14/23 21:48	1
1-Methylnaphthalene	**9.9**		0.19	0.077	ug/L		09/12/23 10:32	09/14/23 21:48	1
2-Methylnaphthalene	**21**		0.19	0.063	ug/L		09/12/23 10:32	09/14/23 21:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*119*		*18 - 147*	*09/12/23 10:32*	*09/14/23 21:48*	*1*
2-Fluorobiphenyl	*81*		*15 - 128*	*09/12/23 10:32*	*09/14/23 21:48*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

Client Sample ID: MW2-ROX-090523
Date Collected: 09/05/23 12:15
Date Received: 09/06/23 09:09

Lab Sample ID: 400-242975-6
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*	*09/12/23 10:32*	*09/14/23 21:48*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*-	9.6	3.6	ug/L		09/12/23 10:32	09/15/23 18:52	1
Benzenethiol	ND		9.6	1.6	ug/L		09/12/23 10:32	09/15/23 18:52	1
Benzoic acid	ND	*- *1	29	7.0	ug/L		09/12/23 10:32	09/15/23 18:52	1
Benzyl alcohol	ND		9.6	1.9	ug/L		09/12/23 10:32	09/15/23 18:52	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		09/12/23 10:32	09/15/23 18:52	1
Bis(2-chloroethyl)ether	ND	*+	9.6	2.6	ug/L		09/12/23 10:32	09/15/23 18:52	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		09/12/23 10:32	09/15/23 18:52	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		09/12/23 10:32	09/15/23 18:52	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		09/12/23 10:32	09/15/23 18:52	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		09/12/23 10:32	09/15/23 18:52	1
4-Chloroaniline	ND		9.6	3.3	ug/L		09/12/23 10:32	09/15/23 18:52	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		09/12/23 10:32	09/15/23 18:52	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		09/12/23 10:32	09/15/23 18:52	1
2-Chlorophenol	ND		9.6	2.1	ug/L		09/12/23 10:32	09/15/23 18:52	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		09/12/23 10:32	09/15/23 18:52	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		09/12/23 10:32	09/15/23 18:52	1
Dibenzofuran	ND		9.6	0.16	ug/L		09/12/23 10:32	09/15/23 18:52	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		09/12/23 10:32	09/15/23 18:52	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		09/12/23 10:32	09/15/23 18:52	1
Diethyl phthalate	**0.52**	**J**	9.6	0.23	ug/L		09/12/23 10:32	09/15/23 18:52	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		09/12/23 10:32	09/15/23 18:52	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		09/12/23 10:32	09/15/23 18:52	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		09/12/23 10:32	09/15/23 18:52	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		09/12/23 10:32	09/15/23 18:52	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/12/23 10:32	09/15/23 18:52	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		09/12/23 10:32	09/15/23 18:52	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		09/12/23 10:32	09/15/23 18:52	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		09/12/23 10:32	09/15/23 18:52	1
1,4-Dioxane	ND		9.6	0.96	ug/L		09/12/23 10:32	09/15/23 18:52	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		09/12/23 10:32	09/15/23 18:52	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		09/12/23 10:32	09/15/23 18:52	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/12/23 10:32	09/15/23 18:52	1
Hexachloroethane	ND		9.6	4.0	ug/L		09/12/23 10:32	09/15/23 18:52	1
Indene	ND		9.6	0.96	ug/L		09/12/23 10:32	09/15/23 18:52	1
Isophorone	ND		9.6	0.13	ug/L		09/12/23 10:32	09/15/23 18:52	1
2-Methylphenol	ND		9.6	1.7	ug/L		09/12/23 10:32	09/15/23 18:52	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/12/23 10:32	09/15/23 18:52	1
2-Nitroaniline	ND		9.6	2.1	ug/L		09/12/23 10:32	09/15/23 18:52	1
3-Nitroaniline	ND		9.6	1.7	ug/L		09/12/23 10:32	09/15/23 18:52	1
4-Nitroaniline	ND		9.6	1.4	ug/L		09/12/23 10:32	09/15/23 18:52	1
Nitrobenzene	ND		9.6	0.12	ug/L		09/12/23 10:32	09/15/23 18:52	1
2-Nitrophenol	ND		9.6	5.0	ug/L		09/12/23 10:32	09/15/23 18:52	1
4-Nitrophenol	ND		9.6	2.0	ug/L		09/12/23 10:32	09/15/23 18:52	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		09/12/23 10:32	09/15/23 18:52	1

Client Sample ID: MW2-ROX-090523
Date Collected: 09/05/23 12:15
Date Received: 09/06/23 09:09

Lab Sample ID: 400-242975-6
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		9.6	3.2	ug/L		09/12/23 10:32	09/15/23 18:52	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		09/12/23 10:32	09/15/23 18:52	1
Pentachlorophenol	ND		19	1.3	ug/L		09/12/23 10:32	09/15/23 18:52	1
Phenol	ND		9.6	2.5	ug/L		09/12/23 10:32	09/15/23 18:52	1
Pyridine	ND		9.6	3.1	ug/L		09/12/23 10:32	09/15/23 18:52	1
Quinoline	ND		9.6	4.3	ug/L		09/12/23 10:32	09/15/23 18:52	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		09/12/23 10:32	09/15/23 18:52	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		09/12/23 10:32	09/15/23 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*46 - 124*	*09/12/23 10:32*	*09/15/23 18:52*	*1*
2-Fluorophenol	*0*	*S1-*	*13 - 113*	*09/12/23 10:32*	*09/15/23 18:52*	*1*
Nitrobenzene-d5	*55*		*36 - 126*	*09/12/23 10:32*	*09/15/23 18:52*	*1*
Phenol-d5	*0.7*	*S1-*	*17 - 127*	*09/12/23 10:32*	*09/15/23 18:52*	*1*
Terphenyl-d14	*69*		*44 - 149*	*09/12/23 10:32*	*09/15/23 18:52*	*1*
2,4,6-Tribromophenol	*0*	*S1-*	*26 - 150*	*09/12/23 10:32*	*09/15/23 18:52*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	H	9.6	3.7	ug/L		09/18/23 10:20	09/20/23 17:27	1
Benzenethiol	ND	H *- *1	9.6	1.6	ug/L		09/18/23 10:20	09/20/23 17:27	1
Benzoic acid	ND	H	29	7.0	ug/L		09/18/23 10:20	09/20/23 17:27	1
Benzyl alcohol	ND	H	9.6	1.9	ug/L		09/18/23 10:20	09/20/23 17:27	1
Bis(2-chloroethoxy)methane	ND	H	9.6	0.15	ug/L		09/18/23 10:20	09/20/23 17:27	1
Bis(2-chloroethyl)ether	ND	H	9.6	2.6	ug/L		09/18/23 10:20	09/20/23 17:27	1
bis (2-chloroisopropyl) ether	ND	H	9.6	0.15	ug/L		09/18/23 10:20	09/20/23 17:27	1
Bis(2-ethylhexyl) phthalate	ND	H	9.6	4.8	ug/L		09/18/23 10:20	09/20/23 17:27	1
4-Bromophenyl phenyl ether	ND	H	9.6	0.19	ug/L		09/18/23 10:20	09/20/23 17:27	1
Butyl benzyl phthalate	ND	H	9.6	0.18	ug/L		09/18/23 10:20	09/20/23 17:27	1
4-Chloroaniline	ND	H	9.6	3.3	ug/L		09/18/23 10:20	09/20/23 17:27	1
4-Chloro-3-methylphenol	ND	H	9.6	3.7	ug/L		09/18/23 10:20	09/20/23 17:27	1
2-Chloronaphthalene	ND	H	9.6	0.13	ug/L		09/18/23 10:20	09/20/23 17:27	1
2-Chlorophenol	ND	H	9.6	2.1	ug/L		09/18/23 10:20	09/20/23 17:27	1
4-Chlorophenyl phenyl ether	ND	H	9.6	1.9	ug/L		09/18/23 10:20	09/20/23 17:27	1
Dibenz[a,h]acridine	ND	H	9.6	0.96	ug/L		09/18/23 10:20	09/20/23 17:27	1
Dibenzofuran	ND	H	9.6	0.16	ug/L		09/18/23 10:20	09/20/23 17:27	1
3,3'-Dichlorobenzidine	ND	H	9.6	2.5	ug/L		09/18/23 10:20	09/20/23 17:27	1
2,4-Dichlorophenol	ND	H	9.6	2.9	ug/L		09/18/23 10:20	09/20/23 17:27	1
Diethyl phthalate	ND	H	9.6	0.23	ug/L		09/18/23 10:20	09/20/23 17:27	1
2,4-Dimethylphenol	ND	H	9.6	3.4	ug/L		09/18/23 10:20	09/20/23 17:27	1
Dimethyl phthalate	ND	H	9.6	0.16	ug/L		09/18/23 10:20	09/20/23 17:27	1
Di-n-butyl phthalate	ND	H	9.6	2.6	ug/L		09/18/23 10:20	09/20/23 17:27	1
4,6-Dinitro-ortho-cresol	ND	H	9.6	1.5	ug/L		09/18/23 10:20	09/20/23 17:27	1
2,4-Dinitrophenol	ND	H	29	3.3	ug/L		09/18/23 10:20	09/20/23 17:27	1
2,4-Dinitrotoluene	ND	H	9.6	1.8	ug/L		09/18/23 10:20	09/20/23 17:27	1
2,6-Dinitrotoluene	ND	H	9.6	1.8	ug/L		09/18/23 10:20	09/20/23 17:27	1
Di-n-octyl phthalate	ND	H	9.6	0.16	ug/L		09/18/23 10:20	09/20/23 17:27	1
1,4-Dioxane	ND	H	9.6	0.96	ug/L		09/18/23 10:20	09/20/23 17:27	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	H	9.6	0.96	ug/L		09/18/23 10:20	09/20/23 17:27	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

Client Sample ID: MW2-ROX-090523
Date Collected: 09/05/23 12:15
Date Received: 09/06/23 09:09

Lab Sample ID: 400-242975-6
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) - RERA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND	H	9.6	0.16	ug/L		09/18/23 10:20	09/20/23 17:27	1
Hexachlorocyclopentadiene	ND	H	19	2.5	ug/L		09/18/23 10:20	09/20/23 17:27	1
Hexachloroethane	ND	H	9.6	4.0	ug/L		09/18/23 10:20	09/20/23 17:27	1
Indene	ND	H	9.6	0.96	ug/L		09/18/23 10:20	09/20/23 17:27	1
Isophorone	ND	H	9.6	0.13	ug/L		09/18/23 10:20	09/20/23 17:27	1
2-Methylphenol	ND	H	9.6	1.7	ug/L		09/18/23 10:20	09/20/23 17:27	1
3 & 4 Methylphenol	ND	H	19	0.38	ug/L		09/18/23 10:20	09/20/23 17:27	1
2-Nitroaniline	ND	H	9.6	2.1	ug/L		09/18/23 10:20	09/20/23 17:27	1
3-Nitroaniline	ND	H	9.6	1.7	ug/L		09/18/23 10:20	09/20/23 17:27	1
4-Nitroaniline	ND	H	9.6	1.4	ug/L		09/18/23 10:20	09/20/23 17:27	1
Nitrobenzene	ND	H	9.6	0.13	ug/L		09/18/23 10:20	09/20/23 17:27	1
2-Nitrophenol	ND	H	9.6	5.0	ug/L		09/18/23 10:20	09/20/23 17:27	1
4-Nitrophenol	ND	H	9.6	2.0	ug/L		09/18/23 10:20	09/20/23 17:27	1
N-Nitrosodimethylamine	ND	H	9.6	3.4	ug/L		09/18/23 10:20	09/20/23 17:27	1
N-Nitrosodi-n-propylamine	ND	H	9.6	3.2	ug/L		09/18/23 10:20	09/20/23 17:27	1
N-Nitrosodiphenylamine	ND	H	9.6	0.17	ug/L		09/18/23 10:20	09/20/23 17:27	1
Pentachlorophenol	ND	H	19	1.3	ug/L		09/18/23 10:20	09/20/23 17:27	1
Phenol	ND	H	9.6	2.5	ug/L		09/18/23 10:20	09/20/23 17:27	1
Pyridine	ND	H	9.6	3.1	ug/L		09/18/23 10:20	09/20/23 17:27	1
Quinoline	ND	H	9.6	4.3	ug/L		09/18/23 10:20	09/20/23 17:27	1
2,4,5-Trichlorophenol	ND	H	9.6	3.6	ug/L		09/18/23 10:20	09/20/23 17:27	1
2,4,6-Trichlorophenol	ND	H	9.6	3.4	ug/L		09/18/23 10:20	09/20/23 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*46 - 124*	*09/18/23 10:20*	*09/20/23 17:27*	*1*
2-Fluorophenol	*19*		*13 - 113*	*09/18/23 10:20*	*09/20/23 17:27*	*1*
Nitrobenzene-d5	*63*		*36 - 126*	*09/18/23 10:20*	*09/20/23 17:27*	*1*
Phenol-d5	*46*		*17 - 127*	*09/18/23 10:20*	*09/20/23 17:27*	*1*
Terphenyl-d14	*109*		*44 - 149*	*09/18/23 10:20*	*09/20/23 17:27*	*1*
2,4,6-Tribromophenol	*71*		*26 - 150*	*09/18/23 10:20*	*09/20/23 17:27*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/12/23 08:25	09/12/23 21:45	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/12/23 08:25	09/12/23 21:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*117*		*51 - 149*	*09/12/23 08:25*	*09/12/23 21:45*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

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.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. 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: 400-242975-1

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)
400-242975-1	TB-ROX-090523-8260	106	109	103
400-242975-3	MW27-ROX-090523	105	110	104
400-242975-4	MW9-ROX-090523	106	109	104
400-242975-5	MW10-ROX-090523	107	109	103
400-242975-6	MW2-ROX-090523	109	102	110
LCS 400-640996/1002	Lab Control Sample	108	103	104
MB 400-640996/4	Method Blank	107	107	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	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-242975-3	MW27-ROX-090523	41 S1-	11 S1-	37	27	47	43
400-242975-4	MW9-ROX-090523	45 S1-	7 S1-	42	20	51	43
400-242975-5	MW10-ROX-090523	63	19	54	41	84	53
400-242975-6	MW2-ROX-090523	63	0 S1-	55	0.7 S1-	69	0 S1-
400-242975-6 - RERA	MW2-ROX-090523	72	19	63	46	109	71
LCS 400-640651/17-A	Lab Control Sample	70	24	63	49	90	55
LCS 400-640651/2-A	Lab Control Sample	66	22	64	44	69	68
LCS 400-641408/4-A	Lab Control Sample	69	15	58	36	95	41
LCSD 400-640651/18-A	Lab Control Sample Dup	69	38	61	56	81	62
LCSD 400-640651/3-A	Lab Control Sample Dup	70	13	57	42	73	75
LCSD 400-641408/5-A	Lab Control Sample Dup	61	27	54	44	87	52
MB 400-640651/1-A	Method Blank	64	3 S1-	54	8 S1-	68	37
MB 400-641408/1-A	Method Blank	69	9 S1-	58	36	93	60

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)
400-242975-3	MW27-ROX-090523	122	92	67
400-242975-4	MW9-ROX-090523	107	91	67
400-242975-5	MW10-ROX-090523	120	88	66
400-242975-6	MW2-ROX-090523	119	81	56

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

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)
LCS 400-640651/19-A	Lab Control Sample	112	91	66
LCSD 400-640651/20-A	Lab Control Sample Dup	112	94	67
MB 400-640651/1-A	Method Blank	94	75	69

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)
400-242975-2	TB-ROX-090523-8011	106
400-242975-3	MW27-ROX-090523	97
400-242975-4	MW9-ROX-090523	89
400-242975-5	MW10-ROX-090523	99
400-242975-6	MW2-ROX-090523	117
LCS 400-640625/2-A	Lab Control Sample	82
LCSD 400-640625/3-A	Lab Control Sample Dup	94
MB 400-640625/1-A	Method Blank	91

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

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: 400-242975-1

Client Sample ID: TB-ROX-090523-8260
Lab Sample ID: 400-242975-1
Date Collected: 09/05/23 12:00
Matrix: Water
Date Received: 09/06/23 09:09

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	640996	09/14/23 20:47	CAR	EET PEN

Client Sample ID: TB-ROX-090523-8011
Lab Sample ID: 400-242975-2
Date Collected: 09/05/23 12:00
Matrix: Water
Date Received: 09/06/23 09:09

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	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/12/23 19:58	DS	EET PEN

Client Sample ID: MW27-ROX-090523
Lab Sample ID: 400-242975-3
Date Collected: 09/05/23 08:50
Matrix: Water
Date Received: 09/06/23 09:09

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	640996	09/14/23 21:13	CAR	EET PEN
Total/NA	Prep	3520C			259.4 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641055	09/14/23 17:35	S1B	EET PEN
Total/NA	Prep	3520C			259.4 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641090	09/14/23 20:46	TH	EET PEN
Total/NA	Prep	8011			35.8 mL	35 mL	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/12/23 20:20	DS	EET PEN

Client Sample ID: MW9-ROX-090523
Lab Sample ID: 400-242975-4
Date Collected: 09/05/23 09:50
Matrix: Water
Date Received: 09/06/23 09:09

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	640996	09/14/23 21:40	CAR	EET PEN
Total/NA	Prep	3520C			257.6 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641055	09/14/23 17:57	S1B	EET PEN
Total/NA	Prep	3520C			257.6 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641090	09/14/23 21:07	TH	EET PEN
Total/NA	Prep	8011			35.1 mL	35 mL	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/12/23 20:41	DS	EET PEN

Client Sample ID: MW10-ROX-090523
Lab Sample ID: 400-242975-5
Date Collected: 09/05/23 10:45
Matrix: Water
Date Received: 09/06/23 09:09

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	640996	09/14/23 22:07	CAR	EET PEN
Total/NA	Prep	3520C			264 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641055	09/14/23 18:18	S1B	EET PEN

Client Sample ID: MW10-ROX-090523

Lab Sample ID: 400-242975-5

Date Collected: 09/05/23 10:45

Matrix: Water

Date Received: 09/06/23 09:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			264 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641090	09/14/23 21:27	TH	EET PEN
Total/NA	Prep	8011			33.9 mL	35 mL	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/12/23 21:24	DS	EET PEN

Client Sample ID: MW2-ROX-090523

Lab Sample ID: 400-242975-6

Date Collected: 09/05/23 12:15

Matrix: Water

Date Received: 09/06/23 09:09

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	640996	09/14/23 22:34	CAR	EET PEN
Total/NA	Prep	3520C	RERA		259.4 mL	1 mL	641408	09/18/23 10:20	BKL	EET PEN
Total/NA	Analysis	8270E	RERA	1	0.4 mL	0.4 mL	641903	09/20/23 17:27	KJA	EET PEN
Total/NA	Prep	3520C			260.6 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641239	09/15/23 18:52	VC1	EET PEN
Total/NA	Prep	3520C			260.6 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641090	09/14/23 21:48	TH	EET PEN
Total/NA	Prep	8011			34.9 mL	35 mL	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/12/23 21:45	DS	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-640625/1-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	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/12/23 17:29	DS	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-640651/1-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	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641239	09/15/23 17:33	VC1	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641154	09/15/23 16:40	KJA	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-640996/4

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	640996	09/14/23 11:50	CAR	EET PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-641408/1-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	641408	09/18/23 10:20	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641903	09/20/23 15:39	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640625/2-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	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/12/23 17:50	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640651/17-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641055	09/14/23 16:10	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640651/19-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	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641090	09/14/23 20:05	TH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640651/2-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	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641239	09/15/23 17:59	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640996/1002
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	640996	09/14/23 10:36	CAR	EET PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-242975-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-641408/4-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	641408	09/18/23 10:20	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641903	09/20/23 16:44	KJA	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-640625/3-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	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/12/23 18:12	DS	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-640651/18-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641055	09/14/23 16:32	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-640651/20-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	640651	09/12/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641090	09/14/23 20:25	TH	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-640651/3-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	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641239	09/15/23 18:25	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-641408/5-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	641408	09/18/23 10:20	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641903	09/20/23 17:05	KJA	EET PEN

Laboratory References:
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 640996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242975-1	TB-ROX-090523-8260	Total/NA	Water	8260D	
400-242975-3	MW27-ROX-090523	Total/NA	Water	8260D	
400-242975-4	MW9-ROX-090523	Total/NA	Water	8260D	
400-242975-5	MW10-ROX-090523	Total/NA	Water	8260D	
400-242975-6	MW2-ROX-090523	Total/NA	Water	8260D	
MB 400-640996/4	Method Blank	Total/NA	Water	8260D	
LCS 400-640996/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 640651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242975-3	MW27-ROX-090523	Total/NA	Water	3520C	
400-242975-4	MW9-ROX-090523	Total/NA	Water	3520C	
400-242975-5	MW10-ROX-090523	Total/NA	Water	3520C	
400-242975-6	MW2-ROX-090523	Total/NA	Water	3520C	
MB 400-640651/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-640651/17-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-640651/19-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-640651/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-640651/18-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-640651/20-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-640651/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 641055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242975-3	MW27-ROX-090523	Total/NA	Water	8270E	640651
400-242975-4	MW9-ROX-090523	Total/NA	Water	8270E	640651
400-242975-5	MW10-ROX-090523	Total/NA	Water	8270E	640651
LCS 400-640651/17-A	Lab Control Sample	Total/NA	Water	8270E	640651
LCSD 400-640651/18-A	Lab Control Sample Dup	Total/NA	Water	8270E	640651

Analysis Batch: 641090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242975-3	MW27-ROX-090523	Total/NA	Water	8270E SIM	640651
400-242975-4	MW9-ROX-090523	Total/NA	Water	8270E SIM	640651
400-242975-5	MW10-ROX-090523	Total/NA	Water	8270E SIM	640651
400-242975-6	MW2-ROX-090523	Total/NA	Water	8270E SIM	640651
LCS 400-640651/19-A	Lab Control Sample	Total/NA	Water	8270E SIM	640651
LCSD 400-640651/20-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	640651

Analysis Batch: 641154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-640651/1-A	Method Blank	Total/NA	Water	8270E SIM	640651

Analysis Batch: 641239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242975-6	MW2-ROX-090523	Total/NA	Water	8270E	640651
MB 400-640651/1-A	Method Blank	Total/NA	Water	8270E	640651
LCS 400-640651/2-A	Lab Control Sample	Total/NA	Water	8270E	640651
LCSD 400-640651/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	640651

GC/MS Semi VOA

Prep Batch: 641408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242975-6 - RERA	MW2-ROX-090523	Total/NA	Water	3520C	
MB 400-641408/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-641408/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-641408/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 641903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242975-6 - RERA	MW2-ROX-090523	Total/NA	Water	8270E	641408
MB 400-641408/1-A	Method Blank	Total/NA	Water	8270E	641408
LCS 400-641408/4-A	Lab Control Sample	Total/NA	Water	8270E	641408
LCSD 400-641408/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	641408

GC Semi VOA

Prep Batch: 640625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242975-2	TB-ROX-090523-8011	Total/NA	Water	8011	
400-242975-3	MW27-ROX-090523	Total/NA	Water	8011	
400-242975-4	MW9-ROX-090523	Total/NA	Water	8011	
400-242975-5	MW10-ROX-090523	Total/NA	Water	8011	
400-242975-6	MW2-ROX-090523	Total/NA	Water	8011	
MB 400-640625/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-640625/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-640625/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 640659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-242975-2	TB-ROX-090523-8011	Total/NA	Water	8011	640625
400-242975-3	MW27-ROX-090523	Total/NA	Water	8011	640625
400-242975-4	MW9-ROX-090523	Total/NA	Water	8011	640625
400-242975-5	MW10-ROX-090523	Total/NA	Water	8011	640625
400-242975-6	MW2-ROX-090523	Total/NA	Water	8011	640625
MB 400-640625/1-A	Method Blank	Total/NA	Water	8011	640625
LCS 400-640625/2-A	Lab Control Sample	Total/NA	Water	8011	640625
LCSD 400-640625/3-A	Lab Control Sample Dup	Total/NA	Water	8011	640625

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-640996/4
Matrix: Water
Analysis Batch: 640996

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			09/14/23 11:50	1
Acrolein	ND		20	3.3	ug/L			09/14/23 11:50	1
Acrylonitrile	ND		10	2.8	ug/L			09/14/23 11:50	1
Benzene	ND		1.0	0.50	ug/L			09/14/23 11:50	1
Bromobenzene	ND		1.0	0.54	ug/L			09/14/23 11:50	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/14/23 11:50	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/14/23 11:50	1
Bromoform	ND		5.0	0.25	ug/L			09/14/23 11:50	1
Bromomethane	ND		1.0	0.98	ug/L			09/14/23 11:50	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/14/23 11:50	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/14/23 11:50	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/14/23 11:50	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/14/23 11:50	1
Chloroethane	ND		1.0	0.76	ug/L			09/14/23 11:50	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/14/23 11:50	1
Chloroform	ND		1.0	0.90	ug/L			09/14/23 11:50	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/14/23 11:50	1
Chloromethane	ND		1.0	0.90	ug/L			09/14/23 11:50	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/14/23 11:50	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/14/23 11:50	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/14/23 11:50	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/14/23 11:50	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/14/23 11:50	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/14/23 11:50	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/14/23 11:50	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/14/23 11:50	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/14/23 11:50	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/14/23 11:50	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 11:50	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 11:50	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/14/23 11:50	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/14/23 11:50	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/14/23 11:50	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/14/23 11:50	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/14/23 11:50	1
2-Hexanone	ND		25	1.4	ug/L			09/14/23 11:50	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/14/23 11:50	1
Methylene bromide	ND		5.0	0.22	ug/L			09/14/23 11:50	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/14/23 11:50	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/14/23 11:50	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/14/23 11:50	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/14/23 11:50	1
Naphthalene	ND		5.0	3.0	ug/L			09/14/23 11:50	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/14/23 11:50	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/14/23 11:50	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/14/23 11:50	1
o-Xylene	ND		5.0	0.60	ug/L			09/14/23 11:50	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/14/23 11:50	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 400-640996/4
Matrix: Water
Analysis Batch: 640996

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			09/14/23 11:50	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			09/14/23 11:50	1
Styrene	ND		1.0	1.0	ug/L			09/14/23 11:50	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/14/23 11:50	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/14/23 11:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/14/23 11:50	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/14/23 11:50	1
Toluene	ND		1.0	0.90	ug/L			09/14/23 11:50	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/14/23 11:50	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/14/23 11:50	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/14/23 11:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/14/23 11:50	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/14/23 11:50	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/14/23 11:50	1
Trichloroethene	ND		1.0	0.15	ug/L			09/14/23 11:50	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/14/23 11:50	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/14/23 11:50	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/14/23 11:50	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/14/23 11:50	1
Vinyl acetate	ND		25	0.93	ug/L			09/14/23 11:50	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/14/23 11:50	1
Xylenes, Total	ND		10	1.6	ug/L			09/14/23 11:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 130*		*09/14/23 11:50*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*09/14/23 11:50*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*09/14/23 11:50*	*1*

Lab Sample ID: LCS 400-640996/1002
Matrix: Water
Analysis Batch: 640996

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	536		ug/L		107	38 - 160
Acrylonitrile	500	705		ug/L		141	64 - 142
Benzene	50.0	45.1		ug/L		90	70 - 130
Bromobenzene	50.0	47.0		ug/L		94	70 - 132
Bromochloromethane	50.0	42.3		ug/L		85	70 - 130
Bromodichloromethane	50.0	46.9		ug/L		94	67 - 133
Bromoform	50.0	48.5		ug/L		97	57 - 140
Bromomethane	50.0	17.7		ug/L		35	10 - 160
2-Butanone (MEK)	200	233		ug/L		116	61 - 145
Carbon disulfide	50.0	35.8		ug/L		72	61 - 137
Carbon tetrachloride	50.0	43.7		ug/L		87	61 - 137
Chlorobenzene	50.0	46.1		ug/L		92	70 - 130
Chloroethane	50.0	39.2		ug/L		78	55 - 141
2-Chloroethyl vinyl ether	50.0	49.9		ug/L		100	10 - 160

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 400-640996/1002
Matrix: Water
Analysis Batch: 640996

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	46.3		ug/L		93	69 - 130
1-Chlorohexane	50.0	51.6		ug/L		103	69 - 130
Chloromethane	50.0	43.3		ug/L		87	58 - 137
cis-1,2-Dichloroethene	50.0	49.8		ug/L		100	68 - 130
cis-1,3-Dichloropropene	50.0	42.8		ug/L		86	69 - 132
Dibromochloromethane	50.0	46.1		ug/L		92	67 - 135
1,2-Dichlorobenzene	50.0	47.2		ug/L		94	67 - 130
1,3-Dichlorobenzene	50.0	47.1		ug/L		94	70 - 130
1,4-Dichlorobenzene	50.0	46.7		ug/L		93	70 - 130
Dichlorodifluoromethane	50.0	44.1		ug/L		88	41 - 146
1,1-Dichloroethane	50.0	59.2		ug/L		118	70 - 130
1,2-Dichloroethane	50.0	50.1		ug/L		100	69 - 130
1,1-Dichloroethene	50.0	36.2		ug/L		72	63 - 134
1,2-Dichloropropane	50.0	48.4		ug/L		97	70 - 130
1,3-Dichloropropane	50.0	51.1		ug/L		102	70 - 130
2,2-Dichloropropane	50.0	45.8		ug/L		92	52 - 135
1,1-Dichloropropene	50.0	44.6		ug/L		89	70 - 130
Ethylbenzene	50.0	46.8		ug/L		94	70 - 130
Ethyl methacrylate	50.0	51.7		ug/L		103	68 - 130
Hexachlorobutadiene	50.0	49.4		ug/L		99	53 - 140
2-Hexanone	200	254		ug/L		127	65 - 137
Isopropy benzene	50.0	45.6		ug/L		91	70 - 130
Methylene bromide	50.0	46.8		ug/L		94	70 - 130
Methylene Chloride	50.0	51.5		ug/L		103	66 - 135
4-Methyl-2-pentanone (MIBK)	200	222		ug/L		111	69 - 138
Methyl tert-butyl ether	50.0	54.1		ug/L		108	66 - 130
m-Xylene & p-Xylene	50.0	45.9		ug/L		92	70 - 130
Naphthalene	50.0	49.1		ug/L		98	47 - 149
n-Butylbenzene	50.0	47.9		ug/L		96	67 - 130
N-Propylbenzene	50.0	48.2		ug/L		96	70 - 130
o-Chlorotoluene	50.0	47.6		ug/L		95	70 - 130
o-Xylene	50.0	44.7		ug/L		89	70 - 130
p-Chlorotoluene	50.0	49.7		ug/L		99	70 - 130
p-Isopropyltoluene	50.0	47.0		ug/L		94	65 - 130
sec-Butylbenzene	50.0	48.9		ug/L		98	66 - 130
Styrene	50.0	44.5		ug/L		89	70 - 130
tert-Butylbenzene	50.0	48.4		ug/L		97	64 - 139
1,1,1,2-Tetrachloroethane	50.0	46.1		ug/L		92	67 - 131
1,1,2,2-Tetrachloroethane	50.0	54.0		ug/L		108	70 - 131
Tetrachloroethene	50.0	43.2		ug/L		86	65 - 130
Toluene	50.0	45.2		ug/L		90	70 - 130
trans-1,2-Dichloroethene	50.0	53.6		ug/L		107	70 - 130
trans-1,3-Dichloropropene	50.0	50.1		ug/L		100	63 - 130
1,2,3-Trichlorobenzene	50.0	47.3		ug/L		95	60 - 138
1,2,4-Trichlorobenzene	50.0	47.3		ug/L		95	60 - 140
1,1,1-Trichloroethane	50.0	45.2		ug/L		90	68 - 130
1,1,2-Trichloroethane	50.0	50.3		ug/L		101	70 - 130
Trichloroethene	50.0	42.3		ug/L		85	70 - 130
Trichlorofluoromethane	50.0	39.7		ug/L		79	65 - 138

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 400-640996/1002
Matrix: Water
Analysis Batch: 640996

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	54.8		ug/L		110	70 - 130
1,2,4-Trimethy benzene	50.0	46.4		ug/L		93	70 - 130
1,3,5-Trimethy benzene	50.0	47.3		ug/L		95	69 - 130
Vinyl acetate	100	120		ug/L		120	26 - 160
Vinyl chloride	50.0	41.9		ug/L		84	59 - 136
Xylenes, Total	100	90.6		ug/L		91	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*108*		*72 - 130*
Dibromofluoromethane	*103*		*75 - 126*
Toluene-d8 (Surr)	*104*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-640651/1-A
Matrix: Water
Analysis Batch: 641239

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640651

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		09/12/23 10:32	09/15/23 17:33	1
Benzenethiol	ND		10	1.7	ug/L		09/12/23 10:32	09/15/23 17:33	1
Benzoic acid	ND		30	7.3	ug/L		09/12/23 10:32	09/15/23 17:33	1
Benzyl alcohol	ND		10	2.0	ug/L		09/12/23 10:32	09/15/23 17:33	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		09/12/23 10:32	09/15/23 17:33	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		09/12/23 10:32	09/15/23 17:33	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		09/12/23 10:32	09/15/23 17:33	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		09/12/23 10:32	09/15/23 17:33	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		09/12/23 10:32	09/15/23 17:33	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		09/12/23 10:32	09/15/23 17:33	1
4-Chloroaniline	ND		10	3.4	ug/L		09/12/23 10:32	09/15/23 17:33	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		09/12/23 10:32	09/15/23 17:33	1
2-Chloronaphthalene	ND		10	0.14	ug/L		09/12/23 10:32	09/15/23 17:33	1
2-Chlorophenol	ND		10	2.2	ug/L		09/12/23 10:32	09/15/23 17:33	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		09/12/23 10:32	09/15/23 17:33	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		09/12/23 10:32	09/15/23 17:33	1
Dibenzofuran	ND		10	0.17	ug/L		09/12/23 10:32	09/15/23 17:33	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		09/12/23 10:32	09/15/23 17:33	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		09/12/23 10:32	09/15/23 17:33	1
Diethyl phthalate	ND		10	0.24	ug/L		09/12/23 10:32	09/15/23 17:33	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		09/12/23 10:32	09/15/23 17:33	1
Dimethyl phthalate	ND		10	0.17	ug/L		09/12/23 10:32	09/15/23 17:33	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		09/12/23 10:32	09/15/23 17:33	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		09/12/23 10:32	09/15/23 17:33	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		09/12/23 10:32	09/15/23 17:33	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		09/12/23 10:32	09/15/23 17:33	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		09/12/23 10:32	09/15/23 17:33	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		09/12/23 10:32	09/15/23 17:33	1
1,4-Dioxane	ND		10	1.0	ug/L		09/12/23 10:32	09/15/23 17:33	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-640651/1-A
Matrix: Water
Analysis Batch: 641239

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640651

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		09/12/23 10:32	09/15/23 17:33	1
Hexachlorobenzene	ND		10	0.17	ug/L		09/12/23 10:32	09/15/23 17:33	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/12/23 10:32	09/15/23 17:33	1
Hexachloroethane	ND		10	4.2	ug/L		09/12/23 10:32	09/15/23 17:33	1
Indene	ND		10	1.0	ug/L		09/12/23 10:32	09/15/23 17:33	1
Isophorone	ND		10	0.14	ug/L		09/12/23 10:32	09/15/23 17:33	1
2-Methylphenol	ND		10	1.8	ug/L		09/12/23 10:32	09/15/23 17:33	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		09/12/23 10:32	09/15/23 17:33	1
2-Nitroaniline	ND		10	2.2	ug/L		09/12/23 10:32	09/15/23 17:33	1
3-Nitroaniline	ND		10	1.8	ug/L		09/12/23 10:32	09/15/23 17:33	1
4-Nitroaniline	ND		10	1.5	ug/L		09/12/23 10:32	09/15/23 17:33	1
Nitrobenzene	ND		10	0.13	ug/L		09/12/23 10:32	09/15/23 17:33	1
2-Nitrophenol	ND		10	5.2	ug/L		09/12/23 10:32	09/15/23 17:33	1
4-Nitrophenol	ND		10	2.1	ug/L		09/12/23 10:32	09/15/23 17:33	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		09/12/23 10:32	09/15/23 17:33	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		09/12/23 10:32	09/15/23 17:33	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		09/12/23 10:32	09/15/23 17:33	1
Pentachlorophenol	ND		20	1.4	ug/L		09/12/23 10:32	09/15/23 17:33	1
Phenol	ND		10	2.6	ug/L		09/12/23 10:32	09/15/23 17:33	1
Pyridine	ND		10	3.2	ug/L		09/12/23 10:32	09/15/23 17:33	1
Quinoline	ND		10	4.5	ug/L		09/12/23 10:32	09/15/23 17:33	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		09/12/23 10:32	09/15/23 17:33	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		09/12/23 10:32	09/15/23 17:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*64*		*46 - 124*	*09/12/23 10:32*	*09/15/23 17:33*	*1*
2-Fluorophenol	*3*	*S1-*	*13 - 113*	*09/12/23 10:32*	*09/15/23 17:33*	*1*
Nitrobenzene-d5	*54*		*36 - 126*	*09/12/23 10:32*	*09/15/23 17:33*	*1*
Phenol-d5	*8*	*S1-*	*17 - 127*	*09/12/23 10:32*	*09/15/23 17:33*	*1*
Terphenyl-d14	*68*		*44 - 149*	*09/12/23 10:32*	*09/15/23 17:33*	*1*
2,4,6-Tribromophenol	*37*		*26 - 150*	*09/12/23 10:32*	*09/15/23 17:33*	*1*

Lab Sample ID: LCS 400-640651/17-A
Matrix: Water
Analysis Batch: 641055

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640651

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	2.31	J *-	ug/L		2	10 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*70*		*46 - 124*
2-Fluorophenol	*24*		*13 - 113*
Nitrobenzene-d5	*63*		*36 - 126*
Phenol-d5	*49*		*17 - 127*
Terphenyl-d14	*90*		*44 - 149*
2,4,6-Tribromophenol	*55*		*26 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-640651/2-A
Matrix: Water
Analysis Batch: 641239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640651

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	ND	*-	ug/L		2	21 - 120
Benzoic acid	522	49.0	*-	ug/L		9	10 - 144
Benzyl alcohol	120	72.4		ug/L		60	28 - 120
Bis(2-chloroethoxy)methane	120	70.9		ug/L		59	47 - 120
Bis(2-chloroethyl)ether	120	138		ug/L		115	44 - 120
bis (2-chloroisopropyl) ether	120	55.8		ug/L		46	33 - 121
Bis(2-ethylhexyl) phthalate	120	93.0		ug/L		78	52 - 147
4-Bromophenyl phenyl ether	120	82.1		ug/L		68	54 - 122
Butyl benzyl phthalate	120	91.8		ug/L		76	54 - 133
4-Chloroaniline	120	68.1		ug/L		57	26 - 120
4-Chloro-3-methylphenol	120	82.8		ug/L		69	48 - 131
2-Chloronaphthalene	120	81.3		ug/L		68	52 - 121
2-Chlorophenol	120	56.4		ug/L		47	40 - 120
4-Chlorophenyl phenyl ether	120	85.5		ug/L		71	56 - 125
Dibenz[a,h]acridine	120	122		ug/L		102	31 - 150
Dibenzofuran	120	86.4		ug/L		72	56 - 122
3,3'-Dichlorobenzidine	160	104		ug/L		65	36 - 132
2,4-Dichlorophenol	120	76.0		ug/L		63	49 - 120
Diethyl phthalate	120	94.4		ug/L		79	50 - 137
2,4-Dimethylphenol	120	78.4		ug/L		65	48 - 120
Dimethyl phthalate	120	85.6		ug/L		71	57 - 124
Di-n-butyl phthalate	120	96.5		ug/L		80	58 - 126
4,6-Dinitro-ortho-cresol	240	168		ug/L		70	23 - 148
2,4-Dinitrophenol	240	123		ug/L		51	10 - 150
2,4-Dinitrotoluene	120	92.3		ug/L		77	54 - 142
2,6-Dinitrotoluene	120	83.7		ug/L		70	55 - 130
Di-n-octyl phthalate	120	97.4		ug/L		81	57 - 138
1,4-Dioxane	120	46.8		ug/L		39	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	73.6		ug/L		61	45 - 124
Hexachlorobenzene	120	84.8		ug/L		71	52 - 129
Hexachlorocyclopentadiene	120	35.3		ug/L		29	10 - 134
Hexachloroethane	120	78.1		ug/L		65	20 - 120
Indene	120	81.6		ug/L		68	49 - 120
Isophorone	120	71.4		ug/L		60	48 - 120
2-Methylphenol	120	81.0		ug/L		68	46 - 124
3 & 4 Methylphenol	120	75.2		ug/L		63	45 - 120
2-Nitroaniline	120	72.7		ug/L		61	51 - 145
3-Nitroaniline	120	66.7		ug/L		56	37 - 127
4-Nitroaniline	120	85.3		ug/L		71	36 - 137
Nitrobenzene	120	71.0		ug/L		59	45 - 120
2-Nitrophenol	120	77.2		ug/L		64	40 - 124
4-Nitrophenol	240	184		ug/L		77	23 - 146
N-Nitrosodimethylamine	120	54.6		ug/L		45	29 - 137
N-Nitrosodi-n-propylamine	120	75.8		ug/L		63	45 - 120
N-Nitrosodiphenylamine	119	79.4		ug/L		67	54 - 120
Pentachlorophenol	240	169		ug/L		70	31 - 130
Phenol	120	58.2		ug/L		49	11 - 120
Pyridine	240	98.8		ug/L		41	16 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-640651/2-A
Matrix: Water
Analysis Batch: 641239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640651

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Quinoline			120	87.2		ug/L		73	49 - 130		
2,4,5-Trichlorophenol			120	81.3		ug/L		68	51 - 136		
2,4,6-Trichlorophenol			120	81.0		ug/L		67	50 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*46 - 124*
2-Fluorophenol	*22*		*13 - 113*
Nitrobenzene-d5	*64*		*36 - 126*
Phenol-d5	*44*		*17 - 127*
Terphenyl-d14	*69*		*44 - 149*
2,4,6-Tribromophenol	*68*		*26 - 150*

Lab Sample ID: LCSD 400-640651/18-A
Matrix: Water
Analysis Batch: 641055

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640651

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	3.07	J *-	ug/L		3	10 - 120	28	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*69*		*46 - 124*
2-Fluorophenol	*38*		*13 - 113*
Nitrobenzene-d5	*61*		*36 - 126*
Phenol-d5	*56*		*17 - 127*
Terphenyl-d14	*81*		*44 - 149*
2,4,6-Tribromophenol	*62*		*26 - 150*

Lab Sample ID: LCSD 400-640651/3-A
Matrix: Water
Analysis Batch: 641239

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640651

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	ND	*-	ug/L		2	21 - 120	4	30
Benzoic acid			522	18.4	J *- *1	ug/L		4	10 - 144	91	30
Benzyl alcohol			120	82.4		ug/L		69	28 - 120	13	30
Bis(2-chloroethoxy)methane			120	74.7		ug/L		62	47 - 120	5	30
Bis(2-chloroethyl)ether			120	153	*+	ug/L		127	44 - 120	10	30
bis (2-chloroisopropyl) ether			120	62.0		ug/L		52	33 - 121	11	30
Bis(2-ethylhexyl) phthalate			120	100		ug/L		83	52 - 147	7	30
4-Bromophenyl phenyl ether			120	90.2		ug/L		75	54 - 122	9	30
Butyl benzyl phthalate			120	101		ug/L		84	54 - 133	10	30
4-Chloroaniline			120	76.4		ug/L		64	26 - 120	12	30
4-Chloro-3-methylphenol			120	88.1		ug/L		73	48 - 131	6	30
2-Chloronaphthalene			120	93.5		ug/L		78	52 - 121	14	30
2-Chlorophenol			120	50.6		ug/L		42	40 - 120	11	30
4-Chlorophenyl phenyl ether			120	94.9		ug/L		79	56 - 125	10	30
Dibenz[a,h]acridine			120	132		ug/L		110	31 - 150	7	30
Dibenzofuran			120	95.5		ug/L		80	56 - 122	10	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-640651/3-A
Matrix: Water
Analysis Batch: 641239

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640651

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine			160	111		ug/L		70	36 - 132	6	30
2,4-Dichlorophenol			120	77.2		ug/L		64	49 - 120	1	30
Diethyl phthalate			120	105		ug/L		87	50 - 137	10	30
2,4-Dimethylphenol			120	82.9		ug/L		69	48 - 120	6	30
Dimethyl phthalate			120	95.0		ug/L		79	57 - 124	10	30
Di-n-butyl phthalate			120	105		ug/L		87	58 - 126	8	30
4,6-Dinitro-ortho-cresol			240	188		ug/L		78	23 - 148	11	30
2,4-Dinitrophenol			240	126		ug/L		52	10 - 150	2	30
2,4-Dinitrotoluene			120	103		ug/L		86	54 - 142	11	30
2,6-Dinitrotoluene			120	93.8		ug/L		78	55 - 130	11	30
Di-n-octyl phthalate			120	107		ug/L		89	57 - 138	10	30
1,4-Dioxane			120	40.1		ug/L		33	31 - 120	15	30
1,2-Diphenylhydrazine (as Azobenzene)			120	80.9		ug/L		67	45 - 124	9	30
Hexachlorobenzene			120	93.8		ug/L		78	52 - 129	10	30
Hexachlorocyclopentadiene			120	44.1		ug/L		37	10 - 134	22	30
Hexachloroethane			120	86.3		ug/L		72	20 - 120	10	30
Indene			120	90.5		ug/L		75	49 - 120	10	30
Isophorone			120	75.5		ug/L		63	48 - 120	6	30
2-Methylphenol			120	86.9		ug/L		72	46 - 124	7	30
3 & 4 Methylphenol			120	80.9		ug/L		67	45 - 120	7	30
2-Nitroaniline			120	81.0		ug/L		67	51 - 145	11	30
3-Nitroaniline			120	73.6		ug/L		61	37 - 127	10	30
4-Nitroaniline			120	97.4		ug/L		81	36 - 137	13	30
Nitrobenzene			120	75.0		ug/L		62	45 - 120	6	30
2-Nitrophenol			120	78.8		ug/L		66	40 - 124	2	30
4-Nitrophenol			240	208		ug/L		87	23 - 146	12	30
N-Nitrosodimethylamine			120	66.0		ug/L		55	29 - 137	19	30
N-Nitrosodi-n-propylamine			120	84.9		ug/L		71	45 - 120	11	30
N-Nitrosodiphenylamine			119	87.9		ug/L		74	54 - 120	10	30
Pentachlorophenol			240	182		ug/L		76	31 - 130	7	30
Phenol			120	59.5		ug/L		50	11 - 120	2	30
Pyridine			240	112		ug/L		47	16 - 120	12	30
Quinoline			120	93.2		ug/L		78	49 - 130	7	30
2,4,5-Trichlorophenol			120	91.1		ug/L		76	51 - 136	11	30
2,4,6-Trichlorophenol			120	88.3		ug/L		74	50 - 127	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*70*		*46 - 124*
2-Fluorophenol	*13*		*13 - 113*
Nitrobenzene-d5	*57*		*36 - 126*
Phenol-d5	*42*		*17 - 127*
Terphenyl-d14	*73*		*44 - 149*
2,4,6-Tribromophenol	*75*		*26 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-641408/1-A
Matrix: Water
Analysis Batch: 641903

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641408

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		09/18/23 10:20	09/20/23 15:39	1
Benzenethiol	ND		10	1.7	ug/L		09/18/23 10:20	09/20/23 15:39	1
Benzoic acid	ND		30	7.3	ug/L		09/18/23 10:20	09/20/23 15:39	1
Benzyl alcohol	ND		10	2.0	ug/L		09/18/23 10:20	09/20/23 15:39	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		09/18/23 10:20	09/20/23 15:39	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		09/18/23 10:20	09/20/23 15:39	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		09/18/23 10:20	09/20/23 15:39	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		09/18/23 10:20	09/20/23 15:39	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		09/18/23 10:20	09/20/23 15:39	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		09/18/23 10:20	09/20/23 15:39	1
4-Chloroaniline	ND		10	3.4	ug/L		09/18/23 10:20	09/20/23 15:39	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		09/18/23 10:20	09/20/23 15:39	1
2-Chloronaphthalene	ND		10	0.14	ug/L		09/18/23 10:20	09/20/23 15:39	1
2-Chlorophenol	ND		10	2.2	ug/L		09/18/23 10:20	09/20/23 15:39	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		09/18/23 10:20	09/20/23 15:39	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		09/18/23 10:20	09/20/23 15:39	1
Dibenzofuran	ND		10	0.17	ug/L		09/18/23 10:20	09/20/23 15:39	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		09/18/23 10:20	09/20/23 15:39	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		09/18/23 10:20	09/20/23 15:39	1
Diethyl phthalate	ND		10	0.24	ug/L		09/18/23 10:20	09/20/23 15:39	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		09/18/23 10:20	09/20/23 15:39	1
Dimethyl phthalate	ND		10	0.17	ug/L		09/18/23 10:20	09/20/23 15:39	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		09/18/23 10:20	09/20/23 15:39	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		09/18/23 10:20	09/20/23 15:39	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		09/18/23 10:20	09/20/23 15:39	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		09/18/23 10:20	09/20/23 15:39	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		09/18/23 10:20	09/20/23 15:39	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		09/18/23 10:20	09/20/23 15:39	1
1,4-Dioxane	ND		10	1.0	ug/L		09/18/23 10:20	09/20/23 15:39	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		09/18/23 10:20	09/20/23 15:39	1
Hexachlorobenzene	ND		10	0.17	ug/L		09/18/23 10:20	09/20/23 15:39	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/18/23 10:20	09/20/23 15:39	1
Hexachloroethane	ND		10	4.2	ug/L		09/18/23 10:20	09/20/23 15:39	1
Indene	ND		10	1.0	ug/L		09/18/23 10:20	09/20/23 15:39	1
Isophorone	ND		10	0.14	ug/L		09/18/23 10:20	09/20/23 15:39	1
2-Methylphenol	ND		10	1.8	ug/L		09/18/23 10:20	09/20/23 15:39	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		09/18/23 10:20	09/20/23 15:39	1
2-Nitroaniline	ND		10	2.2	ug/L		09/18/23 10:20	09/20/23 15:39	1
3-Nitroaniline	ND		10	1.8	ug/L		09/18/23 10:20	09/20/23 15:39	1
4-Nitroaniline	ND		10	1.5	ug/L		09/18/23 10:20	09/20/23 15:39	1
Nitrobenzene	ND		10	0.13	ug/L		09/18/23 10:20	09/20/23 15:39	1
2-Nitrophenol	ND		10	5.2	ug/L		09/18/23 10:20	09/20/23 15:39	1
4-Nitrophenol	ND		10	2.1	ug/L		09/18/23 10:20	09/20/23 15:39	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		09/18/23 10:20	09/20/23 15:39	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		09/18/23 10:20	09/20/23 15:39	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		09/18/23 10:20	09/20/23 15:39	1
Pentachlorophenol	ND		20	1.4	ug/L		09/18/23 10:20	09/20/23 15:39	1
Phenol	ND		10	2.6	ug/L		09/18/23 10:20	09/20/23 15:39	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-641408/1-A
Matrix: Water
Analysis Batch: 641903

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641408

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	ND		10	3.2	ug/L		09/18/23 10:20	09/20/23 15:39	1
Quinoline	ND		10	4.5	ug/L		09/18/23 10:20	09/20/23 15:39	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		09/18/23 10:20	09/20/23 15:39	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		09/18/23 10:20	09/20/23 15:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*46 - 124*	*09/18/23 10:20*	*09/20/23 15:39*	*1*
2-Fluorophenol	*9*	*S1-*	*13 - 113*	*09/18/23 10:20*	*09/20/23 15:39*	*1*
Nitrobenzene-d5	*58*		*36 - 126*	*09/18/23 10:20*	*09/20/23 15:39*	*1*
Phenol-d5	*36*		*17 - 127*	*09/18/23 10:20*	*09/20/23 15:39*	*1*
Terphenyl-d14	*93*		*44 - 149*	*09/18/23 10:20*	*09/20/23 15:39*	*1*
2,4,6-Tribromophenol	*60*		*26 - 150*	*09/18/23 10:20*	*09/20/23 15:39*	*1*

Lab Sample ID: LCS 400-641408/4-A
Matrix: Water
Analysis Batch: 641903

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641408

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	2.29	J *-	ug/L		2	10 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*69*		*46 - 124*
2-Fluorophenol	*15*		*13 - 113*
Nitrobenzene-d5	*58*		*36 - 126*
Phenol-d5	*36*		*17 - 127*
Terphenyl-d14	*95*		*44 - 149*
2,4,6-Tribromophenol	*41*		*26 - 150*

Lab Sample ID: LCSD 400-641408/5-A
Matrix: Water
Analysis Batch: 641903

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 641408

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	9.47	J *- *1	ug/L		8	10 - 120	122	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*46 - 124*
2-Fluorophenol	*27*		*13 - 113*
Nitrobenzene-d5	*54*		*36 - 126*
Phenol-d5	*44*		*17 - 127*
Terphenyl-d14	*87*		*44 - 149*
2,4,6-Tribromophenol	*52*		*26 - 150*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-640651/1-A
Matrix: Water
Analysis Batch: 641154

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640651

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		09/12/23 10:32	09/15/23 16:40	1
Acenaphthylene	ND		0.20	0.044	ug/L		09/12/23 10:32	09/15/23 16:40	1
Anthracene	ND		0.20	0.047	ug/L		09/12/23 10:32	09/15/23 16:40	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		09/12/23 10:32	09/15/23 16:40	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		09/12/23 10:32	09/15/23 16:40	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		09/12/23 10:32	09/15/23 16:40	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		09/12/23 10:32	09/15/23 16:40	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		09/12/23 10:32	09/15/23 16:40	1
Chrysene	ND		0.20	0.033	ug/L		09/12/23 10:32	09/15/23 16:40	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		09/12/23 10:32	09/15/23 16:40	1
Fluoranthene	ND		0.20	0.034	ug/L		09/12/23 10:32	09/15/23 16:40	1
Fluorene	ND		0.20	0.089	ug/L		09/12/23 10:32	09/15/23 16:40	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		09/12/23 10:32	09/15/23 16:40	1
Phenanthrene	ND		0.20	0.090	ug/L		09/12/23 10:32	09/15/23 16:40	1
Pyrene	ND		0.20	0.039	ug/L		09/12/23 10:32	09/15/23 16:40	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		09/12/23 10:32	09/15/23 16:40	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		09/12/23 10:32	09/15/23 16:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*94*		*18 - 147*	*09/12/23 10:32*	*09/15/23 16:40*	*1*
2-Fluorobiphenyl	*75*		*15 - 128*	*09/12/23 10:32*	*09/15/23 16:40*	*1*
Nitrobenzene-d5	*69*		*10 - 144*	*09/12/23 10:32*	*09/15/23 16:40*	*1*

Lab Sample ID: LCS 400-640651/19-A
Matrix: Water
Analysis Batch: 641090

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640651

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	2.00	1.64		ug/L		82	40 - 140
Acenaphthylene	2.00	1.79		ug/L		89	40 - 140
Anthracene	2.00	1.55		ug/L		77	40 - 140
Benzo[a]anthracene	2.00	1.74		ug/L		87	40 - 140
Benzo[a]pyrene	2.00	1.41		ug/L		71	40 - 140
Benzo[b]fluoranthene	2.00	1.55		ug/L		78	40 - 140
Benzo[g,h,i]perylene	2.00	1.54		ug/L		77	40 - 140
Benzo[k]fluoranthene	2.00	1.60		ug/L		80	40 - 140
Chrysene	2.00	1.73		ug/L		87	40 - 140
Dibenz(a,h)anthracene	2.00	1.37		ug/L		69	40 - 140
Fluoranthene	2.00	1.78		ug/L		89	40 - 140
Fluorene	2.00	1.67		ug/L		83	40 - 140
Indeno[1,2,3-cd]pyrene	2.00	1.45		ug/L		73	40 - 140
Phenanthrene	2.00	1.52		ug/L		76	40 - 140
Pyrene	2.00	1.72		ug/L		86	40 - 140
1-Methylnaphthalene	2.00	1.74		ug/L		87	40 - 140
2-Methylnaphthalene	2.00	1.78		ug/L		89	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*112*		*18 - 147*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 400-640651/19-A
Matrix: Water
Analysis Batch: 641090

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640651

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	91		15 - 128
Nitrobenzene-d5	66		10 - 144

Lab Sample ID: LCSD 400-640651/20-A
Matrix: Water
Analysis Batch: 641090

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640651

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			2.00	1.63		ug/L		81	40 - 140	1	40
Acenaphthylene			2.00	1.75		ug/L		87	40 - 140	2	40
Anthracene			2.00	1.57		ug/L		79	40 - 140	1	40
Benzo[a]anthracene			2.00	1.82		ug/L		91	40 - 140	4	40
Benzo[a]pyrene			2.00	1.43		ug/L		72	40 - 140	2	40
Benzo[b]fluoranthene			2.00	1.46		ug/L		73	40 - 140	6	40
Benzo[g,h,i]perylene			2.00	1.47		ug/L		74	40 - 140	4	40
Benzo[k]fluoranthene			2.00	1.54		ug/L		77	40 - 140	4	40
Chrysene			2.00	1.72		ug/L		86	40 - 140	1	40
Dibenz(a,h)anthracene			2.00	1.34		ug/L		67	40 - 140	2	40
Fluoranthene			2.00	1.82		ug/L		91	40 - 140	3	40
Fluorene			2.00	1.63		ug/L		82	40 - 140	2	40
Indeno[1,2,3-cd]pyrene			2.00	1.44		ug/L		72	40 - 140	1	40
Phenanthrene			2.00	1.54		ug/L		77	40 - 140	1	40
Pyrene			2.00	1.71		ug/L		85	40 - 140	1	40
1-Methylnaphthalene			2.00	1.83		ug/L		91	40 - 140	5	40
2-Methylnaphthalene			2.00	1.86		ug/L		93	40 - 140	4	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	112		18 - 147
2-Fluorobiphenyl	94		15 - 128
Nitrobenzene-d5	67		10 - 144

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-640625/1-A
Matrix: Water
Analysis Batch: 640659

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640625

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/12/23 08:25	09/12/23 17:29	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/12/23 08:25	09/12/23 17:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91		51 - 149	09/12/23 08:25	09/12/23 17:29	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCS 400-640625/2-A
Matrix: Water
Analysis Batch: 640659

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640625

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-D bromo-3-Chloropropane			0.101	0.0964		ug/L		96	60 - 140		
1,2-D bromoethane			0.101	0.0962		ug/L		95	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*82*		*51 - 149*

Lab Sample ID: LCSD 400-640625/3-A
Matrix: Water
Analysis Batch: 640659

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640625

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane			0.101	0.0991		ug/L		99	60 - 140	3	30
1,2-D bromoethane			0.101	0.101		ug/L		100	60 - 140	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*51 - 149*

LAB (LOCATION)

400-242975 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: 9/5/2023
PO #	**GSAP Project ID**	PAGE: 1 of 1
60697537 – 3.3.2	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 – 3.3.2

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): S. Beadle, 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; loredana.fillmon@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°: 3.3 IR/D

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-090523-8260	9/5/2023	0000	Water	2					2	X			
	TB-ROX-090523-8011	9/5/2023	0000	Water	2					2		X		
	MW27-ROX-090523	9/5/2023	0850	Water	6			2		8	X	X	X	X
	MW9-ROX-090523	9/5/2023	0950	Water	6			2		8	X	X	X	X
	MW10-ROX-090523	9/5/2023	1045	Water	6			2		8	X	X	X	X
	MW2-ROX-090523	9/5/2023	1215	Water	6			2		8	X	X	X	X

9/5/23

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
SAM BEADLE	FEDEX: 5293 4337 5445	9/5/2023	1600
Relinquished by: (Signature)	Received by: (Signature)	Date: 9.6.23	Time: 9:09
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 12July23

CUSTODY SEALS: 1599782, 1599783

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-242975-1

Login Number: 242975
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	3.3°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: 400-242975-1
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	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	12-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-23
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 Monthly August/September 2023 Data Review

Laboratory SDG: 400-243066-1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Cheyana Cokley

Date Reviewed: 10/4/2023

Guidance: USEPA National Functional Guidelines for Organic Superfund Methods Data Review 2020

Sample Identification	Sample Identification
TB-ROX-090623-8260-A	TB-ROX-090623-8011-A
MW4-ROX-090623-EB	MW4-ROX-090623
MW25-ROX-090623	MW7-ROX-090623
MW7-ROX-090623-DUP	TB-ROX-090623-8260-B
TB-ROX-090623-8011-B	P59-ROX-090623
P58-ROX-090623	P58-ROX-090623-DUP
P93B-ROX-090623	--

1.0 Data Package Completeness

Were all items delivered as specified in the QAPP and COC as appropriate?

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

Were problems noted in the laboratory case narrative or cooler receipt form?

Yes, the laboratory case narrative indicated several 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. MS/MSD recoveries for bromoform, 2-chloroethyl vinyl ether, and 1,1,2,2-tetrachloroethane were outside evaluation criteria in sample MW4-ROX-090623. Several PAHs and phenol in field duplicate pair P58-ROX-090623/P58-ROX-090623-DUP were qualified as estimated (**J**) due to field duplicate RPD above evaluation criteria. VOCs, SVOCs, and PAHs in several samples were diluted to bring target analytes into the calibration range of the instrument. The initial calibration verification (ICV) for 4,6-dinitro-ortho-cresol and 3,3'-dichlorobenzidine, and 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/LCSD 400-640651/17-A/18-A	SVOCs	Benzenethiol	**2/3**	28	10-120/30
LCS/LCSD 400-640651/2-A/3-A	SVOCs	Aniline	**2/2**	4	21-120/30
LCS/LCSD 400-640651/2-A/3-A	SVOCs	Benzoic acid	**9/4**	**91**	10-144/30
LCS/LCSD 400-640651/2-A/3-A	SVOCs	Bis(2-chloroethyl)ether	115/**127**	10	44-120/30

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, aniline, and benzoic acid below evaluation criteria; benzenethiol, aniline, and benzoic acid have been identified as poor performing analytes under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW4-ROX-090623	SVOCs	Benzenethiol	**UJ**
MW25-ROX-090623	SVOCs	Benzenethiol	**UJ**
MW7-ROX-090623	SVOCs	Benzenethiol	**UJ**
MW7-ROX-090623-DUP	SVOCs	Benzenethiol	**UJ**
P59-ROX-090623	SVOCs	Benzenethiol	**UJ**
P58-ROX-090623	SVOCs	Benzenethiol	**UJ**
P58-ROX-090623-DUP	SVOCs	Benzenethiol	**UJ**
P93B-ROX-090623	SVOCs	Benzenethiol	**UJ**
MW4-ROX-090623	SVOCs	Aniline	**UJ**
MW25-ROX-090623	SVOCs	Aniline	**UJ**
MW7-ROX-090623	SVOCs	Aniline	**UJ**
MW7-ROX-090623-DUP	SVOCs	Aniline	**UJ**
P59-ROX-090623	SVOCs	Aniline	**UJ**
P58-ROX-090623	SVOCs	Aniline	**UJ**
P58-ROX-090623-DUP	SVOCs	Aniline	**UJ**
P93B-ROX-090623	SVOCs	Aniline	**UJ**
MW4-ROX-090623	SVOCs	Benzoic acid	**UJ**
MW25-ROX-090623	SVOCs	Benzoic acid	**UJ**
MW7-ROX-090623	SVOCs	Benzoic acid	**UJ**
MW7-ROX-090623-DUP	SVOCs	Benzoic acid	**UJ**
P59-ROX-090623	SVOCs	Benzoic acid	**UJ**

Sample ID	Parameter	Analyte	Qualification
P58-ROX-090623	SVOCs	Benzoic acid	**UJ**
P58-ROX-090623-DUP	SVOCs	Benzoic acid	**UJ**
P93B-ROX-090623	SVOCs	Benzoic acid	**J**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW4-ROX-090623-EB	SVOCs	2-Fluorophenol	**10**	13-113
MW4-ROX-090623	SVOCs	2-Fluorobiphenyl	**45**	46-124
MW4-ROX-090623	SVOCs	2-Fluorophenol	**10**	13-113
MW7-ROX-090623	SVOCs	Terphenyl-d14	**30**	44-149
P59-ROX-090623	SVOCs	2-Fluorophenol	**4**	13-113
P58-ROX-090623	SVOCs	2-Fluorophenol	**7**	13-113
P58-ROX-090623-DUP	SVOCs	Terphenyl-d14	**29**	44-149
MB 400-640651/1-A	SVOCs	2-Fluorophenol	**3**	13-113
MB 400-640651/1-A	SVOCs	Phenol-d5	**8**	17-127

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.

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-090623 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
MW4-ROX-090623 MS/MSD	VOCs	Bromoform	**146**/122	17	50-140/30
MW4-ROX-090623 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW4-ROX-090623 MS/MSD	VOCs	1,1,2,2-Tetrachloroethane	**144**/121	17	66-135/30

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 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
MW4-ROX-090623	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
MW7-ROX-090623	MW7-ROX-090623-DUP
P58-ROX-090623	P58-ROX-090623-DUP

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
P58-ROX-090623	P58-ROX-090623-DUP	PAHs	1-Methylnaphthalene	**31**	**J/J**
P58-ROX-090623	P58-ROX-090623-DUP	PAHs	2-Methylnaphthalene	**35**	**J/J**
P58-ROX-090623	P58-ROX-090623-DUP	SVOCs	Phenol	**43**	**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.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the initial calibration verifications (ICV) for 4,6-dinitro-ortho-cresol, and 3,3'-dichlorobenzidine and the continuing calibration verifications (CCV) for dichlorodifluoromethane, bromomethane, 2-chloroethyl vinyl ether, hexachlorocyclopentadiene, and 1,4-dioxane were outside evaluation criteria, biased low. 2-Chloroethyl vinyl ether in sample MW4-ROX-090623 was qualified in Section 7.0 of this data review due to MS/MSD recoveries outside evaluation criteria; no further qualification is required. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW4-ROX-090623	VOCs	Dichlorodifluoromethane	**UJ**
MW4-ROX-090623	VOCs	Bromomethane	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW25-ROX-090623	VOCs	Dichlorodifluoromethane	UJ
MW25-ROX-090623	VOCs	Bromomethane	UJ
MW25-ROX-090623	VOCs	2-Chloroethyl vinyl ether	UJ
P59-ROX-090623	VOCs	Dichlorodifluoromethane	UJ
P59-ROX-090623	VOCs	Bromomethane	UJ
P59-ROX-090623	VOCs	2-Chloroethyl vinyl ether	UJ
P93B-ROX-090623	VOCs	Dichlorodifluoromethane	UJ
P93B-ROX-090623	VOCs	Bromomethane	UJ
P93B-ROX-090623	VOCs	2-Chloroethyl vinyl ether	UJ
MW7-ROX-090623	VOCs	Dichlorodifluoromethane	UJ
MW7-ROX-090623	VOCs	Bromomethane	UJ
MW7-ROX-090623	VOCs	2-Chloroethyl vinyl ether	UJ
MW7-ROX-090623-DUP	VOCs	Dichlorodifluoromethane	UJ
MW7-ROX-090623-DUP	VOCs	Bromomethane	UJ
MW7-ROX-090623-DUP	VOCs	2-Chloroethyl vinyl ether	UJ
P58-ROX-090623	VOCs	Dichlorodifluoromethane	UJ
P58-ROX-090623	VOCs	Bromomethane	UJ
P58-ROX-090623-DUP	VOCs	Dichlorodifluoromethane	UJ
P58-ROX-090623-DUP	VOCs	Bromomethane	UJ
MW4-ROX-090623	SVOCs	4,6-Dinitro-ortho-cresol	UJ
MW4-ROX-090623	SVOCs	3,3'-Dichlorobenzidine	UJ
MW4-ROX-090623	SVOCs	Hexachlorocyclopentadiene	UJ
MW7-ROX-090623	SVOCs	4,6-Dinitro-ortho-cresol	UJ
MW7-ROX-090623	SVOCs	3,3'-Dichlorobenzidine	UJ
MW7-ROX-090623	SVOCs	Hexachlorocyclopentadiene	UJ
MW7-ROX-090623-DUP	SVOCs	4,6-Dinitro-ortho-cresol	UJ
MW7-ROX-090623-DUP	SVOCs	3,3'-Dichlorobenzidine	UJ
MW7-ROX-090623-DUP	SVOCs	Hexachlorocyclopentadiene	UJ
P59-ROX-090623	SVOCs	4,6-Dinitro-ortho-cresol	UJ
P59-ROX-090623	SVOCs	3,3'-Dichlorobenzidine	UJ
P59-ROX-090623	SVOCs	Hexachlorocyclopentadiene	UJ
P58-ROX-090623	SVOCs	4,6-Dinitro-ortho-cresol	UJ
P58-ROX-090623	SVOCs	3,3'-Dichlorobenzidine	UJ
P58-ROX-090623	SVOCs	Hexachlorocyclopentadiene	UJ
P58-ROX-090623-DUP	SVOCs	4,6-Dinitro-ortho-cresol	UJ
P58-ROX-090623-DUP	SVOCs	3,3'-Dichlorobenzidine	UJ
P58-ROX-090623-DUP	SVOCs	Hexachlorocyclopentadiene	UJ
P93B-ROX-090623	SVOCs	4,6-Dinitro-ortho-cresol	UJ
P93B-ROX-090623	SVOCs	3,3'-Dichlorobenzidine	UJ
P93B-ROX-090623	SVOCs	Hexachlorocyclopentadiene	UJ
MW25-ROX-090623	SVOCs	1,4-Dioxane	UJ
MW25-ROX-090623	SVOCs	Hexachlorocyclopentadiene	UJ

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ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

ROXANA MONTHLY GW

JOB NUMBER

400-243066-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

myEOL

Job Notes

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Authorization

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Job ID: 400-243066-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-243066-1

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 9/7/2023 8:21 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 2.2°C and 2.8°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-090623-8260-A (400-243066-1), MW4-ROX-090623-EB (400-243066-3), MW4-ROX-090623 (400-243066-4), MW25-ROX-090623 (400-243066-5), MW7-ROX-090623 (400-243066-6), MW7-ROX-090623-DUP (400-243066-7), TB-ROX-090623-8260-B (400-243066-8), P59-ROX-090623 (400-243066-10) and P93B-ROX-090623 (400-243066-13). The requested target analyte list includes 2-Chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-641136 recovered outside acceptance criteria, low biased, for Bromomethane,2-Chloroethyl vinyl ether 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 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-090623-8260-A (400-243066-1), MW4-ROX-090623-EB (400-243066-3), MW4-ROX-090623 (400-243066-4), MW25-ROX-090623 (400-243066-5), MW7-ROX-090623 (400-243066-6), MW7-ROX-090623-DUP (400-243066-7), TB-ROX-090623-8260-B (400-243066-8), P59-ROX-090623 (400-243066-10) and P93B-ROX-090623 (400-243066-13). The requested target analyte list includes 2-Chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Method 8260D: The matrix spike (MS) recoveries for analytical batch 400-641136 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 400-641136 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 400-641136 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-641297 recovered outside acceptance criteria, low biased, for Bromomethane 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 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: P58-ROX-090623 (400-243066-11) and

Job ID: 400-243066-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

P58-ROX-090623-DUP (400-243066-12). 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: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 400-640651.

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-640651 and analytical batch 400-641055 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 400-641055 recovered above the upper control limit for 2,4-Dinitrotoluene, 2,4,5-Trichlorophenol, 4-Nitrophenol, 4-Chlorophenyl phenyl ether, 4-Bromophenyl phenyl ether, 2-Nitrophenol and Hexachlorobenzene. 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 400-641055 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: MW4-ROX-090623-EB (400-243066-3), MW7-ROX-090623 (400-243066-6), P59-ROX-090623 (400-243066-10), P58-ROX-090623 (400-243066-11) and P58-ROX-090623-DUP (400-243066-12). 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 400-640651 and analytical batch 400-641239 recovered outside control limits for the following analyte(s): Benzoic acid. Benzoic acid 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 400-640651 and analytical batch 400-641239 recovered outside control limits for the following analytes: Benzoic acid.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-641239 recovered above the upper control limit for 4-Nitrophenol. 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 400-641239 recovered above the upper control limit for Indene. 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 400-641239 recovered outside acceptance criteria, low biased, for 1,4-Dioxane 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: Two of six surrogates for the blank associated with preparation batch 400-640651 and analytical batch 400-641239 were outside of the lower control limit. There was no evidence of lab contamination for any target analyte, therefore the data have been reported.

Job ID: 400-243066-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

Method 8270E: The following sample was diluted to bring the concentration of target analytes within the calibration range: P58-ROX-090623-DUP (400-243066-12). Elevated reporting limits (RLs) are provided.

Method 8270E_SIM: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 400-640651.

Method 8270E_SIM: The following sample was diluted to bring the concentration of target analytes within the calibration range: P58-ROX-090623 (400-243066-11). 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 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: 400-243066-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-243066-1	TB-ROX-090623-8260-A	Water	09/06/23 00:00	09/07/23 08:21
400-243066-2	TB-ROX-090623-8011-A	Water	09/06/23 00:00	09/07/23 08:21
400-243066-3	MW4-ROX-090623-EB	Water	09/06/23 08:25	09/07/23 08:21
400-243066-4	MW4-ROX-090623	Water	09/06/23 09:35	09/07/23 08:21
400-243066-5	MW25-ROX-090623	Water	09/06/23 11:00	09/07/23 08:21
400-243066-6	MW7-ROX-090623	Water	09/06/23 12:10	09/07/23 08:21
400-243066-7	MW7-ROX-090623-DUP	Water	09/06/23 12:10	09/07/23 08:21
400-243066-8	TB-ROX-090623-8260-B	Water	09/06/23 00:00	09/07/23 08:21
400-243066-9	TB-ROX-090623-8011-B	Water	09/06/23 00:00	09/07/23 08:21
400-243066-10	P59-ROX-090623	Water	09/06/23 09:05	09/07/23 08:21
400-243066-11	P58-ROX-090623	Water	09/06/23 09:55	09/07/23 08:21
400-243066-12	P58-ROX-090623-DUP	Water	09/06/23 09:55	09/07/23 08:21
400-243066-13	P93B-ROX-090623	Water	09/06/23 11:15	09/07/23 08:21

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: TB-ROX-090623-8260-A — Lab Sample ID: 400-243066-1

No Detections.

Client Sample ID: TB-ROX-090623-8011-A — Lab Sample ID: 400-243066-2

No Detections.

Client Sample ID: MW4-ROX-090623-EB — Lab Sample ID: 400-243066-3

No Detections.

Client Sample ID: MW4-ROX-090623 — Lab Sample ID: 400-243066-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.33	J	1.0	0.22	ug/L	1		8260D	Total/NA

Client Sample ID: MW25-ROX-090623 — Lab Sample ID: 400-243066-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	16		1.0	0.50	ug/L	1		8260D	Total/NA
tert-Butylbenzene	0.71	J	1.0	0.63	ug/L	1		8260D	Total/NA

Client Sample ID: MW7-ROX-090623 — Lab Sample ID: 400-243066-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene - DL	560000		5000	2500	ug/L	5000		8260D	Total/NA
Acenaphthene	0.13	J	0.20	0.097	ug/L	1		8270E SIM	Total/NA
Fluorene	0.11	J	0.20	0.087	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.13	J	0.20	0.088	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	1.0		0.20	0.078	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	1.5		0.20	0.065	ug/L	1		8270E SIM	Total/NA
Phenol	77		9.8	2.5	ug/L	1		8270E	Total/NA

Client Sample ID: MW7-ROX-090623-DUP — Lab Sample ID: 400-243066-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	460000		5000	2500	ug/L	5000		8260D	Total/NA
Fluorene	0.12	J	0.19	0.086	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.14	J	0.19	0.087	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	0.80		0.19	0.077	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	1.2		0.19	0.064	ug/L	1		8270E SIM	Total/NA
3 & 4 Methylphenol	0.45	J	19	0.38	ug/L	1		8270E	Total/NA
Phenol	83		9.6	2.5	ug/L	1		8270E	Total/NA

Client Sample ID: TB-ROX-090623-8260-B — Lab Sample ID: 400-243066-8

No Detections.

Client Sample ID: TB-ROX-090623-8011-B — Lab Sample ID: 400-243066-9

No Detections.

Client Sample ID: P59-ROX-090623 — Lab Sample ID: 400-243066-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	99		25	10	ug/L	1		8260D	Total/NA
Ethylbenzene	35		1.0	0.50	ug/L	1		8260D	Total/NA
Isopropy benzene	33		1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	75		5.0	0.63	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: P59-ROX-090623 (Continued) — Lab Sample ID: 400-243066-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	29		5.0	3.0	ug/L	1		8260D	Total/NA
n-Butylbenzene	3.9		1.0	0.76	ug/L	1		8260D	Total/NA
N-Propylbenzene	58		1.0	0.69	ug/L	1		8260D	Total/NA
o-Xylene	2.6	J	5.0	0.60	ug/L	1		8260D	Total/NA
sec-Butylbenzene	2.1		1.0	0.70	ug/L	1		8260D	Total/NA
Toluene	48		1.0	0.90	ug/L	1		8260D	Total/NA
1,2,4-Trimethy benzene	17		1.0	0.82	ug/L	1		8260D	Total/NA
1,3,5-Trimethy benzene	23		1.0	0.56	ug/L	1		8260D	Total/NA
Xylenes, Total	77		10	1.6	ug/L	1		8260D	Total/NA
Benzene - DL	890		10	5.0	ug/L	10		8260D	Total/NA
Acenaphthene	0.33		0.19	0.095	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.063	J	0.19	0.033	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.13	J	0.19	0.033	ug/L	1		8270E SIM	Total/NA
Fluorene	0.27		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	0.41		0.19	0.038	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	8.3		0.19	0.077	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	11		0.19	0.064	ug/L	1		8270E SIM	Total/NA
Phenol	2.8	J	9.6	2.5	ug/L	1		8270E	Total/NA

Client Sample ID: P58-ROX-090623 — Lab Sample ID: 400-243066-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	320000		2000	1000	ug/L	2000		8260D	Total/NA
Acenaphthene	0.46		0.19	0.093	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.059	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Fluorene	1.0		0.19	0.084	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.91		0.19	0.085	ug/L	1		8270E SIM	Total/NA
Pyrene	0.19		0.19	0.037	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	67		0.94	0.38	ug/L	5		8270E SIM	Total/NA
2-Methylnaphthalene	50		0.94	0.31	ug/L	5		8270E SIM	Total/NA
Dibenzofuran	1.5	J	9.4	0.16	ug/L	1		8270E	Total/NA
Phenol	270		9.4	2.4	ug/L	1		8270E	Total/NA

Client Sample ID: P58-ROX-090623-DUP — Lab Sample ID: 400-243066-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	330000		2000	1000	ug/L	2000		8260D	Total/NA
Acenaphthene	0.30		0.19	0.095	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.038	J	0.19	0.033	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.046	J	0.19	0.033	ug/L	1		8270E SIM	Total/NA
Fluorene	0.67		0.19	0.085	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.65		0.19	0.086	ug/L	1		8270E SIM	Total/NA
Pyrene	0.11	J	0.19	0.037	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	49		0.96	0.38	ug/L	5		8270E SIM	Total/NA
2-Methylnaphthalene	35		0.19	0.063	ug/L	1		8270E SIM	Total/NA
Dibenzofuran	1.4	J	9.6	0.16	ug/L	1		8270E	Total/NA
Phenol - DL	420		48	12	ug/L	5		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: P93B-ROX-090623 — Lab Sample ID: 400-243066-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	480000		5000	2500	ug/L	5000		8260D	Total/NA
2-Methylnaphthalene	0.075	J	0.19	0.062	ug/L	1		8270E SIM	Total/NA
Benzoic acid	18	J *- *1	28	6.9	ug/L	1		8270E	Total/NA
Bis(2-ethylhexyl) phthalate	5.1	J	9.4	4.7	ug/L	1		8270E	Total/NA
Phenol	180		9.4	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: 400-243066-1

Client Sample ID: TB-ROX-090623-8260-A
Date Collected: 09/06/23 00:00
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-1
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			09/15/23 15:52	1
Acrolein	ND		20	3.3	ug/L			09/15/23 15:52	1
Acrylonitrile	ND		10	2.8	ug/L			09/15/23 15:52	1
Benzene	ND		1.0	0.50	ug/L			09/15/23 15:52	1
Bromobenzene	ND		1.0	0.54	ug/L			09/15/23 15:52	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/15/23 15:52	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/15/23 15:52	1
Bromoform	ND		5.0	0.25	ug/L			09/15/23 15:52	1
Bromomethane	ND		1.0	0.98	ug/L			09/15/23 15:52	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/15/23 15:52	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/15/23 15:52	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/15/23 15:52	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/15/23 15:52	1
Chloroethane	ND		1.0	0.76	ug/L			09/15/23 15:52	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/15/23 15:52	1
Chloroform	ND		1.0	0.90	ug/L			09/15/23 15:52	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/15/23 15:52	1
Chloromethane	ND		1.0	0.90	ug/L			09/15/23 15:52	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/15/23 15:52	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/15/23 15:52	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/15/23 15:52	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/15/23 15:52	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/15/23 15:52	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/15/23 15:52	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/15/23 15:52	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/15/23 15:52	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/15/23 15:52	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/15/23 15:52	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 15:52	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 15:52	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 15:52	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/15/23 15:52	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/15/23 15:52	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/15/23 15:52	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/15/23 15:52	1
2-Hexanone	ND		25	1.4	ug/L			09/15/23 15:52	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/15/23 15:52	1
Methylene bromide	ND		5.0	0.22	ug/L			09/15/23 15:52	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/15/23 15:52	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/15/23 15:52	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/15/23 15:52	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/15/23 15:52	1
Naphthalene	ND		5.0	3.0	ug/L			09/15/23 15:52	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/15/23 15:52	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/15/23 15:52	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/15/23 15:52	1
o-Xylene	ND		5.0	0.60	ug/L			09/15/23 15:52	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/15/23 15:52	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/15/23 15:52	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: TB-ROX-090623-8260-A
Date Collected: 09/06/23 00:00
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-1
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			09/15/23 15:52	1
Styrene	ND		1.0	1.0	ug/L			09/15/23 15:52	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/15/23 15:52	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/15/23 15:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/15/23 15:52	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/15/23 15:52	1
Toluene	ND		1.0	0.90	ug/L			09/15/23 15:52	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/15/23 15:52	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/15/23 15:52	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/15/23 15:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/15/23 15:52	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/15/23 15:52	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/15/23 15:52	1
Trichloroethene	ND		1.0	0.15	ug/L			09/15/23 15:52	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/15/23 15:52	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/15/23 15:52	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/15/23 15:52	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/15/23 15:52	1
Vinyl acetate	ND		25	0.93	ug/L			09/15/23 15:52	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/15/23 15:52	1
Xylenes, Total	ND		10	1.6	ug/L			09/15/23 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*118*		*72 - 130*		*09/15/23 15:52*	*1*
Dibromofluoromethane	*95*		*75 - 126*		*09/15/23 15:52*	*1*
Toluene-d8 (Surr)	*109*		*64 - 132*		*09/15/23 15:52*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: TB-ROX-090623-8011-A
Date Collected: 09/06/23 00:00
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-2
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-D bromo-3-Chloropropane	ND		0.032	0.018	ug/L		09/12/23 08:25	09/12/23 22:06	1
1,2-D bromoethane	ND		0.021	0.016	ug/L		09/12/23 08:25	09/12/23 22:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*51 - 149*	*09/12/23 08:25*	*09/12/23 22:06*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: MW4-ROX-090623-EB
Date Collected: 09/06/23 08:25
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-3
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			09/15/23 16:41	1
Acrolein	ND		20	3.3	ug/L			09/15/23 16:41	1
Acrylonitrile	ND		10	2.8	ug/L			09/15/23 16:41	1
Benzene	ND		1.0	0.50	ug/L			09/15/23 16:41	1
Bromobenzene	ND		1.0	0.54	ug/L			09/15/23 16:41	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/15/23 16:41	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/15/23 16:41	1
Bromoform	ND		5.0	0.25	ug/L			09/15/23 16:41	1
Bromomethane	ND		1.0	0.98	ug/L			09/15/23 16:41	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/15/23 16:41	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/15/23 16:41	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/15/23 16:41	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/15/23 16:41	1
Chloroethane	ND		1.0	0.76	ug/L			09/15/23 16:41	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/15/23 16:41	1
Chloroform	ND		1.0	0.90	ug/L			09/15/23 16:41	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/15/23 16:41	1
Chloromethane	ND		1.0	0.90	ug/L			09/15/23 16:41	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/15/23 16:41	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/15/23 16:41	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/15/23 16:41	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/15/23 16:41	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/15/23 16:41	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/15/23 16:41	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/15/23 16:41	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/15/23 16:41	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/15/23 16:41	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/15/23 16:41	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 16:41	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 16:41	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 16:41	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/15/23 16:41	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/15/23 16:41	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/15/23 16:41	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/15/23 16:41	1
2-Hexanone	ND		25	1.4	ug/L			09/15/23 16:41	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/15/23 16:41	1
Methylene bromide	ND		5.0	0.22	ug/L			09/15/23 16:41	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/15/23 16:41	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/15/23 16:41	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/15/23 16:41	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/15/23 16:41	1
Naphthalene	ND		5.0	3.0	ug/L			09/15/23 16:41	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/15/23 16:41	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/15/23 16:41	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/15/23 16:41	1
o-Xylene	ND		5.0	0.60	ug/L			09/15/23 16:41	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/15/23 16:41	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/15/23 16:41	1

Client Sample ID: MW4-ROX-090623-EB
Date Collected: 09/06/23 08:25
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-3
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			09/15/23 16:41	1
Styrene	ND		1.0	1.0	ug/L			09/15/23 16:41	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/15/23 16:41	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/15/23 16:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/15/23 16:41	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/15/23 16:41	1
Toluene	ND		1.0	0.90	ug/L			09/15/23 16:41	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/15/23 16:41	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/15/23 16:41	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/15/23 16:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/15/23 16:41	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/15/23 16:41	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/15/23 16:41	1
Trichloroethene	ND		1.0	0.15	ug/L			09/15/23 16:41	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/15/23 16:41	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/15/23 16:41	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/15/23 16:41	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/15/23 16:41	1
Vinyl acetate	ND		25	0.93	ug/L			09/15/23 16:41	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/15/23 16:41	1
Xylenes, Total	ND		10	1.6	ug/L			09/15/23 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*122*		*72 - 130*		*09/15/23 16:41*	*1*
Dibromofluoromethane	*99*		*75 - 126*		*09/15/23 16:41*	*1*
Toluene-d8 (Surr)	*108*		*64 - 132*		*09/15/23 16:41*	*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		09/12/23 10:32	09/14/23 22:09	1
Acenaphthylene	ND		0.19	0.043	ug/L		09/12/23 10:32	09/14/23 22:09	1
Anthracene	ND		0.19	0.046	ug/L		09/12/23 10:32	09/14/23 22:09	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		09/12/23 10:32	09/14/23 22:09	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		09/12/23 10:32	09/14/23 22:09	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		09/12/23 10:32	09/14/23 22:09	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/12/23 10:32	09/14/23 22:09	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		09/12/23 10:32	09/14/23 22:09	1
Chrysene	ND		0.19	0.032	ug/L		09/12/23 10:32	09/14/23 22:09	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		09/12/23 10:32	09/14/23 22:09	1
Fluoranthene	ND		0.19	0.033	ug/L		09/12/23 10:32	09/14/23 22:09	1
Fluorene	ND		0.19	0.087	ug/L		09/12/23 10:32	09/14/23 22:09	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		09/12/23 10:32	09/14/23 22:09	1
Phenanthrene	ND		0.19	0.088	ug/L		09/12/23 10:32	09/14/23 22:09	1
Pyrene	ND		0.19	0.038	ug/L		09/12/23 10:32	09/14/23 22:09	1
1-Methylnaphthalene	ND		0.19	0.078	ug/L		09/12/23 10:32	09/14/23 22:09	1
2-Methylnaphthalene	ND		0.19	0.064	ug/L		09/12/23 10:32	09/14/23 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*133*		*18 - 147*	*09/12/23 10:32*	*09/14/23 22:09*	*1*
2-Fluorobiphenyl	*101*		*15 - 128*	*09/12/23 10:32*	*09/14/23 22:09*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: MW4-ROX-090623-EB

Date Collected: 09/06/23 08:25
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-3

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*	*09/12/23 10:32*	*09/14/23 22:09*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*-	9.7	3.7	ug/L		09/12/23 10:32	09/14/23 19:00	1
Benzenethiol	ND	*-	9.7	1.7	ug/L		09/12/23 10:32	09/14/23 19:00	1
Benzoic acid	ND	*- *1	29	7.1	ug/L		09/12/23 10:32	09/14/23 19:00	1
Benzyl alcohol	ND		9.7	1.9	ug/L		09/12/23 10:32	09/14/23 19:00	1
Bis(2-chloroethoxy)methane	ND		9.7	0.16	ug/L		09/12/23 10:32	09/14/23 19:00	1
Bis(2-chloroethyl)ether	ND	*+	9.7	2.6	ug/L		09/12/23 10:32	09/14/23 19:00	1
bis (2-chloroisopropyl) ether	ND		9.7	0.16	ug/L		09/12/23 10:32	09/14/23 19:00	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.9	ug/L		09/12/23 10:32	09/14/23 19:00	1
4-Bromophenyl phenyl ether	ND		9.7	0.19	ug/L		09/12/23 10:32	09/14/23 19:00	1
Butyl benzyl phthalate	ND		9.7	0.18	ug/L		09/12/23 10:32	09/14/23 19:00	1
4-Chloroaniline	ND		9.7	3.3	ug/L		09/12/23 10:32	09/14/23 19:00	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		09/12/23 10:32	09/14/23 19:00	1
2-Chloronaphthalene	ND		9.7	0.14	ug/L		09/12/23 10:32	09/14/23 19:00	1
2-Chlorophenol	ND		9.7	2.1	ug/L		09/12/23 10:32	09/14/23 19:00	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		09/12/23 10:32	09/14/23 19:00	1
Dibenz[a,h]acridine	ND		9.7	0.97	ug/L		09/12/23 10:32	09/14/23 19:00	1
Dibenzofuran	ND		9.7	0.17	ug/L		09/12/23 10:32	09/14/23 19:00	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		09/12/23 10:32	09/14/23 19:00	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		09/12/23 10:32	09/14/23 19:00	1
Diethyl phthalate	ND		9.7	0.23	ug/L		09/12/23 10:32	09/14/23 19:00	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		09/12/23 10:32	09/14/23 19:00	1
Dimethyl phthalate	ND		9.7	0.17	ug/L		09/12/23 10:32	09/14/23 19:00	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		09/12/23 10:32	09/14/23 19:00	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.6	ug/L		09/12/23 10:32	09/14/23 19:00	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/12/23 10:32	09/14/23 19:00	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		09/12/23 10:32	09/14/23 19:00	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		09/12/23 10:32	09/14/23 19:00	1
Di-n-octyl phthalate	ND		9.7	0.17	ug/L		09/12/23 10:32	09/14/23 19:00	1
1,4-Dioxane	ND		9.7	0.97	ug/L		09/12/23 10:32	09/14/23 19:00	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		09/12/23 10:32	09/14/23 19:00	1
Hexachlorobenzene	ND		9.7	0.17	ug/L		09/12/23 10:32	09/14/23 19:00	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/12/23 10:32	09/14/23 19:00	1
Hexachloroethane	ND		9.7	4.1	ug/L		09/12/23 10:32	09/14/23 19:00	1
Indene	ND		9.7	0.97	ug/L		09/12/23 10:32	09/14/23 19:00	1
Isophorone	ND		9.7	0.14	ug/L		09/12/23 10:32	09/14/23 19:00	1
2-Methylphenol	ND		9.7	1.8	ug/L		09/12/23 10:32	09/14/23 19:00	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		09/12/23 10:32	09/14/23 19:00	1
2-Nitroaniline	ND		9.7	2.1	ug/L		09/12/23 10:32	09/14/23 19:00	1
3-Nitroaniline	ND		9.7	1.8	ug/L		09/12/23 10:32	09/14/23 19:00	1
4-Nitroaniline	ND		9.7	1.5	ug/L		09/12/23 10:32	09/14/23 19:00	1
Nitrobenzene	ND		9.7	0.13	ug/L		09/12/23 10:32	09/14/23 19:00	1
2-Nitrophenol	ND		9.7	5.1	ug/L		09/12/23 10:32	09/14/23 19:00	1
4-Nitrophenol	ND		9.7	2.0	ug/L		09/12/23 10:32	09/14/23 19:00	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		09/12/23 10:32	09/14/23 19:00	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: MW4-ROX-090623-EB

Date Collected: 09/06/23 08:25
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-3

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	3.2	ug/L		09/12/23 10:32	09/14/23 19:00	1
N-Nitrosodiphenylamine	ND		9.7	0.18	ug/L		09/12/23 10:32	09/14/23 19:00	1
Pentachlorophenol	ND		19	1.4	ug/L		09/12/23 10:32	09/14/23 19:00	1
Phenol	ND		9.7	2.5	ug/L		09/12/23 10:32	09/14/23 19:00	1
Pyridine	ND		9.7	3.1	ug/L		09/12/23 10:32	09/14/23 19:00	1
Quinoline	ND		9.7	4.4	ug/L		09/12/23 10:32	09/14/23 19:00	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		09/12/23 10:32	09/14/23 19:00	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		09/12/23 10:32	09/14/23 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*49*		*46 - 124*	*09/12/23 10:32*	*09/14/23 19:00*	*1*
2-Fluorophenol	*10*	*S1-*	*13 - 113*	*09/12/23 10:32*	*09/14/23 19:00*	*1*
Nitrobenzene-d5	*44*		*36 - 126*	*09/12/23 10:32*	*09/14/23 19:00*	*1*
Phenol-d5	*29*		*17 - 127*	*09/12/23 10:32*	*09/14/23 19:00*	*1*
Terphenyl-d14	*59*		*44 - 149*	*09/12/23 10:32*	*09/14/23 19:00*	*1*
2,4,6-Tribromophenol	*49*		*26 - 150*	*09/12/23 10:32*	*09/14/23 19:00*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/12/23 08:25	09/12/23 22:49	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/12/23 08:25	09/12/23 22:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*51 - 149*	*09/12/23 08:25*	*09/12/23 22:49*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: MW4-ROX-090623
Date Collected: 09/06/23 09:35
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-4
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			09/15/23 13:27	1
Acrolein	ND		20	3.3	ug/L			09/15/23 13:27	1
Acrylonitrile	ND		10	2.8	ug/L			09/15/23 13:27	1
Benzene	ND		1.0	0.50	ug/L			09/15/23 13:27	1
Bromobenzene	ND		1.0	0.54	ug/L			09/15/23 13:27	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/15/23 13:27	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/15/23 13:27	1
Bromoform	ND	F1	5.0	0.25	ug/L			09/15/23 13:27	1
Bromomethane	ND		1.0	0.98	ug/L			09/15/23 13:27	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/15/23 13:27	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/15/23 13:27	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/15/23 13:27	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/15/23 13:27	1
Chloroethane	ND		1.0	0.76	ug/L			09/15/23 13:27	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			09/15/23 13:27	1
Chloroform	ND		1.0	0.90	ug/L			09/15/23 13:27	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/15/23 13:27	1
Chloromethane	ND		1.0	0.90	ug/L			09/15/23 13:27	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/15/23 13:27	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/15/23 13:27	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/15/23 13:27	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/15/23 13:27	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/15/23 13:27	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/15/23 13:27	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/15/23 13:27	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/15/23 13:27	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/15/23 13:27	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/15/23 13:27	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 13:27	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 13:27	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 13:27	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/15/23 13:27	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/15/23 13:27	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/15/23 13:27	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/15/23 13:27	1
2-Hexanone	ND		25	1.4	ug/L			09/15/23 13:27	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/15/23 13:27	1
Methylene bromide	ND		5.0	0.22	ug/L			09/15/23 13:27	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/15/23 13:27	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/15/23 13:27	1
Methyl tert-butyl ether	**0.33**	**J**	1.0	0.22	ug/L			09/15/23 13:27	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/15/23 13:27	1
Naphthalene	ND		5.0	3.0	ug/L			09/15/23 13:27	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/15/23 13:27	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/15/23 13:27	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/15/23 13:27	1
o-Xylene	ND		5.0	0.60	ug/L			09/15/23 13:27	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/15/23 13:27	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/15/23 13:27	1

Client Sample ID: MW4-ROX-090623
Date Collected: 09/06/23 09:35
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-4
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			09/15/23 13:27	1
Styrene	ND		1.0	1.0	ug/L			09/15/23 13:27	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/15/23 13:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/15/23 13:27	1
1,1,2,2-Tetrachloroethane	ND	F1	1.0	0.50	ug/L			09/15/23 13:27	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/15/23 13:27	1
Toluene	ND		1.0	0.90	ug/L			09/15/23 13:27	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/15/23 13:27	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/15/23 13:27	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/15/23 13:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/15/23 13:27	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/15/23 13:27	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/15/23 13:27	1
Trichloroethene	ND		1.0	0.15	ug/L			09/15/23 13:27	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/15/23 13:27	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/15/23 13:27	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/15/23 13:27	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/15/23 13:27	1
Vinyl acetate	ND		25	0.93	ug/L			09/15/23 13:27	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/15/23 13:27	1
Xylenes, Total	ND		10	1.6	ug/L			09/15/23 13:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*123*		*72 - 130*		*09/15/23 13:27*	*1*
Dibromofluoromethane	*99*		*75 - 126*		*09/15/23 13:27*	*1*
Toluene-d8 (Surr)	*110*		*64 - 132*		*09/15/23 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	ND		0.20	0.097	ug/L		09/12/23 10:32	09/14/23 22:30	1
Acenaphthylene	ND		0.20	0.043	ug/L		09/12/23 10:32	09/14/23 22:30	1
Anthracene	ND		0.20	0.046	ug/L		09/12/23 10:32	09/14/23 22:30	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		09/12/23 10:32	09/14/23 22:30	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		09/12/23 10:32	09/14/23 22:30	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		09/12/23 10:32	09/14/23 22:30	1
Benzo[g,h,i]perylene	ND		0.20	0.026	ug/L		09/12/23 10:32	09/14/23 22:30	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		09/12/23 10:32	09/14/23 22:30	1
Chrysene	ND		0.20	0.032	ug/L		09/12/23 10:32	09/14/23 22:30	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		09/12/23 10:32	09/14/23 22:30	1
Fluoranthene	ND		0.20	0.033	ug/L		09/12/23 10:32	09/14/23 22:30	1
Fluorene	ND		0.20	0.087	ug/L		09/12/23 10:32	09/14/23 22:30	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		09/12/23 10:32	09/14/23 22:30	1
Phenanthrene	ND		0.20	0.088	ug/L		09/12/23 10:32	09/14/23 22:30	1
Pyrene	ND		0.20	0.038	ug/L		09/12/23 10:32	09/14/23 22:30	1
1-Methylnaphthalene	ND		0.20	0.078	ug/L		09/12/23 10:32	09/14/23 22:30	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		09/12/23 10:32	09/14/23 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*104*		*18 - 147*	*09/12/23 10:32*	*09/14/23 22:30*	*1*
2-Fluorobiphenyl	*86*		*15 - 128*	*09/12/23 10:32*	*09/14/23 22:30*	*1*

Client Sample ID: MW4-ROX-090623
Date Collected: 09/06/23 09:35
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-4
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	09/12/23 10:32	09/14/23 22:30	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		09/12/23 10:32	09/14/23 19:22	1
Benzenethiol	ND	*-	9.8	1.7	ug/L		09/12/23 10:32	09/14/23 19:22	1
Benzoic acid	ND	*- *1	29	7.2	ug/L		09/12/23 10:32	09/14/23 19:22	1
Benzyl alcohol	ND		9.8	2.0	ug/L		09/12/23 10:32	09/14/23 19:22	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		09/12/23 10:32	09/14/23 19:22	1
Bis(2-chloroethyl)ether	ND	*+	9.8	2.6	ug/L		09/12/23 10:32	09/14/23 19:22	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		09/12/23 10:32	09/14/23 19:22	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		09/12/23 10:32	09/14/23 19:22	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		09/12/23 10:32	09/14/23 19:22	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		09/12/23 10:32	09/14/23 19:22	1
4-Chloroaniline	ND		9.8	3.3	ug/L		09/12/23 10:32	09/14/23 19:22	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		09/12/23 10:32	09/14/23 19:22	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		09/12/23 10:32	09/14/23 19:22	1
2-Chlorophenol	ND		9.8	2.2	ug/L		09/12/23 10:32	09/14/23 19:22	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		09/12/23 10:32	09/14/23 19:22	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		09/12/23 10:32	09/14/23 19:22	1
Dibenzofuran	ND		9.8	0.17	ug/L		09/12/23 10:32	09/14/23 19:22	1
3,3'-Dichlorobenzidine	ND		9.8	2.5	ug/L		09/12/23 10:32	09/14/23 19:22	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		09/12/23 10:32	09/14/23 19:22	1
Diethyl phthalate	ND		9.8	0.24	ug/L		09/12/23 10:32	09/14/23 19:22	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		09/12/23 10:32	09/14/23 19:22	1
Dimethyl phthalate	ND		9.8	0.17	ug/L		09/12/23 10:32	09/14/23 19:22	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		09/12/23 10:32	09/14/23 19:22	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		09/12/23 10:32	09/14/23 19:22	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/12/23 10:32	09/14/23 19:22	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		09/12/23 10:32	09/14/23 19:22	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		09/12/23 10:32	09/14/23 19:22	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		09/12/23 10:32	09/14/23 19:22	1
1,4-Dioxane	ND		9.8	0.98	ug/L		09/12/23 10:32	09/14/23 19:22	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		09/12/23 10:32	09/14/23 19:22	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		09/12/23 10:32	09/14/23 19:22	1
Hexachlorocyclopentadiene	ND		20	2.5	ug/L		09/12/23 10:32	09/14/23 19:22	1
Hexachloroethane	ND		9.8	4.1	ug/L		09/12/23 10:32	09/14/23 19:22	1
Indene	ND		9.8	0.98	ug/L		09/12/23 10:32	09/14/23 19:22	1
Isophorone	ND		9.8	0.14	ug/L		09/12/23 10:32	09/14/23 19:22	1
2-Methylphenol	ND		9.8	1.8	ug/L		09/12/23 10:32	09/14/23 19:22	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		09/12/23 10:32	09/14/23 19:22	1
2-Nitroaniline	ND		9.8	2.2	ug/L		09/12/23 10:32	09/14/23 19:22	1
3-Nitroaniline	ND		9.8	1.8	ug/L		09/12/23 10:32	09/14/23 19:22	1
4-Nitroaniline	ND		9.8	1.5	ug/L		09/12/23 10:32	09/14/23 19:22	1
Nitrobenzene	ND		9.8	0.13	ug/L		09/12/23 10:32	09/14/23 19:22	1
2-Nitrophenol	ND		9.8	5.1	ug/L		09/12/23 10:32	09/14/23 19:22	1
4-Nitrophenol	ND		9.8	2.1	ug/L		09/12/23 10:32	09/14/23 19:22	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		09/12/23 10:32	09/14/23 19:22	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: MW4-ROX-090623
Date Collected: 09/06/23 09:35
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-4
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	3.2	ug/L		09/12/23 10:32	09/14/23 19:22	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		09/12/23 10:32	09/14/23 19:22	1
Pentachlorophenol	ND		20	1.4	ug/L		09/12/23 10:32	09/14/23 19:22	1
Phenol	ND		9.8	2.5	ug/L		09/12/23 10:32	09/14/23 19:22	1
Pyridine	ND		9.8	3.1	ug/L		09/12/23 10:32	09/14/23 19:22	1
Quinoline	ND		9.8	4.4	ug/L		09/12/23 10:32	09/14/23 19:22	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		09/12/23 10:32	09/14/23 19:22	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		09/12/23 10:32	09/14/23 19:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*45*	*S1-*	*46 - 124*	*09/12/23 10:32*	*09/14/23 19:22*	*1*
2-Fluorophenol	*10*	*S1-*	*13 - 113*	*09/12/23 10:32*	*09/14/23 19:22*	*1*
Nitrobenzene-d5	*41*		*36 - 126*	*09/12/23 10:32*	*09/14/23 19:22*	*1*
Phenol-d5	*28*		*17 - 127*	*09/12/23 10:32*	*09/14/23 19:22*	*1*
Terphenyl-d14	*54*		*44 - 149*	*09/12/23 10:32*	*09/14/23 19:22*	*1*
2,4,6-Tribromophenol	*52*		*26 - 150*	*09/12/23 10:32*	*09/14/23 19:22*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/12/23 08:25	09/12/23 23:10	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/12/23 08:25	09/12/23 23:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*51 - 149*	*09/12/23 08:25*	*09/12/23 23:10*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: MW25-ROX-090623
Date Collected: 09/06/23 11:00
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-5
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			09/15/23 17:06	1
Acrolein	ND		20	3.3	ug/L			09/15/23 17:06	1
Acrylonitrile	ND		10	2.8	ug/L			09/15/23 17:06	1
Benzene	**16**		1.0	0.50	ug/L			09/15/23 17:06	1
Bromobenzene	ND		1.0	0.54	ug/L			09/15/23 17:06	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/15/23 17:06	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/15/23 17:06	1
Bromoform	ND		5.0	0.25	ug/L			09/15/23 17:06	1
Bromomethane	ND		1.0	0.98	ug/L			09/15/23 17:06	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/15/23 17:06	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/15/23 17:06	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/15/23 17:06	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/15/23 17:06	1
Chloroethane	ND		1.0	0.76	ug/L			09/15/23 17:06	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/15/23 17:06	1
Chloroform	ND		1.0	0.90	ug/L			09/15/23 17:06	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/15/23 17:06	1
Chloromethane	ND		1.0	0.90	ug/L			09/15/23 17:06	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/15/23 17:06	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/15/23 17:06	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/15/23 17:06	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/15/23 17:06	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/15/23 17:06	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/15/23 17:06	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/15/23 17:06	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/15/23 17:06	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/15/23 17:06	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/15/23 17:06	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 17:06	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 17:06	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 17:06	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/15/23 17:06	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/15/23 17:06	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/15/23 17:06	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/15/23 17:06	1
2-Hexanone	ND		25	1.4	ug/L			09/15/23 17:06	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/15/23 17:06	1
Methylene bromide	ND		5.0	0.22	ug/L			09/15/23 17:06	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/15/23 17:06	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/15/23 17:06	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/15/23 17:06	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/15/23 17:06	1
Naphthalene	ND		5.0	3.0	ug/L			09/15/23 17:06	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/15/23 17:06	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/15/23 17:06	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/15/23 17:06	1
o-Xylene	ND		5.0	0.60	ug/L			09/15/23 17:06	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/15/23 17:06	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/15/23 17:06	1

Client Sample ID: MW25-ROX-090623
Date Collected: 09/06/23 11:00
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-5
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			09/15/23 17:06	1
Styrene	ND		1.0	1.0	ug/L			09/15/23 17:06	1
tert-Butylbenzene	**0.71**	**J**	1.0	0.63	ug/L			09/15/23 17:06	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/15/23 17:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/15/23 17:06	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/15/23 17:06	1
Toluene	ND		1.0	0.90	ug/L			09/15/23 17:06	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/15/23 17:06	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/15/23 17:06	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/15/23 17:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/15/23 17:06	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/15/23 17:06	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/15/23 17:06	1
Trichloroethene	ND		1.0	0.15	ug/L			09/15/23 17:06	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/15/23 17:06	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/15/23 17:06	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/15/23 17:06	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/15/23 17:06	1
Vinyl acetate	ND		25	0.93	ug/L			09/15/23 17:06	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/15/23 17:06	1
Xylenes, Total	ND		10	1.6	ug/L			09/15/23 17:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 130*		*09/15/23 17:06*	*1*
Dibromofluoromethane	*95*		*75 - 126*		*09/15/23 17:06*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*09/15/23 17:06*	*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		09/12/23 10:32	09/15/23 18:47	1
Acenaphthylene	ND		0.19	0.042	ug/L		09/12/23 10:32	09/15/23 18:47	1
Anthracene	ND		0.19	0.044	ug/L		09/12/23 10:32	09/15/23 18:47	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		09/12/23 10:32	09/15/23 18:47	1
Benzo[a]pyrene	ND		0.19	0.060	ug/L		09/12/23 10:32	09/15/23 18:47	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		09/12/23 10:32	09/15/23 18:47	1
Benzo[g,h,i]perylene	ND		0.19	0.025	ug/L		09/12/23 10:32	09/15/23 18:47	1
Benzo[k]fluoranthene	ND		0.19	0.058	ug/L		09/12/23 10:32	09/15/23 18:47	1
Chrysene	ND		0.19	0.031	ug/L		09/12/23 10:32	09/15/23 18:47	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		09/12/23 10:32	09/15/23 18:47	1
Fluoranthene	ND		0.19	0.032	ug/L		09/12/23 10:32	09/15/23 18:47	1
Fluorene	ND		0.19	0.084	ug/L		09/12/23 10:32	09/15/23 18:47	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		09/12/23 10:32	09/15/23 18:47	1
Phenanthrene	ND		0.19	0.085	ug/L		09/12/23 10:32	09/15/23 18:47	1
Pyrene	ND		0.19	0.037	ug/L		09/12/23 10:32	09/15/23 18:47	1
1-Methylnaphthalene	ND		0.19	0.075	ug/L		09/12/23 10:32	09/15/23 18:47	1
2-Methylnaphthalene	ND		0.19	0.062	ug/L		09/12/23 10:32	09/15/23 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*52*		*18 - 147*	*09/12/23 10:32*	*09/15/23 18:47*	*1*
2-Fluorobiphenyl	*63*		*15 - 128*	*09/12/23 10:32*	*09/15/23 18:47*	*1*

Client Sample ID: MW25-ROX-090623
Date Collected: 09/06/23 11:00
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-5
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*	*09/12/23 10:32*	*09/15/23 18:47*	*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		09/12/23 10:32	09/15/23 19:18	1
Benzenethiol	ND		9.4	1.6	ug/L		09/12/23 10:32	09/15/23 19:18	1
Benzoic acid	ND	*- *1	28	6.9	ug/L		09/12/23 10:32	09/15/23 19:18	1
Benzyl alcohol	ND		9.4	1.9	ug/L		09/12/23 10:32	09/15/23 19:18	1
Bis(2-chloroethoxy)methane	ND		9.4	0.15	ug/L		09/12/23 10:32	09/15/23 19:18	1
Bis(2-chloroethyl)ether	ND	*+	9.4	2.5	ug/L		09/12/23 10:32	09/15/23 19:18	1
bis (2-chloroisopropyl) ether	ND		9.4	0.15	ug/L		09/12/23 10:32	09/15/23 19:18	1
Bis(2-ethylhexyl) phthalate	ND		9.4	4.7	ug/L		09/12/23 10:32	09/15/23 19:18	1
4-Bromophenyl phenyl ether	ND		9.4	0.19	ug/L		09/12/23 10:32	09/15/23 19:18	1
Butyl benzyl phthalate	ND		9.4	0.18	ug/L		09/12/23 10:32	09/15/23 19:18	1
4-Chloroaniline	ND		9.4	3.2	ug/L		09/12/23 10:32	09/15/23 19:18	1
4-Chloro-3-methylphenol	ND		9.4	3.6	ug/L		09/12/23 10:32	09/15/23 19:18	1
2-Chloronaphthalene	ND		9.4	0.13	ug/L		09/12/23 10:32	09/15/23 19:18	1
2-Chlorophenol	ND		9.4	2.1	ug/L		09/12/23 10:32	09/15/23 19:18	1
4-Chlorophenyl phenyl ether	ND		9.4	1.9	ug/L		09/12/23 10:32	09/15/23 19:18	1
Dibenz[a,h]acridine	ND		9.4	0.94	ug/L		09/12/23 10:32	09/15/23 19:18	1
Dibenzofuran	ND		9.4	0.16	ug/L		09/12/23 10:32	09/15/23 19:18	1
3,3'-Dichlorobenzidine	ND		9.4	2.5	ug/L		09/12/23 10:32	09/15/23 19:18	1
2,4-Dichlorophenol	ND		9.4	2.8	ug/L		09/12/23 10:32	09/15/23 19:18	1
Diethyl phthalate	ND		9.4	0.23	ug/L		09/12/23 10:32	09/15/23 19:18	1
2,4-Dimethylphenol	ND		9.4	3.3	ug/L		09/12/23 10:32	09/15/23 19:18	1
Dimethyl phthalate	ND		9.4	0.16	ug/L		09/12/23 10:32	09/15/23 19:18	1
Di-n-butyl phthalate	ND		9.4	2.5	ug/L		09/12/23 10:32	09/15/23 19:18	1
4,6-Dinitro-ortho-cresol	ND		9.4	1.5	ug/L		09/12/23 10:32	09/15/23 19:18	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		09/12/23 10:32	09/15/23 19:18	1
2,4-Dinitrotoluene	ND		9.4	1.8	ug/L		09/12/23 10:32	09/15/23 19:18	1
2,6-Dinitrotoluene	ND		9.4	1.8	ug/L		09/12/23 10:32	09/15/23 19:18	1
Di-n-octyl phthalate	ND		9.4	0.16	ug/L		09/12/23 10:32	09/15/23 19:18	1
1,4-Dioxane	ND		9.4	0.94	ug/L		09/12/23 10:32	09/15/23 19:18	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	0.94	ug/L		09/12/23 10:32	09/15/23 19:18	1
Hexachlorobenzene	ND		9.4	0.16	ug/L		09/12/23 10:32	09/15/23 19:18	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/12/23 10:32	09/15/23 19:18	1
Hexachloroethane	ND		9.4	4.0	ug/L		09/12/23 10:32	09/15/23 19:18	1
Indene	ND		9.4	0.94	ug/L		09/12/23 10:32	09/15/23 19:18	1
Isophorone	ND		9.4	0.13	ug/L		09/12/23 10:32	09/15/23 19:18	1
2-Methylphenol	ND		9.4	1.7	ug/L		09/12/23 10:32	09/15/23 19:18	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/12/23 10:32	09/15/23 19:18	1
2-Nitroaniline	ND		9.4	2.1	ug/L		09/12/23 10:32	09/15/23 19:18	1
3-Nitroaniline	ND		9.4	1.7	ug/L		09/12/23 10:32	09/15/23 19:18	1
4-Nitroaniline	ND		9.4	1.4	ug/L		09/12/23 10:32	09/15/23 19:18	1
Nitrobenzene	ND		9.4	0.12	ug/L		09/12/23 10:32	09/15/23 19:18	1
2-Nitrophenol	ND		9.4	4.9	ug/L		09/12/23 10:32	09/15/23 19:18	1
4-Nitrophenol	ND		9.4	2.0	ug/L		09/12/23 10:32	09/15/23 19:18	1
N-Nitrosodimethylamine	ND		9.4	3.3	ug/L		09/12/23 10:32	09/15/23 19:18	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: MW25-ROX-090623
Date Collected: 09/06/23 11:00
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-5
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		09/12/23 10:32	09/15/23 19:18	1
N-Nitrosodiphenylamine	ND		9.4	0.17	ug/L		09/12/23 10:32	09/15/23 19:18	1
Pentachlorophenol	ND		19	1.3	ug/L		09/12/23 10:32	09/15/23 19:18	1
Phenol	ND		9.4	2.5	ug/L		09/12/23 10:32	09/15/23 19:18	1
Pyridine	ND		9.4	3.0	ug/L		09/12/23 10:32	09/15/23 19:18	1
Quinoline	ND		9.4	4.2	ug/L		09/12/23 10:32	09/15/23 19:18	1
2,4,5-Trichlorophenol	ND		9.4	3.5	ug/L		09/12/23 10:32	09/15/23 19:18	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		09/12/23 10:32	09/15/23 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*46 - 124*	*09/12/23 10:32*	*09/15/23 19:18*	*1*
2-Fluorophenol	*13*		*13 - 113*	*09/12/23 10:32*	*09/15/23 19:18*	*1*
Nitrobenzene-d5	*49*		*36 - 126*	*09/12/23 10:32*	*09/15/23 19:18*	*1*
Phenol-d5	*35*		*17 - 127*	*09/12/23 10:32*	*09/15/23 19:18*	*1*
Terphenyl-d14	*48*		*44 - 149*	*09/12/23 10:32*	*09/15/23 19:18*	*1*
2,4,6-Tribromophenol	*57*		*26 - 150*	*09/12/23 10:32*	*09/15/23 19:18*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.031	0.018	ug/L		09/12/23 08:25	09/12/23 23:31	1
1,2-D bromoethane	ND		0.021	0.015	ug/L		09/12/23 08:25	09/12/23 23:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*09/12/23 08:25*	*09/12/23 23:31*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: MW7-ROX-090623
Date Collected: 09/06/23 12:10
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-6
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			09/15/23 13:52	2000
Acrolein	ND		40000	6600	ug/L			09/15/23 13:52	2000
Acrylonitrile	ND		20000	5600	ug/L			09/15/23 13:52	2000
Bromobenzene	ND		2000	1100	ug/L			09/15/23 13:52	2000
Bromochloromethane	ND		2000	420	ug/L			09/15/23 13:52	2000
Bromodichloromethane	ND		2000	1000	ug/L			09/15/23 13:52	2000
Bromoform	ND		10000	500	ug/L			09/15/23 13:52	2000
Bromomethane	ND		2000	2000	ug/L			09/15/23 13:52	2000
2-Butanone (MEK)	ND		50000	5200	ug/L			09/15/23 13:52	2000
Carbon disulfide	ND		2000	1000	ug/L			09/15/23 13:52	2000
Carbon tetrachloride	ND		2000	380	ug/L			09/15/23 13:52	2000
Chlorobenzene	ND		2000	1800	ug/L			09/15/23 13:52	2000
Chloroethane	ND		2000	1500	ug/L			09/15/23 13:52	2000
2-Chloroethyl vinyl ether	ND		10000	4000	ug/L			09/15/23 13:52	2000
Chloroform	ND		2000	1800	ug/L			09/15/23 13:52	2000
1-Chlorohexane	ND		2000	640	ug/L			09/15/23 13:52	2000
Chloromethane	ND		2000	1800	ug/L			09/15/23 13:52	2000
cis-1,2-Dichloroethene	ND		2000	400	ug/L			09/15/23 13:52	2000
cis-1,3-Dichloropropene	ND		10000	1000	ug/L			09/15/23 13:52	2000
Dibromochloromethane	ND		2000	480	ug/L			09/15/23 13:52	2000
1,2-Dichlorobenzene	ND		2000	1000	ug/L			09/15/23 13:52	2000
1,3-Dichlorobenzene	ND		2000	1100	ug/L			09/15/23 13:52	2000
1,4-Dichlorobenzene	ND		2000	1300	ug/L			09/15/23 13:52	2000
Dichlorodifluoromethane	ND		2000	1700	ug/L			09/15/23 13:52	2000
1,1-Dichloroethane	ND		2000	1000	ug/L			09/15/23 13:52	2000
1,2-Dichloroethane	ND		2000	380	ug/L			09/15/23 13:52	2000
1,1-Dichloroethene	ND		2000	1000	ug/L			09/15/23 13:52	2000
1,2-Dichloropropane	ND		2000	1000	ug/L			09/15/23 13:52	2000
1,3-Dichloropropane	ND		2000	1000	ug/L			09/15/23 13:52	2000
2,2-Dichloropropane	ND		2000	1000	ug/L			09/15/23 13:52	2000
1,1-Dichloropropene	ND		2000	1000	ug/L			09/15/23 13:52	2000
Ethylbenzene	ND		2000	1000	ug/L			09/15/23 13:52	2000
Ethyl methacrylate	ND		2000	1200	ug/L			09/15/23 13:52	2000
Hexachlorobutadiene	ND		10000	1800	ug/L			09/15/23 13:52	2000
2-Hexanone	ND		50000	2800	ug/L			09/15/23 13:52	2000
Isopropy benzene	ND		2000	1100	ug/L			09/15/23 13:52	2000
Methylene bromide	ND		10000	440	ug/L			09/15/23 13:52	2000
Methylene Chloride	ND		10000	6000	ug/L			09/15/23 13:52	2000
4-Methyl-2-pentanone (MIBK)	ND		50000	3600	ug/L			09/15/23 13:52	2000
Methyl tert-butyl ether	ND		2000	440	ug/L			09/15/23 13:52	2000
m-Xylene & p-Xylene	ND		10000	1300	ug/L			09/15/23 13:52	2000
Naphthalene	ND		10000	6000	ug/L			09/15/23 13:52	2000
n-Butylbenzene	ND		2000	1500	ug/L			09/15/23 13:52	2000
N-Propylbenzene	ND		2000	1400	ug/L			09/15/23 13:52	2000
o-Chlorotoluene	ND		2000	1100	ug/L			09/15/23 13:52	2000
o-Xylene	ND		10000	1200	ug/L			09/15/23 13:52	2000
p-Chlorotoluene	ND		2000	1100	ug/L			09/15/23 13:52	2000
p-Isopropyltoluene	ND		2000	1400	ug/L			09/15/23 13:52	2000
sec-Butylbenzene	ND		2000	1400	ug/L			09/15/23 13:52	2000

Client Sample ID: MW7-ROX-090623
Date Collected: 09/06/23 12:10
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-6
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		2000	2000	ug/L			09/15/23 13:52	2000
tert-Butylbenzene	ND		2000	1300	ug/L			09/15/23 13:52	2000
1,1,1,2-Tetrachloroethane	ND		2000	320	ug/L			09/15/23 13:52	2000
1,1,2,2-Tetrachloroethane	ND		2000	1000	ug/L			09/15/23 13:52	2000
Tetrachloroethene	ND		2000	1800	ug/L			09/15/23 13:52	2000
Toluene	ND		2000	1800	ug/L			09/15/23 13:52	2000
trans-1,2-Dichloroethene	ND		2000	1000	ug/L			09/15/23 13:52	2000
trans-1,3-Dichloropropene	ND		10000	400	ug/L			09/15/23 13:52	2000
1,2,3-Trichlorobenzene	ND		2000	1800	ug/L			09/15/23 13:52	2000
1,2,4-Trichlorobenzene	ND		2000	1600	ug/L			09/15/23 13:52	2000
1,1,1-Trichloroethane	ND		2000	360	ug/L			09/15/23 13:52	2000
1,1,2-Trichloroethane	ND		10000	420	ug/L			09/15/23 13:52	2000
Trichloroethene	ND		2000	300	ug/L			09/15/23 13:52	2000
Trichlorofluoromethane	ND		2000	1000	ug/L			09/15/23 13:52	2000
1,2,3-Trichloropropane	ND		10000	1700	ug/L			09/15/23 13:52	2000
1,2,4-Trimethy benzene	ND		2000	1600	ug/L			09/15/23 13:52	2000
1,3,5-Trimethy benzene	ND		2000	1100	ug/L			09/15/23 13:52	2000
Vinyl acetate	ND		50000	1900	ug/L			09/15/23 13:52	2000
Vinyl chloride	ND		2000	1000	ug/L			09/15/23 13:52	2000
Xylenes, Total	ND		20000	3200	ug/L			09/15/23 13:52	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*117*		*72 - 130*		*09/15/23 13:52*	*2000*
Dibromofluoromethane	*97*		*75 - 126*		*09/15/23 13:52*	*2000*
Toluene-d8 (Surr)	*106*		*64 - 132*		*09/15/23 13:52*	*2000*

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**560000**		5000	2500	ug/L			09/15/23 19:05	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*121*		*72 - 130*		*09/15/23 19:05*	*5000*
Dibromofluoromethane	*102*		*75 - 126*		*09/15/23 19:05*	*5000*
Toluene-d8 (Surr)	*109*		*64 - 132*		*09/15/23 19:05*	*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**	0.20	0.097	ug/L		09/12/23 10:32	09/14/23 23:11	1
Acenaphthylene	ND		0.20	0.043	ug/L		09/12/23 10:32	09/14/23 23:11	1
Anthracene	ND		0.20	0.046	ug/L		09/12/23 10:32	09/14/23 23:11	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		09/12/23 10:32	09/14/23 23:11	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		09/12/23 10:32	09/14/23 23:11	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		09/12/23 10:32	09/14/23 23:11	1
Benzo[g,h,i]perylene	ND		0.20	0.026	ug/L		09/12/23 10:32	09/14/23 23:11	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		09/12/23 10:32	09/14/23 23:11	1
Chrysene	ND		0.20	0.032	ug/L		09/12/23 10:32	09/14/23 23:11	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		09/12/23 10:32	09/14/23 23:11	1
Fluoranthene	ND		0.20	0.033	ug/L		09/12/23 10:32	09/14/23 23:11	1
Fluorene	**0.11**	**J**	0.20	0.087	ug/L		09/12/23 10:32	09/14/23 23:11	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		09/12/23 10:32	09/14/23 23:11	1

Client Sample ID: MW7-ROX-090623
Date Collected: 09/06/23 12:10
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-6
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	**0.13**	**J**	0.20	0.088	ug/L		09/12/23 10:32	09/14/23 23:11	1
Pyrene	ND		0.20	0.038	ug/L		09/12/23 10:32	09/14/23 23:11	1
1-Methylnaphthalene	**1.0**		0.20	0.078	ug/L		09/12/23 10:32	09/14/23 23:11	1
2-Methylnaphthalene	**1.5**		0.20	0.065	ug/L		09/12/23 10:32	09/14/23 23:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*48*		*18 - 147*	*09/12/23 10:32*	*09/14/23 23:11*	*1*
2-Fluorobiphenyl	*89*		*15 - 128*	*09/12/23 10:32*	*09/14/23 23:11*	*1*
Nitrobenzene-d5	*40*		*10 - 144*	*09/12/23 10:32*	*09/14/23 23:11*	*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		09/12/23 10:32	09/14/23 20:04	1
Benzenethiol	ND	*-	9.8	1.7	ug/L		09/12/23 10:32	09/14/23 20:04	1
Benzoic acid	ND	*- *1	29	7.1	ug/L		09/12/23 10:32	09/14/23 20:04	1
Benzyl alcohol	ND		9.8	2.0	ug/L		09/12/23 10:32	09/14/23 20:04	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		09/12/23 10:32	09/14/23 20:04	1
Bis(2-chloroethyl)ether	ND	*+	9.8	2.6	ug/L		09/12/23 10:32	09/14/23 20:04	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		09/12/23 10:32	09/14/23 20:04	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		09/12/23 10:32	09/14/23 20:04	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		09/12/23 10:32	09/14/23 20:04	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		09/12/23 10:32	09/14/23 20:04	1
4-Chloroaniline	ND		9.8	3.3	ug/L		09/12/23 10:32	09/14/23 20:04	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		09/12/23 10:32	09/14/23 20:04	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		09/12/23 10:32	09/14/23 20:04	1
2-Chlorophenol	ND		9.8	2.2	ug/L		09/12/23 10:32	09/14/23 20:04	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		09/12/23 10:32	09/14/23 20:04	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		09/12/23 10:32	09/14/23 20:04	1
Dibenzofuran	ND		9.8	0.17	ug/L		09/12/23 10:32	09/14/23 20:04	1
3,3'-Dichlorobenzidine	ND		9.8	2.5	ug/L		09/12/23 10:32	09/14/23 20:04	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		09/12/23 10:32	09/14/23 20:04	1
Diethyl phthalate	ND		9.8	0.23	ug/L		09/12/23 10:32	09/14/23 20:04	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		09/12/23 10:32	09/14/23 20:04	1
Dimethyl phthalate	ND		9.8	0.17	ug/L		09/12/23 10:32	09/14/23 20:04	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		09/12/23 10:32	09/14/23 20:04	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		09/12/23 10:32	09/14/23 20:04	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/12/23 10:32	09/14/23 20:04	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		09/12/23 10:32	09/14/23 20:04	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		09/12/23 10:32	09/14/23 20:04	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		09/12/23 10:32	09/14/23 20:04	1
1,4-Dioxane	ND		9.8	0.98	ug/L		09/12/23 10:32	09/14/23 20:04	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		09/12/23 10:32	09/14/23 20:04	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		09/12/23 10:32	09/14/23 20:04	1
Hexachlorocyclopentadiene	ND		20	2.5	ug/L		09/12/23 10:32	09/14/23 20:04	1
Hexachloroethane	ND		9.8	4.1	ug/L		09/12/23 10:32	09/14/23 20:04	1
Indene	ND		9.8	0.98	ug/L		09/12/23 10:32	09/14/23 20:04	1
Isophorone	ND		9.8	0.14	ug/L		09/12/23 10:32	09/14/23 20:04	1
2-Methylphenol	ND		9.8	1.8	ug/L		09/12/23 10:32	09/14/23 20:04	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		09/12/23 10:32	09/14/23 20:04	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: MW7-ROX-090623
Date Collected: 09/06/23 12:10
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-6
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		9.8	2.2	ug/L		09/12/23 10:32	09/14/23 20:04	1
3-Nitroaniline	ND		9.8	1.8	ug/L		09/12/23 10:32	09/14/23 20:04	1
4-Nitroaniline	ND		9.8	1.5	ug/L		09/12/23 10:32	09/14/23 20:04	1
Nitrobenzene	ND		9.8	0.13	ug/L		09/12/23 10:32	09/14/23 20:04	1
2-Nitrophenol	ND		9.8	5.1	ug/L		09/12/23 10:32	09/14/23 20:04	1
4-Nitrophenol	ND		9.8	2.1	ug/L		09/12/23 10:32	09/14/23 20:04	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		09/12/23 10:32	09/14/23 20:04	1
N-Nitrosodi-n-propylamine	ND		9.8	3.2	ug/L		09/12/23 10:32	09/14/23 20:04	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		09/12/23 10:32	09/14/23 20:04	1
Pentachlorophenol	ND		20	1.4	ug/L		09/12/23 10:32	09/14/23 20:04	1
Phenol	**77**		9.8	2.5	ug/L		09/12/23 10:32	09/14/23 20:04	1
Pyridine	ND		9.8	3.1	ug/L		09/12/23 10:32	09/14/23 20:04	1
Quinoline	ND		9.8	4.4	ug/L		09/12/23 10:32	09/14/23 20:04	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		09/12/23 10:32	09/14/23 20:04	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		09/12/23 10:32	09/14/23 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*51*		*46 - 124*	*09/12/23 10:32*	*09/14/23 20:04*	*1*
2-Fluorophenol	*15*		*13 - 113*	*09/12/23 10:32*	*09/14/23 20:04*	*1*
Nitrobenzene-d5	*49*		*36 - 126*	*09/12/23 10:32*	*09/14/23 20:04*	*1*
Phenol-d5	*34*		*17 - 127*	*09/12/23 10:32*	*09/14/23 20:04*	*1*
Terphenyl-d14	*30*	*S1-*	*44 - 149*	*09/12/23 10:32*	*09/14/23 20:04*	*1*
2,4,6-Tribromophenol	*58*		*26 - 150*	*09/12/23 10:32*	*09/14/23 20:04*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/12/23 08:25	09/12/23 23:53	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/12/23 08:25	09/12/23 23:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*09/12/23 08:25*	*09/12/23 23:53*	*1*

Client Sample ID: MW7-ROX-090623-DUP

Date Collected: 09/06/23 12:10
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-7

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130000	50000	ug/L			09/15/23 19:30	5000
Acrolein	ND		100000	17000	ug/L			09/15/23 19:30	5000
Acrylonitrile	ND		50000	14000	ug/L			09/15/23 19:30	5000
Benzene	**460000**		5000	2500	ug/L			09/15/23 19:30	5000
Bromobenzene	ND		5000	2700	ug/L			09/15/23 19:30	5000
Bromochloromethane	ND		5000	1100	ug/L			09/15/23 19:30	5000
Bromodichloromethane	ND		5000	2500	ug/L			09/15/23 19:30	5000
Bromoform	ND		25000	1300	ug/L			09/15/23 19:30	5000
Bromomethane	ND		5000	4900	ug/L			09/15/23 19:30	5000
2-Butanone (MEK)	ND		130000	13000	ug/L			09/15/23 19:30	5000
Carbon disulfide	ND		5000	2500	ug/L			09/15/23 19:30	5000
Carbon tetrachloride	ND		5000	950	ug/L			09/15/23 19:30	5000
Chlorobenzene	ND		5000	4500	ug/L			09/15/23 19:30	5000
Chloroethane	ND		5000	3800	ug/L			09/15/23 19:30	5000
2-Chloroethyl vinyl ether	ND		25000	10000	ug/L			09/15/23 19:30	5000
Chloroform	ND		5000	4500	ug/L			09/15/23 19:30	5000
1-Chlorohexane	ND		5000	1600	ug/L			09/15/23 19:30	5000
Chloromethane	ND		5000	4500	ug/L			09/15/23 19:30	5000
cis-1,2-Dichloroethene	ND		5000	1000	ug/L			09/15/23 19:30	5000
cis-1,3-Dichloropropene	ND		25000	2500	ug/L			09/15/23 19:30	5000
Dibromochloromethane	ND		5000	1200	ug/L			09/15/23 19:30	5000
1,2-Dichlorobenzene	ND		5000	2500	ug/L			09/15/23 19:30	5000
1,3-Dichlorobenzene	ND		5000	2700	ug/L			09/15/23 19:30	5000
1,4-Dichlorobenzene	ND		5000	3200	ug/L			09/15/23 19:30	5000
Dichlorodifluoromethane	ND		5000	4300	ug/L			09/15/23 19:30	5000
1,1-Dichloroethane	ND		5000	2500	ug/L			09/15/23 19:30	5000
1,2-Dichloroethane	ND		5000	950	ug/L			09/15/23 19:30	5000
1,1-Dichloroethene	ND		5000	2500	ug/L			09/15/23 19:30	5000
1,2-Dichloropropane	ND		5000	2500	ug/L			09/15/23 19:30	5000
1,3-Dichloropropane	ND		5000	2500	ug/L			09/15/23 19:30	5000
2,2-Dichloropropane	ND		5000	2500	ug/L			09/15/23 19:30	5000
1,1-Dichloropropene	ND		5000	2500	ug/L			09/15/23 19:30	5000
Ethylbenzene	ND		5000	2500	ug/L			09/15/23 19:30	5000
Ethyl methacrylate	ND		5000	3000	ug/L			09/15/23 19:30	5000
Hexachlorobutadiene	ND		25000	4500	ug/L			09/15/23 19:30	5000
2-Hexanone	ND		130000	7000	ug/L			09/15/23 19:30	5000
Isopropy benzene	ND		5000	2700	ug/L			09/15/23 19:30	5000
Methylene bromide	ND		25000	1100	ug/L			09/15/23 19:30	5000
Methylene Chloride	ND		25000	15000	ug/L			09/15/23 19:30	5000
4-Methyl-2-pentanone (MIBK)	ND		130000	9000	ug/L			09/15/23 19:30	5000
Methyl tert-butyl ether	ND		5000	1100	ug/L			09/15/23 19:30	5000
m-Xylene & p-Xylene	ND		25000	3200	ug/L			09/15/23 19:30	5000
Naphthalene	ND		25000	15000	ug/L			09/15/23 19:30	5000
n-Butylbenzene	ND		5000	3800	ug/L			09/15/23 19:30	5000
N-Propylbenzene	ND		5000	3500	ug/L			09/15/23 19:30	5000
o-Chlorotoluene	ND		5000	2900	ug/L			09/15/23 19:30	5000
o-Xylene	ND		25000	3000	ug/L			09/15/23 19:30	5000
p-Chlorotoluene	ND		5000	2800	ug/L			09/15/23 19:30	5000
p-Isopropyltoluene	ND		5000	3600	ug/L			09/15/23 19:30	5000

Client Sample ID: MW7-ROX-090623-DUP
Date Collected: 09/06/23 12:10
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-7
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		5000	3500	ug/L			09/15/23 19:30	5000
Styrene	ND		5000	5000	ug/L			09/15/23 19:30	5000
tert-Butylbenzene	ND		5000	3200	ug/L			09/15/23 19:30	5000
1,1,1,2-Tetrachloroethane	ND		5000	800	ug/L			09/15/23 19:30	5000
1,1,2,2-Tetrachloroethane	ND		5000	2500	ug/L			09/15/23 19:30	5000
Tetrachloroethene	ND		5000	4500	ug/L			09/15/23 19:30	5000
Toluene	ND		5000	4500	ug/L			09/15/23 19:30	5000
trans-1,2-Dichloroethene	ND		5000	2500	ug/L			09/15/23 19:30	5000
trans-1,3-Dichloropropene	ND		25000	1000	ug/L			09/15/23 19:30	5000
1,2,3-Trichlorobenzene	ND		5000	4500	ug/L			09/15/23 19:30	5000
1,2,4-Trichlorobenzene	ND		5000	4100	ug/L			09/15/23 19:30	5000
1,1,1-Trichloroethane	ND		5000	900	ug/L			09/15/23 19:30	5000
1,1,2-Trichloroethane	ND		25000	1100	ug/L			09/15/23 19:30	5000
Trichloroethene	ND		5000	750	ug/L			09/15/23 19:30	5000
Trichlorofluoromethane	ND		5000	2600	ug/L			09/15/23 19:30	5000
1,2,3-Trichloropropane	ND		25000	4200	ug/L			09/15/23 19:30	5000
1,2,4-Trimethy benzene	ND		5000	4100	ug/L			09/15/23 19:30	5000
1,3,5-Trimethy benzene	ND		5000	2800	ug/L			09/15/23 19:30	5000
Vinyl acetate	ND		130000	4700	ug/L			09/15/23 19:30	5000
Vinyl chloride	ND		5000	2500	ug/L			09/15/23 19:30	5000
Xylenes, Total	ND		50000	8000	ug/L			09/15/23 19:30	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*72 - 130*		*09/15/23 19:30*	*5000*
4-Bromofluorobenzene	*121*		*72 - 130*		*09/16/23 10:29*	*5000*
Dibromofluoromethane	*98*		*75 - 126*		*09/15/23 19:30*	*5000*
Dibromofluoromethane	*94*		*75 - 126*		*09/16/23 10:29*	*5000*
Toluene-d8 (Surr)	*103*		*64 - 132*		*09/15/23 19:30*	*5000*
Toluene-d8 (Surr)	*110*		*64 - 132*		*09/16/23 10:29*	*5000*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.095	ug/L		09/12/23 10:32	09/14/23 23:31	1
Acenaphthylene	ND		0.19	0.042	ug/L		09/12/23 10:32	09/14/23 23:31	1
Anthracene	ND		0.19	0.045	ug/L		09/12/23 10:32	09/14/23 23:31	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		09/12/23 10:32	09/14/23 23:31	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		09/12/23 10:32	09/14/23 23:31	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		09/12/23 10:32	09/14/23 23:31	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/12/23 10:32	09/14/23 23:31	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		09/12/23 10:32	09/14/23 23:31	1
Chrysene	ND		0.19	0.032	ug/L		09/12/23 10:32	09/14/23 23:31	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		09/12/23 10:32	09/14/23 23:31	1
Fluoranthene	ND		0.19	0.033	ug/L		09/12/23 10:32	09/14/23 23:31	1
Fluorene	**0.12**	**J**	0.19	0.086	ug/L		09/12/23 10:32	09/14/23 23:31	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		09/12/23 10:32	09/14/23 23:31	1
Phenanthrene	**0.14**	**J**	0.19	0.087	ug/L		09/12/23 10:32	09/14/23 23:31	1
Pyrene	ND		0.19	0.038	ug/L		09/12/23 10:32	09/14/23 23:31	1
1-Methylnaphthalene	**0.80**		0.19	0.077	ug/L		09/12/23 10:32	09/14/23 23:31	1
2-Methylnaphthalene	**1.2**		0.19	0.064	ug/L		09/12/23 10:32	09/14/23 23:31	1

Client Sample ID: MW7-ROX-090623-DUP

Date Collected: 09/06/23 12:10
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-7

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*69*		*18 - 147*	*09/12/23 10:32*	*09/14/23 23:31*	*1*
2-Fluorobiphenyl	*78*		*15 - 128*	*09/12/23 10:32*	*09/14/23 23:31*	*1*
Nitrobenzene-d5	*35*		*10 - 144*	*09/12/23 10:32*	*09/14/23 23:31*	*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		09/12/23 10:32	09/14/23 20:25	1
Benzenethiol	ND	*-	9.6	1.6	ug/L		09/12/23 10:32	09/14/23 20:25	1
Benzoic acid	ND	*- *1	29	7.0	ug/L		09/12/23 10:32	09/14/23 20:25	1
Benzyl alcohol	ND		9.6	1.9	ug/L		09/12/23 10:32	09/14/23 20:25	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		09/12/23 10:32	09/14/23 20:25	1
Bis(2-chloroethyl)ether	ND	*+	9.6	2.6	ug/L		09/12/23 10:32	09/14/23 20:25	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		09/12/23 10:32	09/14/23 20:25	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		09/12/23 10:32	09/14/23 20:25	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		09/12/23 10:32	09/14/23 20:25	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		09/12/23 10:32	09/14/23 20:25	1
4-Chloroaniline	ND		9.6	3.3	ug/L		09/12/23 10:32	09/14/23 20:25	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		09/12/23 10:32	09/14/23 20:25	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		09/12/23 10:32	09/14/23 20:25	1
2-Chlorophenol	ND		9.6	2.1	ug/L		09/12/23 10:32	09/14/23 20:25	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		09/12/23 10:32	09/14/23 20:25	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		09/12/23 10:32	09/14/23 20:25	1
Dibenzofuran	ND		9.6	0.16	ug/L		09/12/23 10:32	09/14/23 20:25	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		09/12/23 10:32	09/14/23 20:25	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		09/12/23 10:32	09/14/23 20:25	1
Diethyl phthalate	ND		9.6	0.23	ug/L		09/12/23 10:32	09/14/23 20:25	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		09/12/23 10:32	09/14/23 20:25	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		09/12/23 10:32	09/14/23 20:25	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		09/12/23 10:32	09/14/23 20:25	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		09/12/23 10:32	09/14/23 20:25	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/12/23 10:32	09/14/23 20:25	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		09/12/23 10:32	09/14/23 20:25	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		09/12/23 10:32	09/14/23 20:25	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		09/12/23 10:32	09/14/23 20:25	1
1,4-Dioxane	ND		9.6	0.96	ug/L		09/12/23 10:32	09/14/23 20:25	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		09/12/23 10:32	09/14/23 20:25	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		09/12/23 10:32	09/14/23 20:25	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/12/23 10:32	09/14/23 20:25	1
Hexachloroethane	ND		9.6	4.0	ug/L		09/12/23 10:32	09/14/23 20:25	1
Indene	ND		9.6	0.96	ug/L		09/12/23 10:32	09/14/23 20:25	1
Isophorone	ND		9.6	0.13	ug/L		09/12/23 10:32	09/14/23 20:25	1
2-Methylphenol	ND		9.6	1.7	ug/L		09/12/23 10:32	09/14/23 20:25	1
3 & 4 Methylphenol	**0.45**	**J**	19	0.38	ug/L		09/12/23 10:32	09/14/23 20:25	1
2-Nitroaniline	ND		9.6	2.1	ug/L		09/12/23 10:32	09/14/23 20:25	1
3-Nitroaniline	ND		9.6	1.7	ug/L		09/12/23 10:32	09/14/23 20:25	1
4-Nitroaniline	ND		9.6	1.4	ug/L		09/12/23 10:32	09/14/23 20:25	1
Nitrobenzene	ND		9.6	0.13	ug/L		09/12/23 10:32	09/14/23 20:25	1
2-Nitrophenol	ND		9.6	5.0	ug/L		09/12/23 10:32	09/14/23 20:25	1
4-Nitrophenol	ND		9.6	2.0	ug/L		09/12/23 10:32	09/14/23 20:25	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: MW7-ROX-090623-DUP
Date Collected: 09/06/23 12:10
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-7
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		9.6	3.4	ug/L		09/12/23 10:32	09/14/23 20:25	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		09/12/23 10:32	09/14/23 20:25	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		09/12/23 10:32	09/14/23 20:25	1
Pentachlorophenol	ND		19	1.3	ug/L		09/12/23 10:32	09/14/23 20:25	1
Phenol	**83**		9.6	2.5	ug/L		09/12/23 10:32	09/14/23 20:25	1
Pyridine	ND		9.6	3.1	ug/L		09/12/23 10:32	09/14/23 20:25	1
Quinoline	ND		9.6	4.3	ug/L		09/12/23 10:32	09/14/23 20:25	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		09/12/23 10:32	09/14/23 20:25	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		09/12/23 10:32	09/14/23 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*46 - 124*	*09/12/23 10:32*	*09/14/23 20:25*	*1*
2-Fluorophenol	*15*		*13 - 113*	*09/12/23 10:32*	*09/14/23 20:25*	*1*
Nitrobenzene-d5	*52*		*36 - 126*	*09/12/23 10:32*	*09/14/23 20:25*	*1*
Phenol-d5	*38*		*17 - 127*	*09/12/23 10:32*	*09/14/23 20:25*	*1*
Terphenyl-d14	*54*		*44 - 149*	*09/12/23 10:32*	*09/14/23 20:25*	*1*
2,4,6-Tribromophenol	*66*		*26 - 150*	*09/12/23 10:32*	*09/14/23 20:25*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/12/23 08:25	09/13/23 00:14	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/12/23 08:25	09/13/23 00:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*09/12/23 08:25*	*09/13/23 00:14*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: TB-ROX-090623-8260-B
Date Collected: 09/06/23 00:00
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-8
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			09/15/23 16:17	1
Acrolein	ND		20	3.3	ug/L			09/15/23 16:17	1
Acrylonitrile	ND		10	2.8	ug/L			09/15/23 16:17	1
Benzene	ND		1.0	0.50	ug/L			09/15/23 16:17	1
Bromobenzene	ND		1.0	0.54	ug/L			09/15/23 16:17	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/15/23 16:17	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/15/23 16:17	1
Bromoform	ND		5.0	0.25	ug/L			09/15/23 16:17	1
Bromomethane	ND		1.0	0.98	ug/L			09/15/23 16:17	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/15/23 16:17	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/15/23 16:17	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/15/23 16:17	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/15/23 16:17	1
Chloroethane	ND		1.0	0.76	ug/L			09/15/23 16:17	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/15/23 16:17	1
Chloroform	ND		1.0	0.90	ug/L			09/15/23 16:17	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/15/23 16:17	1
Chloromethane	ND		1.0	0.90	ug/L			09/15/23 16:17	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/15/23 16:17	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/15/23 16:17	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/15/23 16:17	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/15/23 16:17	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/15/23 16:17	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/15/23 16:17	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/15/23 16:17	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/15/23 16:17	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/15/23 16:17	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/15/23 16:17	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 16:17	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 16:17	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 16:17	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/15/23 16:17	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/15/23 16:17	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/15/23 16:17	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/15/23 16:17	1
2-Hexanone	ND		25	1.4	ug/L			09/15/23 16:17	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/15/23 16:17	1
Methylene bromide	ND		5.0	0.22	ug/L			09/15/23 16:17	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/15/23 16:17	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/15/23 16:17	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/15/23 16:17	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/15/23 16:17	1
Naphthalene	ND		5.0	3.0	ug/L			09/15/23 16:17	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/15/23 16:17	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/15/23 16:17	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/15/23 16:17	1
o-Xylene	ND		5.0	0.60	ug/L			09/15/23 16:17	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/15/23 16:17	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/15/23 16:17	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: TB-ROX-090623-8260-B
Date Collected: 09/06/23 00:00
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-8
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			09/15/23 16:17	1
Styrene	ND		1.0	1.0	ug/L			09/15/23 16:17	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/15/23 16:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/15/23 16:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/15/23 16:17	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/15/23 16:17	1
Toluene	ND		1.0	0.90	ug/L			09/15/23 16:17	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/15/23 16:17	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/15/23 16:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/15/23 16:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/15/23 16:17	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/15/23 16:17	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/15/23 16:17	1
Trichloroethene	ND		1.0	0.15	ug/L			09/15/23 16:17	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/15/23 16:17	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/15/23 16:17	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/15/23 16:17	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/15/23 16:17	1
Vinyl acetate	ND		25	0.93	ug/L			09/15/23 16:17	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/15/23 16:17	1
Xylenes, Total	ND		10	1.6	ug/L			09/15/23 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*119*		*72 - 130*		*09/15/23 16:17*	*1*
Dibromofluoromethane	*97*		*75 - 126*		*09/15/23 16:17*	*1*
Toluene-d8 (Surr)	*107*		*64 - 132*		*09/15/23 16:17*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: TB-ROX-090623-8011-B
Date Collected: 09/06/23 00:00
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-9
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-D bromo-3-Chloropropane	ND		0.031	0.018	ug/L		09/12/23 08:25	09/13/23 00:35	1
1,2-D bromoethane	ND		0.021	0.016	ug/L		09/12/23 08:25	09/13/23 00:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*09/12/23 08:25*	*09/13/23 00:35*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: P59-ROX-090623
Date Collected: 09/06/23 09:05
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-10
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**99**		25	10	ug/L			09/15/23 17:30	1
Acrolein	ND		20	3.3	ug/L			09/15/23 17:30	1
Acrylonitrile	ND		10	2.8	ug/L			09/15/23 17:30	1
Bromobenzene	ND		1.0	0.54	ug/L			09/15/23 17:30	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/15/23 17:30	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/15/23 17:30	1
Bromoform	ND		5.0	0.25	ug/L			09/15/23 17:30	1
Bromomethane	ND		1.0	0.98	ug/L			09/15/23 17:30	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/15/23 17:30	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/15/23 17:30	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/15/23 17:30	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/15/23 17:30	1
Chloroethane	ND		1.0	0.76	ug/L			09/15/23 17:30	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/15/23 17:30	1
Chloroform	ND		1.0	0.90	ug/L			09/15/23 17:30	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/15/23 17:30	1
Chloromethane	ND		1.0	0.90	ug/L			09/15/23 17:30	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/15/23 17:30	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/15/23 17:30	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/15/23 17:30	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/15/23 17:30	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/15/23 17:30	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/15/23 17:30	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/15/23 17:30	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/15/23 17:30	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/15/23 17:30	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/15/23 17:30	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 17:30	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 17:30	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 17:30	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/15/23 17:30	1
Ethylbenzene	**35**		1.0	0.50	ug/L			09/15/23 17:30	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/15/23 17:30	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/15/23 17:30	1
2-Hexanone	ND		25	1.4	ug/L			09/15/23 17:30	1
Isopropylbenzene	**33**		1.0	0.53	ug/L			09/15/23 17:30	1
Methylene bromide	ND		5.0	0.22	ug/L			09/15/23 17:30	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/15/23 17:30	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/15/23 17:30	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/15/23 17:30	1
m-Xylene & p-Xylene	**75**		5.0	0.63	ug/L			09/15/23 17:30	1
Naphthalene	**29**		5.0	3.0	ug/L			09/15/23 17:30	1
n-Butylbenzene	**3.9**		1.0	0.76	ug/L			09/15/23 17:30	1
N-Propylbenzene	**58**		1.0	0.69	ug/L			09/15/23 17:30	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/15/23 17:30	1
o-Xylene	**2.6**	**J**	5.0	0.60	ug/L			09/15/23 17:30	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/15/23 17:30	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/15/23 17:30	1
sec-Butylbenzene	**2.1**		1.0	0.70	ug/L			09/15/23 17:30	1

Client Sample ID: P59-ROX-090623
Date Collected: 09/06/23 09:05
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-10
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		1.0	1.0	ug/L			09/15/23 17:30	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/15/23 17:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/15/23 17:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/15/23 17:30	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/15/23 17:30	1
Toluene	**48**		1.0	0.90	ug/L			09/15/23 17:30	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/15/23 17:30	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/15/23 17:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/15/23 17:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/15/23 17:30	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/15/23 17:30	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/15/23 17:30	1
Trichloroethene	ND		1.0	0.15	ug/L			09/15/23 17:30	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/15/23 17:30	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/15/23 17:30	1
1,2,4-Trimethylbenzene	**17**		1.0	0.82	ug/L			09/15/23 17:30	1
1,3,5-Trimethylbenzene	**23**		1.0	0.56	ug/L			09/15/23 17:30	1
Vinyl acetate	ND		25	0.93	ug/L			09/15/23 17:30	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/15/23 17:30	1
Xylenes, Total	**77**		10	1.6	ug/L			09/15/23 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*117*		*72 - 130*		*09/15/23 17:30*	*1*
Dibromofluoromethane	*98*		*75 - 126*		*09/15/23 17:30*	*1*
Toluene-d8 (Surr)	*108*		*64 - 132*		*09/15/23 17:30*	*1*

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**890**		10	5.0	ug/L			09/16/23 09:17	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*72 - 130*		*09/16/23 09:17*	*10*
Dibromofluoromethane	*93*		*75 - 126*		*09/16/23 09:17*	*10*
Toluene-d8 (Surr)	*104*		*64 - 132*		*09/16/23 09:17*	*10*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.33**		0.19	0.095	ug/L		09/12/23 10:32	09/14/23 23:52	1
Acenaphthylene	ND		0.19	0.042	ug/L		09/12/23 10:32	09/14/23 23:52	1
Anthracene	ND		0.19	0.045	ug/L		09/12/23 10:32	09/14/23 23:52	1
Benzo[a]anthracene	**0.063**	**J**	0.19	0.033	ug/L		09/12/23 10:32	09/14/23 23:52	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		09/12/23 10:32	09/14/23 23:52	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		09/12/23 10:32	09/14/23 23:52	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/12/23 10:32	09/14/23 23:52	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		09/12/23 10:32	09/14/23 23:52	1
Chrysene	ND		0.19	0.032	ug/L		09/12/23 10:32	09/14/23 23:52	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		09/12/23 10:32	09/14/23 23:52	1
Fluoranthene	**0.13**	**J**	0.19	0.033	ug/L		09/12/23 10:32	09/14/23 23:52	1
Fluorene	**0.27**		0.19	0.086	ug/L		09/12/23 10:32	09/14/23 23:52	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		09/12/23 10:32	09/14/23 23:52	1

Client Sample ID: P59-ROX-090623
Date Collected: 09/06/23 09:05
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-10
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	0.49		0.19	0.087	ug/L		09/12/23 10:32	09/14/23 23:52	1
Pyrene	0.41		0.19	0.038	ug/L		09/12/23 10:32	09/14/23 23:52	1
1-Methylnaphthalene	8.3		0.19	0.077	ug/L		09/12/23 10:32	09/14/23 23:52	1
2-Methylnaphthalene	11		0.19	0.064	ug/L		09/12/23 10:32	09/14/23 23:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*99*		*18 - 147*	*09/12/23 10:32*	*09/14/23 23:52*	*1*
2-Fluorobiphenyl	*93*		*15 - 128*	*09/12/23 10:32*	*09/14/23 23:52*	*1*
Nitrobenzene-d5	*59*		*10 - 144*	*09/12/23 10:32*	*09/14/23 23:52*	*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		09/12/23 10:32	09/14/23 20:46	1
Benzenethiol	ND	*-	9.6	1.6	ug/L		09/12/23 10:32	09/14/23 20:46	1
Benzoic acid	ND	*- *1	29	7.0	ug/L		09/12/23 10:32	09/14/23 20:46	1
Benzyl alcohol	ND		9.6	1.9	ug/L		09/12/23 10:32	09/14/23 20:46	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		09/12/23 10:32	09/14/23 20:46	1
Bis(2-chloroethyl)ether	ND	*+	9.6	2.6	ug/L		09/12/23 10:32	09/14/23 20:46	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		09/12/23 10:32	09/14/23 20:46	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		09/12/23 10:32	09/14/23 20:46	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		09/12/23 10:32	09/14/23 20:46	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		09/12/23 10:32	09/14/23 20:46	1
4-Chloroaniline	ND		9.6	3.3	ug/L		09/12/23 10:32	09/14/23 20:46	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		09/12/23 10:32	09/14/23 20:46	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		09/12/23 10:32	09/14/23 20:46	1
2-Chlorophenol	ND		9.6	2.1	ug/L		09/12/23 10:32	09/14/23 20:46	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		09/12/23 10:32	09/14/23 20:46	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		09/12/23 10:32	09/14/23 20:46	1
Dibenzofuran	ND		9.6	0.16	ug/L		09/12/23 10:32	09/14/23 20:46	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		09/12/23 10:32	09/14/23 20:46	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		09/12/23 10:32	09/14/23 20:46	1
Diethyl phthalate	ND		9.6	0.23	ug/L		09/12/23 10:32	09/14/23 20:46	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		09/12/23 10:32	09/14/23 20:46	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		09/12/23 10:32	09/14/23 20:46	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		09/12/23 10:32	09/14/23 20:46	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		09/12/23 10:32	09/14/23 20:46	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/12/23 10:32	09/14/23 20:46	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		09/12/23 10:32	09/14/23 20:46	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		09/12/23 10:32	09/14/23 20:46	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		09/12/23 10:32	09/14/23 20:46	1
1,4-Dioxane	ND		9.6	0.96	ug/L		09/12/23 10:32	09/14/23 20:46	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		09/12/23 10:32	09/14/23 20:46	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		09/12/23 10:32	09/14/23 20:46	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/12/23 10:32	09/14/23 20:46	1
Hexachloroethane	ND		9.6	4.0	ug/L		09/12/23 10:32	09/14/23 20:46	1
Indene	ND		9.6	0.96	ug/L		09/12/23 10:32	09/14/23 20:46	1
Isophorone	ND		9.6	0.13	ug/L		09/12/23 10:32	09/14/23 20:46	1
2-Methylphenol	ND		9.6	1.7	ug/L		09/12/23 10:32	09/14/23 20:46	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		09/12/23 10:32	09/14/23 20:46	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: P59-ROX-090623
Date Collected: 09/06/23 09:05
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-10
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		9.6	2.1	ug/L		09/12/23 10:32	09/14/23 20:46	1
3-Nitroaniline	ND		9.6	1.7	ug/L		09/12/23 10:32	09/14/23 20:46	1
4-Nitroaniline	ND		9.6	1.4	ug/L		09/12/23 10:32	09/14/23 20:46	1
Nitrobenzene	ND		9.6	0.13	ug/L		09/12/23 10:32	09/14/23 20:46	1
2-Nitrophenol	ND		9.6	5.0	ug/L		09/12/23 10:32	09/14/23 20:46	1
4-Nitrophenol	ND		9.6	2.0	ug/L		09/12/23 10:32	09/14/23 20:46	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		09/12/23 10:32	09/14/23 20:46	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		09/12/23 10:32	09/14/23 20:46	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		09/12/23 10:32	09/14/23 20:46	1
Pentachlorophenol	ND		19	1.3	ug/L		09/12/23 10:32	09/14/23 20:46	1
Phenol	**2.8**	**J**	9.6	2.5	ug/L		09/12/23 10:32	09/14/23 20:46	1
Pyridine	ND		9.6	3.1	ug/L		09/12/23 10:32	09/14/23 20:46	1
Quinoline	ND		9.6	4.3	ug/L		09/12/23 10:32	09/14/23 20:46	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		09/12/23 10:32	09/14/23 20:46	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		09/12/23 10:32	09/14/23 20:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*46 - 124*	*09/12/23 10:32*	*09/14/23 20:46*	*1*
2-Fluorophenol	*4*	*S1-*	*13 - 113*	*09/12/23 10:32*	*09/14/23 20:46*	*1*
Nitrobenzene-d5	*60*		*36 - 126*	*09/12/23 10:32*	*09/14/23 20:46*	*1*
Phenol-d5	*18*		*17 - 127*	*09/12/23 10:32*	*09/14/23 20:46*	*1*
Terphenyl-d14	*73*		*44 - 149*	*09/12/23 10:32*	*09/14/23 20:46*	*1*
2,4,6-Tribromophenol	*69*		*26 - 150*	*09/12/23 10:32*	*09/14/23 20:46*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/12/23 08:25	09/12/23 22:27	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/12/23 08:25	09/12/23 22:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*51 - 149*	*09/12/23 08:25*	*09/12/23 22:27*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: P58-ROX-090623
Date Collected: 09/06/23 09:55
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-11
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		50000	20000	ug/L			09/16/23 09:40	2000
Acrolein	ND		40000	6600	ug/L			09/16/23 09:40	2000
Acrylonitrile	ND		20000	5600	ug/L			09/16/23 09:40	2000
Benzene	**320000**		2000	1000	ug/L			09/16/23 09:40	2000
Bromobenzene	ND		2000	1100	ug/L			09/16/23 09:40	2000
Bromochloromethane	ND		2000	420	ug/L			09/16/23 09:40	2000
Bromodichloromethane	ND		2000	1000	ug/L			09/16/23 09:40	2000
Bromoform	ND		10000	500	ug/L			09/16/23 09:40	2000
Bromomethane	ND		2000	2000	ug/L			09/16/23 09:40	2000
2-Butanone (MEK)	ND		50000	5200	ug/L			09/16/23 09:40	2000
Carbon disulfide	ND		2000	1000	ug/L			09/16/23 09:40	2000
Carbon tetrachloride	ND		2000	380	ug/L			09/16/23 09:40	2000
Chlorobenzene	ND		2000	1800	ug/L			09/16/23 09:40	2000
Chloroethane	ND		2000	1500	ug/L			09/16/23 09:40	2000
2-Chloroethyl vinyl ether	ND		10000	4000	ug/L			09/16/23 09:40	2000
Chloroform	ND		2000	1800	ug/L			09/16/23 09:40	2000
1-Chlorohexane	ND		2000	640	ug/L			09/16/23 09:40	2000
Chloromethane	ND		2000	1800	ug/L			09/16/23 09:40	2000
cis-1,2-Dichloroethene	ND		2000	400	ug/L			09/16/23 09:40	2000
cis-1,3-Dichloropropene	ND		10000	1000	ug/L			09/16/23 09:40	2000
Dibromochloromethane	ND		2000	480	ug/L			09/16/23 09:40	2000
1,2-Dichlorobenzene	ND		2000	1000	ug/L			09/16/23 09:40	2000
1,3-Dichlorobenzene	ND		2000	1100	ug/L			09/16/23 09:40	2000
1,4-Dichlorobenzene	ND		2000	1300	ug/L			09/16/23 09:40	2000
Dichlorodifluoromethane	ND		2000	1700	ug/L			09/16/23 09:40	2000
1,1-Dichloroethane	ND		2000	1000	ug/L			09/16/23 09:40	2000
1,2-Dichloroethane	ND		2000	380	ug/L			09/16/23 09:40	2000
1,1-Dichloroethene	ND		2000	1000	ug/L			09/16/23 09:40	2000
1,2-Dichloropropane	ND		2000	1000	ug/L			09/16/23 09:40	2000
1,3-Dichloropropane	ND		2000	1000	ug/L			09/16/23 09:40	2000
2,2-Dichloropropane	ND		2000	1000	ug/L			09/16/23 09:40	2000
1,1-Dichloropropene	ND		2000	1000	ug/L			09/16/23 09:40	2000
Ethylbenzene	ND		2000	1000	ug/L			09/16/23 09:40	2000
Ethyl methacrylate	ND		2000	1200	ug/L			09/16/23 09:40	2000
Hexachlorobutadiene	ND		10000	1800	ug/L			09/16/23 09:40	2000
2-Hexanone	ND		50000	2800	ug/L			09/16/23 09:40	2000
Isopropy benzene	ND		2000	1100	ug/L			09/16/23 09:40	2000
Methylene bromide	ND		10000	440	ug/L			09/16/23 09:40	2000
Methylene Chloride	ND		10000	6000	ug/L			09/16/23 09:40	2000
4-Methyl-2-pentanone (MIBK)	ND		50000	3600	ug/L			09/16/23 09:40	2000
Methyl tert-butyl ether	ND		2000	440	ug/L			09/16/23 09:40	2000
m-Xylene & p-Xylene	ND		10000	1300	ug/L			09/16/23 09:40	2000
Naphthalene	ND		10000	6000	ug/L			09/16/23 09:40	2000
n-Butylbenzene	ND		2000	1500	ug/L			09/16/23 09:40	2000
N-Propylbenzene	ND		2000	1400	ug/L			09/16/23 09:40	2000
o-Chlorotoluene	ND		2000	1100	ug/L			09/16/23 09:40	2000
o-Xylene	ND		10000	1200	ug/L			09/16/23 09:40	2000
p-Chlorotoluene	ND		2000	1100	ug/L			09/16/23 09:40	2000
p-Isopropyltoluene	ND		2000	1400	ug/L			09/16/23 09:40	2000

Client Sample ID: P58-ROX-090623
Date Collected: 09/06/23 09:55
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-11
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		2000	1400	ug/L			09/16/23 09:40	2000
Styrene	ND		2000	2000	ug/L			09/16/23 09:40	2000
tert-Butylbenzene	ND		2000	1300	ug/L			09/16/23 09:40	2000
1,1,1,2-Tetrachloroethane	ND		2000	320	ug/L			09/16/23 09:40	2000
1,1,2,2-Tetrachloroethane	ND		2000	1000	ug/L			09/16/23 09:40	2000
Tetrachloroethene	ND		2000	1800	ug/L			09/16/23 09:40	2000
Toluene	ND		2000	1800	ug/L			09/16/23 09:40	2000
trans-1,2-Dichloroethene	ND		2000	1000	ug/L			09/16/23 09:40	2000
trans-1,3-Dichloropropene	ND		10000	400	ug/L			09/16/23 09:40	2000
1,2,3-Trichlorobenzene	ND		2000	1800	ug/L			09/16/23 09:40	2000
1,2,4-Trichlorobenzene	ND		2000	1600	ug/L			09/16/23 09:40	2000
1,1,1-Trichloroethane	ND		2000	360	ug/L			09/16/23 09:40	2000
1,1,2-Trichloroethane	ND		10000	420	ug/L			09/16/23 09:40	2000
Trichloroethene	ND		2000	300	ug/L			09/16/23 09:40	2000
Trichlorofluoromethane	ND		2000	1000	ug/L			09/16/23 09:40	2000
1,2,3-Trichloropropane	ND		10000	1700	ug/L			09/16/23 09:40	2000
1,2,4-Trimethy benzene	ND		2000	1600	ug/L			09/16/23 09:40	2000
1,3,5-Trimethy benzene	ND		2000	1100	ug/L			09/16/23 09:40	2000
Vinyl acetate	ND		50000	1900	ug/L			09/16/23 09:40	2000
Vinyl chloride	ND		2000	1000	ug/L			09/16/23 09:40	2000
Xylenes, Total	ND		20000	3200	ug/L			09/16/23 09:40	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*72 - 130*		*09/16/23 09:40*	*2000*
Dibromofluoromethane	*95*		*75 - 126*		*09/16/23 09:40*	*2000*
Toluene-d8 (Surr)	*107*		*64 - 132*		*09/16/23 09:40*	*2000*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.46**		0.19	0.093	ug/L		09/12/23 10:32	09/15/23 00:13	1
Acenaphthylene	ND		0.19	0.041	ug/L		09/12/23 10:32	09/15/23 00:13	1
Anthracene	ND		0.19	0.044	ug/L		09/12/23 10:32	09/15/23 00:13	1
Benzo[a]anthracene	**0.059**	**J**	0.19	0.032	ug/L		09/12/23 10:32	09/15/23 00:13	1
Benzo[a]pyrene	ND		0.19	0.060	ug/L		09/12/23 10:32	09/15/23 00:13	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		09/12/23 10:32	09/15/23 00:13	1
Benzo[g,h,i]perylene	ND		0.19	0.025	ug/L		09/12/23 10:32	09/15/23 00:13	1
Benzo[k]fluoranthene	ND		0.19	0.058	ug/L		09/12/23 10:32	09/15/23 00:13	1
Chrysene	ND		0.19	0.031	ug/L		09/12/23 10:32	09/15/23 00:13	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		09/12/23 10:32	09/15/23 00:13	1
Fluoranthene	ND		0.19	0.032	ug/L		09/12/23 10:32	09/15/23 00:13	1
Fluorene	**1.0**		0.19	0.084	ug/L		09/12/23 10:32	09/15/23 00:13	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		09/12/23 10:32	09/15/23 00:13	1
Phenanthrene	**0.91**		0.19	0.085	ug/L		09/12/23 10:32	09/15/23 00:13	1
Pyrene	**0.19**		0.19	0.037	ug/L		09/12/23 10:32	09/15/23 00:13	1
1-Methylnaphthalene	**67**		0.94	0.38	ug/L		09/12/23 10:32	09/15/23 19:07	5
2-Methylnaphthalene	**50**		0.94	0.31	ug/L		09/12/23 10:32	09/15/23 19:07	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*112*		*18 - 147*	*09/12/23 10:32*	*09/15/23 00:13*	*1*
2-Fluorobiphenyl	*77*		*15 - 128*	*09/12/23 10:32*	*09/15/23 00:13*	*1*

Client Sample ID: P58-ROX-090623
Date Collected: 09/06/23 09:55
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-11
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	09/12/23 10:32	09/15/23 00:13	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		09/12/23 10:32	09/14/23 21:07	1
Benzenethiol	ND	*-	9.4	1.6	ug/L		09/12/23 10:32	09/14/23 21:07	1
Benzoic acid	ND	*- *1	28	6.9	ug/L		09/12/23 10:32	09/14/23 21:07	1
Benzyl alcohol	ND		9.4	1.9	ug/L		09/12/23 10:32	09/14/23 21:07	1
Bis(2-chloroethoxy)methane	ND		9.4	0.15	ug/L		09/12/23 10:32	09/14/23 21:07	1
Bis(2-chloroethyl)ether	ND	*+	9.4	2.5	ug/L		09/12/23 10:32	09/14/23 21:07	1
bis (2-chloroisopropyl) ether	ND		9.4	0.15	ug/L		09/12/23 10:32	09/14/23 21:07	1
Bis(2-ethylhexyl) phthalate	ND		9.4	4.7	ug/L		09/12/23 10:32	09/14/23 21:07	1
4-Bromophenyl phenyl ether	ND		9.4	0.19	ug/L		09/12/23 10:32	09/14/23 21:07	1
Butyl benzyl phthalate	ND		9.4	0.18	ug/L		09/12/23 10:32	09/14/23 21:07	1
4-Chloroaniline	ND		9.4	3.2	ug/L		09/12/23 10:32	09/14/23 21:07	1
4-Chloro-3-methylphenol	ND		9.4	3.6	ug/L		09/12/23 10:32	09/14/23 21:07	1
2-Chloronaphthalene	ND		9.4	0.13	ug/L		09/12/23 10:32	09/14/23 21:07	1
2-Chlorophenol	ND		9.4	2.1	ug/L		09/12/23 10:32	09/14/23 21:07	1
4-Chlorophenyl phenyl ether	ND		9.4	1.9	ug/L		09/12/23 10:32	09/14/23 21:07	1
Dibenz[a,h]acridine	ND		9.4	0.94	ug/L		09/12/23 10:32	09/14/23 21:07	1
Dibenzofuran	**1.5**	**J**	9.4	0.16	ug/L		09/12/23 10:32	09/14/23 21:07	1
3,3'-Dichlorobenzidine	ND		9.4	2.4	ug/L		09/12/23 10:32	09/14/23 21:07	1
2,4-Dichlorophenol	ND		9.4	2.8	ug/L		09/12/23 10:32	09/14/23 21:07	1
Diethyl phthalate	ND		9.4	0.23	ug/L		09/12/23 10:32	09/14/23 21:07	1
2,4-Dimethylphenol	ND		9.4	3.3	ug/L		09/12/23 10:32	09/14/23 21:07	1
Dimethyl phthalate	ND		9.4	0.16	ug/L		09/12/23 10:32	09/14/23 21:07	1
Di-n-butyl phthalate	ND		9.4	2.5	ug/L		09/12/23 10:32	09/14/23 21:07	1
4,6-Dinitro-ortho-cresol	ND		9.4	1.5	ug/L		09/12/23 10:32	09/14/23 21:07	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		09/12/23 10:32	09/14/23 21:07	1
2,4-Dinitrotoluene	ND		9.4	1.8	ug/L		09/12/23 10:32	09/14/23 21:07	1
2,6-Dinitrotoluene	ND		9.4	1.8	ug/L		09/12/23 10:32	09/14/23 21:07	1
Di-n-octyl phthalate	ND		9.4	0.16	ug/L		09/12/23 10:32	09/14/23 21:07	1
1,4-Dioxane	ND		9.4	0.94	ug/L		09/12/23 10:32	09/14/23 21:07	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	0.94	ug/L		09/12/23 10:32	09/14/23 21:07	1
Hexachlorobenzene	ND		9.4	0.16	ug/L		09/12/23 10:32	09/14/23 21:07	1
Hexachlorocyclopentadiene	ND		19	2.4	ug/L		09/12/23 10:32	09/14/23 21:07	1
Hexachloroethane	ND		9.4	4.0	ug/L		09/12/23 10:32	09/14/23 21:07	1
Indene	ND		9.4	0.94	ug/L		09/12/23 10:32	09/14/23 21:07	1
Isophorone	ND		9.4	0.13	ug/L		09/12/23 10:32	09/14/23 21:07	1
2-Methylphenol	ND		9.4	1.7	ug/L		09/12/23 10:32	09/14/23 21:07	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/12/23 10:32	09/14/23 21:07	1
2-Nitroaniline	ND		9.4	2.1	ug/L		09/12/23 10:32	09/14/23 21:07	1
3-Nitroaniline	ND		9.4	1.7	ug/L		09/12/23 10:32	09/14/23 21:07	1
4-Nitroaniline	ND		9.4	1.4	ug/L		09/12/23 10:32	09/14/23 21:07	1
Nitrobenzene	ND		9.4	0.12	ug/L		09/12/23 10:32	09/14/23 21:07	1
2-Nitrophenol	ND		9.4	4.9	ug/L		09/12/23 10:32	09/14/23 21:07	1
4-Nitrophenol	ND		9.4	2.0	ug/L		09/12/23 10:32	09/14/23 21:07	1
N-Nitrosodimethylamine	ND		9.4	3.3	ug/L		09/12/23 10:32	09/14/23 21:07	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: P58-ROX-090623
Date Collected: 09/06/23 09:55
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-11
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		9.4	3.1	ug/L		09/12/23 10:32	09/14/23 21:07	1
N-Nitrosodiphenylamine	ND		9.4	0.17	ug/L		09/12/23 10:32	09/14/23 21:07	1
Pentachlorophenol	ND		19	1.3	ug/L		09/12/23 10:32	09/14/23 21:07	1
Phenol	**270**		9.4	2.4	ug/L		09/12/23 10:32	09/14/23 21:07	1
Pyridine	ND		9.4	3.0	ug/L		09/12/23 10:32	09/14/23 21:07	1
Quinoline	ND		9.4	4.2	ug/L		09/12/23 10:32	09/14/23 21:07	1
2,4,5-Trichlorophenol	ND		9.4	3.5	ug/L		09/12/23 10:32	09/14/23 21:07	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		09/12/23 10:32	09/14/23 21:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*46 - 124*	*09/12/23 10:32*	*09/14/23 21:07*	*1*
2-Fluorophenol	*7*	*S1-*	*13 - 113*	*09/12/23 10:32*	*09/14/23 21:07*	*1*
Nitrobenzene-d5	*60*		*36 - 126*	*09/12/23 10:32*	*09/14/23 21:07*	*1*
Phenol-d5	*34*		*17 - 127*	*09/12/23 10:32*	*09/14/23 21:07*	*1*
Terphenyl-d14	*61*		*44 - 149*	*09/12/23 10:32*	*09/14/23 21:07*	*1*
2,4,6-Tribromophenol	*71*		*26 - 150*	*09/12/23 10:32*	*09/14/23 21:07*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.032	0.018	ug/L		09/12/23 08:25	09/13/23 01:18	1
1,2-D bromoethane	ND		0.021	0.016	ug/L		09/12/23 08:25	09/13/23 01:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*09/12/23 08:25*	*09/13/23 01:18*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: P58-ROX-090623-DUP

Date Collected: 09/06/23 09:55
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-12

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		50000	20000	ug/L			09/16/23 10:04	2000
Acrolein	ND		40000	6600	ug/L			09/16/23 10:04	2000
Acrylonitrile	ND		20000	5600	ug/L			09/16/23 10:04	2000
Benzene	**330000**		2000	1000	ug/L			09/16/23 10:04	2000
Bromobenzene	ND		2000	1100	ug/L			09/16/23 10:04	2000
Bromochloromethane	ND		2000	420	ug/L			09/16/23 10:04	2000
Bromodichloromethane	ND		2000	1000	ug/L			09/16/23 10:04	2000
Bromoform	ND		10000	500	ug/L			09/16/23 10:04	2000
Bromomethane	ND		2000	2000	ug/L			09/16/23 10:04	2000
2-Butanone (MEK)	ND		50000	5200	ug/L			09/16/23 10:04	2000
Carbon disulfide	ND		2000	1000	ug/L			09/16/23 10:04	2000
Carbon tetrachloride	ND		2000	380	ug/L			09/16/23 10:04	2000
Chlorobenzene	ND		2000	1800	ug/L			09/16/23 10:04	2000
Chloroethane	ND		2000	1500	ug/L			09/16/23 10:04	2000
2-Chloroethyl vinyl ether	ND		10000	4000	ug/L			09/16/23 10:04	2000
Chloroform	ND		2000	1800	ug/L			09/16/23 10:04	2000
1-Chlorohexane	ND		2000	640	ug/L			09/16/23 10:04	2000
Chloromethane	ND		2000	1800	ug/L			09/16/23 10:04	2000
cis-1,2-Dichloroethene	ND		2000	400	ug/L			09/16/23 10:04	2000
cis-1,3-Dichloropropene	ND		10000	1000	ug/L			09/16/23 10:04	2000
Dibromochloromethane	ND		2000	480	ug/L			09/16/23 10:04	2000
1,2-Dichlorobenzene	ND		2000	1000	ug/L			09/16/23 10:04	2000
1,3-Dichlorobenzene	ND		2000	1100	ug/L			09/16/23 10:04	2000
1,4-Dichlorobenzene	ND		2000	1300	ug/L			09/16/23 10:04	2000
Dichlorodifluoromethane	ND		2000	1700	ug/L			09/16/23 10:04	2000
1,1-Dichloroethane	ND		2000	1000	ug/L			09/16/23 10:04	2000
1,2-Dichloroethane	ND		2000	380	ug/L			09/16/23 10:04	2000
1,1-Dichloroethene	ND		2000	1000	ug/L			09/16/23 10:04	2000
1,2-Dichloropropane	ND		2000	1000	ug/L			09/16/23 10:04	2000
1,3-Dichloropropane	ND		2000	1000	ug/L			09/16/23 10:04	2000
2,2-Dichloropropane	ND		2000	1000	ug/L			09/16/23 10:04	2000
1,1-Dichloropropene	ND		2000	1000	ug/L			09/16/23 10:04	2000
Ethylbenzene	ND		2000	1000	ug/L			09/16/23 10:04	2000
Ethyl methacrylate	ND		2000	1200	ug/L			09/16/23 10:04	2000
Hexachlorobutadiene	ND		10000	1800	ug/L			09/16/23 10:04	2000
2-Hexanone	ND		50000	2800	ug/L			09/16/23 10:04	2000
Isopropy benzene	ND		2000	1100	ug/L			09/16/23 10:04	2000
Methylene bromide	ND		10000	440	ug/L			09/16/23 10:04	2000
Methylene Chloride	ND		10000	6000	ug/L			09/16/23 10:04	2000
4-Methyl-2-pentanone (MIBK)	ND		50000	3600	ug/L			09/16/23 10:04	2000
Methyl tert-butyl ether	ND		2000	440	ug/L			09/16/23 10:04	2000
m-Xylene & p-Xylene	ND		10000	1300	ug/L			09/16/23 10:04	2000
Naphthalene	ND		10000	6000	ug/L			09/16/23 10:04	2000
n-Butylbenzene	ND		2000	1500	ug/L			09/16/23 10:04	2000
N-Propylbenzene	ND		2000	1400	ug/L			09/16/23 10:04	2000
o-Chlorotoluene	ND		2000	1100	ug/L			09/16/23 10:04	2000
o-Xylene	ND		10000	1200	ug/L			09/16/23 10:04	2000
p-Chlorotoluene	ND		2000	1100	ug/L			09/16/23 10:04	2000
p-Isopropyltoluene	ND		2000	1400	ug/L			09/16/23 10:04	2000

Client Sample ID: P58-ROX-090623-DUP
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Lab Sample ID: 400-243066-12
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		2000	1400	ug/L			09/16/23 10:04	2000
Styrene	ND		2000	2000	ug/L			09/16/23 10:04	2000
tert-Butylbenzene	ND		2000	1300	ug/L			09/16/23 10:04	2000
1,1,1,2-Tetrachloroethane	ND		2000	320	ug/L			09/16/23 10:04	2000
1,1,2,2-Tetrachloroethane	ND		2000	1000	ug/L			09/16/23 10:04	2000
Tetrachloroethene	ND		2000	1800	ug/L			09/16/23 10:04	2000
Toluene	ND		2000	1800	ug/L			09/16/23 10:04	2000
trans-1,2-Dichloroethene	ND		2000	1000	ug/L			09/16/23 10:04	2000
trans-1,3-Dichloropropene	ND		10000	400	ug/L			09/16/23 10:04	2000
1,2,3-Trichlorobenzene	ND		2000	1800	ug/L			09/16/23 10:04	2000
1,2,4-Trichlorobenzene	ND		2000	1600	ug/L			09/16/23 10:04	2000
1,1,1-Trichloroethane	ND		2000	360	ug/L			09/16/23 10:04	2000
1,1,2-Trichloroethane	ND		10000	420	ug/L			09/16/23 10:04	2000
Trichloroethene	ND		2000	300	ug/L			09/16/23 10:04	2000
Trichlorofluoromethane	ND		2000	1000	ug/L			09/16/23 10:04	2000
1,2,3-Trichloropropane	ND		10000	1700	ug/L			09/16/23 10:04	2000
1,2,4-Trimethy benzene	ND		2000	1600	ug/L			09/16/23 10:04	2000
1,3,5-Trimethy benzene	ND		2000	1100	ug/L			09/16/23 10:04	2000
Vinyl acetate	ND		50000	1900	ug/L			09/16/23 10:04	2000
Vinyl chloride	ND		2000	1000	ug/L			09/16/23 10:04	2000
Xylenes, Total	ND		20000	3200	ug/L			09/16/23 10:04	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*72 - 130*		*09/16/23 10:04*	*2000*
Dibromofluoromethane	*98*		*75 - 126*		*09/16/23 10:04*	*2000*
Toluene-d8 (Surr)	*107*		*64 - 132*		*09/16/23 10:04*	*2000*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.30**		0.19	0.095	ug/L		09/12/23 10:32	09/15/23 00:33	1
Acenaphthylene	ND		0.19	0.042	ug/L		09/12/23 10:32	09/15/23 00:33	1
Anthracene	ND		0.19	0.045	ug/L		09/12/23 10:32	09/15/23 00:33	1
Benzo[a]anthracene	**0.038**	**J**	0.19	0.033	ug/L		09/12/23 10:32	09/15/23 00:33	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		09/12/23 10:32	09/15/23 00:33	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		09/12/23 10:32	09/15/23 00:33	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		09/12/23 10:32	09/15/23 00:33	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		09/12/23 10:32	09/15/23 00:33	1
Chrysene	ND		0.19	0.032	ug/L		09/12/23 10:32	09/15/23 00:33	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		09/12/23 10:32	09/15/23 00:33	1
Fluoranthene	**0.046**	**J**	0.19	0.033	ug/L		09/12/23 10:32	09/15/23 00:33	1
Fluorene	**0.67**		0.19	0.085	ug/L		09/12/23 10:32	09/15/23 00:33	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		09/12/23 10:32	09/15/23 00:33	1
Phenanthrene	**0.65**		0.19	0.086	ug/L		09/12/23 10:32	09/15/23 00:33	1
Pyrene	**0.11**	**J**	0.19	0.037	ug/L		09/12/23 10:32	09/15/23 00:33	1
1-Methylnaphthalene	**49**		0.96	0.38	ug/L		09/12/23 10:32	09/15/23 19:28	5
2-Methylnaphthalene	**35**		0.19	0.063	ug/L		09/12/23 10:32	09/15/23 00:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*40*		*18 - 147*	*09/12/23 10:32*	*09/15/23 00:33*	*1*
2-Fluorobiphenyl	*45*		*15 - 128*	*09/12/23 10:32*	*09/15/23 00:33*	*1*

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Lab Sample ID: 400-243066-12

Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*50*		*10 - 144*	*09/12/23 10:32*	*09/15/23 00:33*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*-	9.6	3.6	ug/L		09/12/23 10:32	09/14/23 21:29	1
Benzenethiol	ND	*-	9.6	1.6	ug/L		09/12/23 10:32	09/14/23 21:29	1
Benzoic acid	ND	*- *1	29	7.0	ug/L		09/12/23 10:32	09/14/23 21:29	1
Benzyl alcohol	ND		9.6	1.9	ug/L		09/12/23 10:32	09/14/23 21:29	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		09/12/23 10:32	09/14/23 21:29	1
Bis(2-chloroethyl)ether	ND	*+	9.6	2.6	ug/L		09/12/23 10:32	09/14/23 21:29	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		09/12/23 10:32	09/14/23 21:29	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		09/12/23 10:32	09/14/23 21:29	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		09/12/23 10:32	09/14/23 21:29	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		09/12/23 10:32	09/14/23 21:29	1
4-Chloroaniline	ND		9.6	3.3	ug/L		09/12/23 10:32	09/14/23 21:29	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		09/12/23 10:32	09/14/23 21:29	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		09/12/23 10:32	09/14/23 21:29	1
2-Chlorophenol	ND		9.6	2.1	ug/L		09/12/23 10:32	09/14/23 21:29	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		09/12/23 10:32	09/14/23 21:29	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		09/12/23 10:32	09/14/23 21:29	1
Dibenzofuran	**1.4**	**J**	9.6	0.16	ug/L		09/12/23 10:32	09/14/23 21:29	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		09/12/23 10:32	09/14/23 21:29	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		09/12/23 10:32	09/14/23 21:29	1
Diethyl phthalate	ND		9.6	0.23	ug/L		09/12/23 10:32	09/14/23 21:29	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		09/12/23 10:32	09/14/23 21:29	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		09/12/23 10:32	09/14/23 21:29	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		09/12/23 10:32	09/14/23 21:29	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		09/12/23 10:32	09/14/23 21:29	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		09/12/23 10:32	09/14/23 21:29	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		09/12/23 10:32	09/14/23 21:29	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		09/12/23 10:32	09/14/23 21:29	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		09/12/23 10:32	09/14/23 21:29	1
1,4-Dioxane	ND		9.6	0.96	ug/L		09/12/23 10:32	09/14/23 21:29	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		09/12/23 10:32	09/14/23 21:29	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		09/12/23 10:32	09/14/23 21:29	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/12/23 10:32	09/14/23 21:29	1
Hexachloroethane	ND		9.6	4.0	ug/L		09/12/23 10:32	09/14/23 21:29	1
Indene	ND		9.6	0.96	ug/L		09/12/23 10:32	09/14/23 21:29	1
Isophorone	ND		9.6	0.13	ug/L		09/12/23 10:32	09/14/23 21:29	1
2-Methylphenol	ND		9.6	1.7	ug/L		09/12/23 10:32	09/14/23 21:29	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/12/23 10:32	09/14/23 21:29	1
2-Nitroaniline	ND		9.6	2.1	ug/L		09/12/23 10:32	09/14/23 21:29	1
3-Nitroaniline	ND		9.6	1.7	ug/L		09/12/23 10:32	09/14/23 21:29	1
4-Nitroaniline	ND		9.6	1.4	ug/L		09/12/23 10:32	09/14/23 21:29	1
Nitrobenzene	ND		9.6	0.12	ug/L		09/12/23 10:32	09/14/23 21:29	1
2-Nitrophenol	ND		9.6	5.0	ug/L		09/12/23 10:32	09/14/23 21:29	1
4-Nitrophenol	ND		9.6	2.0	ug/L		09/12/23 10:32	09/14/23 21:29	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		09/12/23 10:32	09/14/23 21:29	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: P58-ROX-090623-DUP

Date Collected: 09/06/23 09:55
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-12

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		9.6	3.2	ug/L		09/12/23 10:32	09/14/23 21:29	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		09/12/23 10:32	09/14/23 21:29	1
Pentachlorophenol	ND		19	1.3	ug/L		09/12/23 10:32	09/14/23 21:29	1
Pyridine	ND		9.6	3.1	ug/L		09/12/23 10:32	09/14/23 21:29	1
Quinoline	ND		9.6	4.3	ug/L		09/12/23 10:32	09/14/23 21:29	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		09/12/23 10:32	09/14/23 21:29	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		09/12/23 10:32	09/14/23 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*52*		*46 - 124*	*09/12/23 10:32*	*09/14/23 21:29*	*1*
2-Fluorophenol	*22*		*13 - 113*	*09/12/23 10:32*	*09/14/23 21:29*	*1*
Nitrobenzene-d5	*49*		*36 - 126*	*09/12/23 10:32*	*09/14/23 21:29*	*1*
Phenol-d5	*43*		*17 - 127*	*09/12/23 10:32*	*09/14/23 21:29*	*1*
Terphenyl-d14	*29*	*S1-*	*44 - 149*	*09/12/23 10:32*	*09/14/23 21:29*	*1*
2,4,6-Tribromophenol	*64*		*26 - 150*	*09/12/23 10:32*	*09/14/23 21:29*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**420**		48	12	ug/L		09/12/23 10:32	09/21/23 16:00	5

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/12/23 08:25	09/13/23 01:39	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/12/23 08:25	09/13/23 01:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*118*		*51 - 149*	*09/12/23 08:25*	*09/13/23 01:39*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: P93B-ROX-090623
Date Collected: 09/06/23 11:15
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-13
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130000	50000	ug/L			09/15/23 18:41	5000
Acrolein	ND		100000	17000	ug/L			09/15/23 18:41	5000
Acrylonitrile	ND		50000	14000	ug/L			09/15/23 18:41	5000
Benzene	**480000**		5000	2500	ug/L			09/15/23 18:41	5000
Bromobenzene	ND		5000	2700	ug/L			09/15/23 18:41	5000
Bromochloromethane	ND		5000	1100	ug/L			09/15/23 18:41	5000
Bromodichloromethane	ND		5000	2500	ug/L			09/15/23 18:41	5000
Bromoform	ND		25000	1300	ug/L			09/15/23 18:41	5000
Bromomethane	ND		5000	4900	ug/L			09/15/23 18:41	5000
2-Butanone (MEK)	ND		130000	13000	ug/L			09/15/23 18:41	5000
Carbon disulfide	ND		5000	2500	ug/L			09/15/23 18:41	5000
Carbon tetrachloride	ND		5000	950	ug/L			09/15/23 18:41	5000
Chlorobenzene	ND		5000	4500	ug/L			09/15/23 18:41	5000
Chloroethane	ND		5000	3800	ug/L			09/15/23 18:41	5000
2-Chloroethyl vinyl ether	ND		25000	10000	ug/L			09/15/23 18:41	5000
Chloroform	ND		5000	4500	ug/L			09/15/23 18:41	5000
1-Chlorohexane	ND		5000	1600	ug/L			09/15/23 18:41	5000
Chloromethane	ND		5000	4500	ug/L			09/15/23 18:41	5000
cis-1,2-Dichloroethene	ND		5000	1000	ug/L			09/15/23 18:41	5000
cis-1,3-Dichloropropene	ND		25000	2500	ug/L			09/15/23 18:41	5000
Dibromochloromethane	ND		5000	1200	ug/L			09/15/23 18:41	5000
1,2-Dichlorobenzene	ND		5000	2500	ug/L			09/15/23 18:41	5000
1,3-Dichlorobenzene	ND		5000	2700	ug/L			09/15/23 18:41	5000
1,4-Dichlorobenzene	ND		5000	3200	ug/L			09/15/23 18:41	5000
Dichlorodifluoromethane	ND		5000	4300	ug/L			09/15/23 18:41	5000
1,1-Dichloroethane	ND		5000	2500	ug/L			09/15/23 18:41	5000
1,2-Dichloroethane	ND		5000	950	ug/L			09/15/23 18:41	5000
1,1-Dichloroethene	ND		5000	2500	ug/L			09/15/23 18:41	5000
1,2-Dichloropropane	ND		5000	2500	ug/L			09/15/23 18:41	5000
1,3-Dichloropropane	ND		5000	2500	ug/L			09/15/23 18:41	5000
2,2-Dichloropropane	ND		5000	2500	ug/L			09/15/23 18:41	5000
1,1-Dichloropropene	ND		5000	2500	ug/L			09/15/23 18:41	5000
Ethylbenzene	ND		5000	2500	ug/L			09/15/23 18:41	5000
Ethyl methacrylate	ND		5000	3000	ug/L			09/15/23 18:41	5000
Hexachlorobutadiene	ND		25000	4500	ug/L			09/15/23 18:41	5000
2-Hexanone	ND		130000	7000	ug/L			09/15/23 18:41	5000
Isopropy benzene	ND		5000	2700	ug/L			09/15/23 18:41	5000
Methylene bromide	ND		25000	1100	ug/L			09/15/23 18:41	5000
Methylene Chloride	ND		25000	15000	ug/L			09/15/23 18:41	5000
4-Methyl-2-pentanone (MIBK)	ND		130000	9000	ug/L			09/15/23 18:41	5000
Methyl tert-butyl ether	ND		5000	1100	ug/L			09/15/23 18:41	5000
m-Xylene & p-Xylene	ND		25000	3200	ug/L			09/15/23 18:41	5000
Naphthalene	ND		25000	15000	ug/L			09/15/23 18:41	5000
n-Butylbenzene	ND		5000	3800	ug/L			09/15/23 18:41	5000
N-Propylbenzene	ND		5000	3500	ug/L			09/15/23 18:41	5000
o-Chlorotoluene	ND		5000	2900	ug/L			09/15/23 18:41	5000
o-Xylene	ND		25000	3000	ug/L			09/15/23 18:41	5000
p-Chlorotoluene	ND		5000	2800	ug/L			09/15/23 18:41	5000
p-Isopropyltoluene	ND		5000	3600	ug/L			09/15/23 18:41	5000

Client Sample ID: P93B-ROX-090623
Date Collected: 09/06/23 11:15
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-13
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		5000	3500	ug/L			09/15/23 18:41	5000
Styrene	ND		5000	5000	ug/L			09/15/23 18:41	5000
tert-Butylbenzene	ND		5000	3200	ug/L			09/15/23 18:41	5000
1,1,1,2-Tetrachloroethane	ND		5000	800	ug/L			09/15/23 18:41	5000
1,1,2,2-Tetrachloroethane	ND		5000	2500	ug/L			09/15/23 18:41	5000
Tetrachloroethene	ND		5000	4500	ug/L			09/15/23 18:41	5000
Toluene	ND		5000	4500	ug/L			09/15/23 18:41	5000
trans-1,2-Dichloroethene	ND		5000	2500	ug/L			09/15/23 18:41	5000
trans-1,3-Dichloropropene	ND		25000	1000	ug/L			09/15/23 18:41	5000
1,2,3-Trichlorobenzene	ND		5000	4500	ug/L			09/15/23 18:41	5000
1,2,4-Trichlorobenzene	ND		5000	4100	ug/L			09/15/23 18:41	5000
1,1,1-Trichloroethane	ND		5000	900	ug/L			09/15/23 18:41	5000
1,1,2-Trichloroethane	ND		25000	1100	ug/L			09/15/23 18:41	5000
Trichloroethene	ND		5000	750	ug/L			09/15/23 18:41	5000
Trichlorofluoromethane	ND		5000	2600	ug/L			09/15/23 18:41	5000
1,2,3-Trichloropropane	ND		25000	4200	ug/L			09/15/23 18:41	5000
1,2,4-Trimethy benzene	ND		5000	4100	ug/L			09/15/23 18:41	5000
1,3,5-Trimethy benzene	ND		5000	2800	ug/L			09/15/23 18:41	5000
Vinyl acetate	ND		130000	4700	ug/L			09/15/23 18:41	5000
Vinyl chloride	ND		5000	2500	ug/L			09/15/23 18:41	5000
Xylenes, Total	ND		50000	8000	ug/L			09/15/23 18:41	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*120*		*72 - 130*		*09/15/23 18:41*	*5000*
Dibromofluoromethane	*97*		*75 - 126*		*09/15/23 18:41*	*5000*
Toluene-d8 (Surr)	*109*		*64 - 132*		*09/15/23 18:41*	*5000*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.093	ug/L		09/12/23 10:32	09/15/23 00:54	1
Acenaphthylene	ND		0.19	0.042	ug/L		09/12/23 10:32	09/15/23 00:54	1
Anthracene	ND		0.19	0.044	ug/L		09/12/23 10:32	09/15/23 00:54	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		09/12/23 10:32	09/15/23 00:54	1
Benzo[a]pyrene	ND		0.19	0.060	ug/L		09/12/23 10:32	09/15/23 00:54	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		09/12/23 10:32	09/15/23 00:54	1
Benzo[g,h,i]perylene	ND		0.19	0.025	ug/L		09/12/23 10:32	09/15/23 00:54	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		09/12/23 10:32	09/15/23 00:54	1
Chrysene	ND		0.19	0.031	ug/L		09/12/23 10:32	09/15/23 00:54	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		09/12/23 10:32	09/15/23 00:54	1
Fluoranthene	ND		0.19	0.032	ug/L		09/12/23 10:32	09/15/23 00:54	1
Fluorene	ND		0.19	0.084	ug/L		09/12/23 10:32	09/15/23 00:54	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		09/12/23 10:32	09/15/23 00:54	1
Phenanthrene	ND		0.19	0.085	ug/L		09/12/23 10:32	09/15/23 00:54	1
Pyrene	ND		0.19	0.037	ug/L		09/12/23 10:32	09/15/23 00:54	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		09/12/23 10:32	09/15/23 00:54	1
2-Methylnaphthalene	**0.075**	**J**	0.19	0.062	ug/L		09/12/23 10:32	09/15/23 00:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*86*		*18 - 147*	*09/12/23 10:32*	*09/15/23 00:54*	*1*
2-Fluorobiphenyl	*82*		*15 - 128*	*09/12/23 10:32*	*09/15/23 00:54*	*1*

Client Sample ID: P93B-ROX-090623
Date Collected: 09/06/23 11:15
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-13
Matrix: Water

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	28		10 - 144	09/12/23 10:32	09/15/23 00:54	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		09/12/23 10:32	09/14/23 21:50	1
Benzenethiol	ND	*-	9.4	1.6	ug/L		09/12/23 10:32	09/14/23 21:50	1
Benzoic acid	**18**	**J *- *1**	28	6.9	ug/L		09/12/23 10:32	09/14/23 21:50	1
Benzyl alcohol	ND		9.4	1.9	ug/L		09/12/23 10:32	09/14/23 21:50	1
Bis(2-chloroethoxy)methane	ND		9.4	0.15	ug/L		09/12/23 10:32	09/14/23 21:50	1
Bis(2-chloroethyl)ether	ND	*+	9.4	2.5	ug/L		09/12/23 10:32	09/14/23 21:50	1
bis (2-chloroisopropyl) ether	ND		9.4	0.15	ug/L		09/12/23 10:32	09/14/23 21:50	1
Bis(2-ethylhexyl) phthalate	**5.1**	**J**	9.4	4.7	ug/L		09/12/23 10:32	09/14/23 21:50	1
4-Bromophenyl phenyl ether	ND		9.4	0.19	ug/L		09/12/23 10:32	09/14/23 21:50	1
Butyl benzyl phthalate	ND		9.4	0.18	ug/L		09/12/23 10:32	09/14/23 21:50	1
4-Chloroaniline	ND		9.4	3.2	ug/L		09/12/23 10:32	09/14/23 21:50	1
4-Chloro-3-methylphenol	ND		9.4	3.6	ug/L		09/12/23 10:32	09/14/23 21:50	1
2-Chloronaphthalene	ND		9.4	0.13	ug/L		09/12/23 10:32	09/14/23 21:50	1
2-Chlorophenol	ND		9.4	2.1	ug/L		09/12/23 10:32	09/14/23 21:50	1
4-Chlorophenyl phenyl ether	ND		9.4	1.9	ug/L		09/12/23 10:32	09/14/23 21:50	1
Dibenz[a,h]acridine	ND		9.4	0.94	ug/L		09/12/23 10:32	09/14/23 21:50	1
Dibenzofuran	ND		9.4	0.16	ug/L		09/12/23 10:32	09/14/23 21:50	1
3,3'-Dichlorobenzidine	ND		9.4	2.5	ug/L		09/12/23 10:32	09/14/23 21:50	1
2,4-Dichlorophenol	ND		9.4	2.8	ug/L		09/12/23 10:32	09/14/23 21:50	1
Diethyl phthalate	ND		9.4	0.23	ug/L		09/12/23 10:32	09/14/23 21:50	1
2,4-Dimethylphenol	ND		9.4	3.3	ug/L		09/12/23 10:32	09/14/23 21:50	1
Dimethyl phthalate	ND		9.4	0.16	ug/L		09/12/23 10:32	09/14/23 21:50	1
Di-n-butyl phthalate	ND		9.4	2.5	ug/L		09/12/23 10:32	09/14/23 21:50	1
4,6-Dinitro-ortho-cresol	ND		9.4	1.5	ug/L		09/12/23 10:32	09/14/23 21:50	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		09/12/23 10:32	09/14/23 21:50	1
2,4-Dinitrotoluene	ND		9.4	1.8	ug/L		09/12/23 10:32	09/14/23 21:50	1
2,6-Dinitrotoluene	ND		9.4	1.8	ug/L		09/12/23 10:32	09/14/23 21:50	1
Di-n-octyl phthalate	ND		9.4	0.16	ug/L		09/12/23 10:32	09/14/23 21:50	1
1,4-Dioxane	ND		9.4	0.94	ug/L		09/12/23 10:32	09/14/23 21:50	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	0.94	ug/L		09/12/23 10:32	09/14/23 21:50	1
Hexachlorobenzene	ND		9.4	0.16	ug/L		09/12/23 10:32	09/14/23 21:50	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		09/12/23 10:32	09/14/23 21:50	1
Hexachloroethane	ND		9.4	4.0	ug/L		09/12/23 10:32	09/14/23 21:50	1
Indene	ND		9.4	0.94	ug/L		09/12/23 10:32	09/14/23 21:50	1
Isophorone	ND		9.4	0.13	ug/L		09/12/23 10:32	09/14/23 21:50	1
2-Methylphenol	ND		9.4	1.7	ug/L		09/12/23 10:32	09/14/23 21:50	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		09/12/23 10:32	09/14/23 21:50	1
2-Nitroaniline	ND		9.4	2.1	ug/L		09/12/23 10:32	09/14/23 21:50	1
3-Nitroaniline	ND		9.4	1.7	ug/L		09/12/23 10:32	09/14/23 21:50	1
4-Nitroaniline	ND		9.4	1.4	ug/L		09/12/23 10:32	09/14/23 21:50	1
Nitrobenzene	ND		9.4	0.12	ug/L		09/12/23 10:32	09/14/23 21:50	1
2-Nitrophenol	ND		9.4	4.9	ug/L		09/12/23 10:32	09/14/23 21:50	1
4-Nitrophenol	ND		9.4	2.0	ug/L		09/12/23 10:32	09/14/23 21:50	1
N-Nitrosodimethylamine	ND		9.4	3.3	ug/L		09/12/23 10:32	09/14/23 21:50	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: P93B-ROX-090623
Date Collected: 09/06/23 11:15
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-13
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		9.4	3.1	ug/L		09/12/23 10:32	09/14/23 21:50	1
N-Nitrosodiphenylamine	ND		9.4	0.17	ug/L		09/12/23 10:32	09/14/23 21:50	1
Pentachlorophenol	ND		19	1.3	ug/L		09/12/23 10:32	09/14/23 21:50	1
Phenol	**180**		9.4	2.5	ug/L		09/12/23 10:32	09/14/23 21:50	1
Pyridine	ND		9.4	3.0	ug/L		09/12/23 10:32	09/14/23 21:50	1
Quinoline	ND		9.4	4.2	ug/L		09/12/23 10:32	09/14/23 21:50	1
2,4,5-Trichlorophenol	ND		9.4	3.5	ug/L		09/12/23 10:32	09/14/23 21:50	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		09/12/23 10:32	09/14/23 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*46 - 124*	*09/12/23 10:32*	*09/14/23 21:50*	*1*
2-Fluorophenol	*14*		*13 - 113*	*09/12/23 10:32*	*09/14/23 21:50*	*1*
Nitrobenzene-d5	*55*		*36 - 126*	*09/12/23 10:32*	*09/14/23 21:50*	*1*
Phenol-d5	*42*		*17 - 127*	*09/12/23 10:32*	*09/14/23 21:50*	*1*
Terphenyl-d14	*69*		*44 - 149*	*09/12/23 10:32*	*09/14/23 21:50*	*1*
2,4,6-Tribromophenol	*72*		*26 - 150*	*09/12/23 10:32*	*09/14/23 21:50*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/12/23 08:25	09/13/23 02:00	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/12/23 08:25	09/13/23 02:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*51 - 149*	*09/12/23 08:25*	*09/13/23 02:00*	*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.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

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: 400-243066-1

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)
400-243066-1	TB-ROX-090623-8260-A	118	95	109
400-243066-3	MW4-ROX-090623-EB	122	99	108
400-243066-4	MW4-ROX-090623	123	99	110
400-243066-4 MS	MW4-ROX-090623	117	96	106
400-243066-4 MSD	MW4-ROX-090623	114	94	105
400-243066-5	MW25-ROX-090623	109	95	102
400-243066-6	MW7-ROX-090623	117	97	106
400-243066-6 - DL	MW7-ROX-090623	121	102	109
400-243066-7	MW7-ROX-090623-DUP	114	98	103
400-243066-7	MW7-ROX-090623-DUP	121	94	110
400-243066-8	TB-ROX-090623-8260-B	119	97	107
400-243066-10	P59-ROX-090623	117	98	108
400-243066-10 - DL	P59-ROX-090623	111	93	104
400-243066-11	P58-ROX-090623	114	95	107
400-243066-12	P58-ROX-090623-DUP	112	98	107
400-243066-13	P93B-ROX-090623	120	97	109
LCS 400-641136/1004	Lab Control Sample	106	92	100
LCS 400-641297/1002	Lab Control Sample	103	91	99
MB 400-641136/6	Method Blank	106	94	101
MB 400-641297/4	Method Blank	111	92	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)
400-243066-3	MW4-ROX-090623-EB	49	10 S1-	44	29	59	49
400-243066-4	MW4-ROX-090623	45 S1-	10 S1-	41	28	54	52
400-243066-5	MW25-ROX-090623	58	13	49	35	48	57
400-243066-6	MW7-ROX-090623	51	15	49	34	30 S1-	58
400-243066-7	MW7-ROX-090623-DUP	58	15	52	38	54	66
400-243066-10	P59-ROX-090623	67	4 S1-	60	18	73	69
400-243066-11	P58-ROX-090623	63	7 S1-	60	34	61	71
400-243066-12	P58-ROX-090623-DUP	52	22	49	43	29 S1-	64
400-243066-13	P93B-ROX-090623	62	14	55	42	69	72
LCS 400-640651/17-A	Lab Control Sample	70	24	63	49	90	55
LCS 400-640651/2-A	Lab Control Sample	66	22	64	44	69	68
LCSD 400-640651/18-A	Lab Control Sample Dup	69	38	61	56	81	62
LCSD 400-640651/3-A	Lab Control Sample Dup	70	13	57	42	73	75
MB 400-640651/1-A	Method Blank	64	3 S1-	54	8 S1-	68	37

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5

Client: AECOM Technical Services Inc.
Job ID: 400-243066-1
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)
400-243066-3	MW4-ROX-090623-EB	133	101	68
400-243066-4	MW4-ROX-090623	104	86	63
400-243066-5	MW25-ROX-090623	52	63	62
400-243066-6	MW7-ROX-090623	48	89	40
400-243066-7	MW7-ROX-090623-DUP	69	78	35
400-243066-10	P59-ROX-090623	99	93	59
400-243066-11	P58-ROX-090623	112	77	56
400-243066-12	P58-ROX-090623-DUP	40	45	50
400-243066-13	P93B-ROX-090623	86	82	28
LCS 400-640651/19-A	Lab Control Sample	112	91	66
LCSD 400-640651/20-A	Lab Control Sample Dup	112	94	67
MB 400-640651/1-A	Method Blank	94	75	69

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)
400-243066-2	TB-ROX-090623-8011-A	89
400-243066-3	MW4-ROX-090623-EB	104
400-243066-4	MW4-ROX-090623	104
400-243066-5	MW25-ROX-090623	99
400-243066-6	MW7-ROX-090623	96
400-243066-7	MW7-ROX-090623-DUP	101
400-243066-9	TB-ROX-090623-8011-B	96
400-243066-10	P59-ROX-090623	111
400-243066-11	P58-ROX-090623	101
400-243066-12	P58-ROX-090623-DUP	118
400-243066-13	P93B-ROX-090623	88
LCS 400-640625/2-A	Lab Control Sample	82
LCSD 400-640625/3-A	Lab Control Sample Dup	94
MB 400-640625/1-A	Method Blank	91

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

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: 400-243066-1

Client Sample ID: TB-ROX-090623-8260-A
Lab Sample ID: 400-243066-1
Date Collected: 09/06/23 00:00
Matrix: Water
Date Received: 09/07/23 08:21

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	641136	09/15/23 15:52	WPD	EET PEN

Client Sample ID: TB-ROX-090623-8011-A
Lab Sample ID: 400-243066-2
Date Collected: 09/06/23 00:00
Matrix: Water
Date Received: 09/07/23 08:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			33 mL	35 mL	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/12/23 22:06	DS	EET PEN

Client Sample ID: MW4-ROX-090623-EB
Lab Sample ID: 400-243066-3
Date Collected: 09/06/23 08:25
Matrix: Water
Date Received: 09/07/23 08:21

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	641136	09/15/23 16:41	WPD	EET PEN
Total/NA	Prep	3520C			256.8 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641055	09/14/23 19:00	S1B	EET PEN
Total/NA	Prep	3520C			256.8 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641090	09/14/23 22:09	TH	EET PEN
Total/NA	Prep	8011			35.4 mL	35 mL	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/12/23 22:49	DS	EET PEN

Client Sample ID: MW4-ROX-090623
Lab Sample ID: 400-243066-4
Date Collected: 09/06/23 09:35
Matrix: Water
Date Received: 09/07/23 08:21

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	641136	09/15/23 13:27	WPD	EET PEN
Total/NA	Prep	3520C			255.2 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641055	09/14/23 19:22	S1B	EET PEN
Total/NA	Prep	3520C			255.2 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641090	09/14/23 22:30	TH	EET PEN
Total/NA	Prep	8011			35 mL	35 mL	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/12/23 23:10	DS	EET PEN

Client Sample ID: MW25-ROX-090623
Lab Sample ID: 400-243066-5
Date Collected: 09/06/23 11:00
Matrix: Water
Date Received: 09/07/23 08:21

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	641136	09/15/23 17:06	WPD	EET PEN
Total/NA	Prep	3520C			265 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641239	09/15/23 19:18	VC1	EET PEN

Client Sample ID: MW25-ROX-090623

Lab Sample ID: 400-243066-5

Date Collected: 09/06/23 11:00

Matrix: Water

Date Received: 09/07/23 08:21

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	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641154	09/15/23 18:47	KJA	EET PEN
Total/NA	Prep	8011			34 mL	35 mL	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/12/23 23:31	DS	EET PEN

Client Sample ID: MW7-ROX-090623

Lab Sample ID: 400-243066-6

Date Collected: 09/06/23 12:10

Matrix: Water

Date Received: 09/07/23 08:21

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	641136	09/15/23 13:52	WPD	EET PEN
Total/NA	Analysis	8260D	DL	5000	5 mL	5 mL	641136	09/15/23 19:05	WPD	EET PEN
Total/NA	Prep	3520C			255.6 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641055	09/14/23 20:04	S1B	EET PEN
Total/NA	Prep	3520C			255.6 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641090	09/14/23 23:11	TH	EET PEN
Total/NA	Prep	8011			35.1 mL	35 mL	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/12/23 23:53	DS	EET PEN

Client Sample ID: MW7-ROX-090623-DUP

Lab Sample ID: 400-243066-7

Date Collected: 09/06/23 12:10

Matrix: Water

Date Received: 09/07/23 08:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		5000	5 mL	5 mL	641136	09/15/23 19:30	WPD	EET PEN
Total/NA	Analysis	8260D		5000	5 mL	5 mL	641297	09/16/23 10:29	WPD	EET PEN
Total/NA	Prep	3520C			259.6 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641055	09/14/23 20:25	S1B	EET PEN
Total/NA	Prep	3520C			259.6 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641090	09/14/23 23:31	TH	EET PEN
Total/NA	Prep	8011			35.1 mL	35 mL	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/13/23 00:14	DS	EET PEN

Client Sample ID: TB-ROX-090623-8260-B

Lab Sample ID: 400-243066-8

Date Collected: 09/06/23 00:00

Matrix: Water

Date Received: 09/07/23 08:21

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	641136	09/15/23 16:17	WPD	EET PEN

Client Sample ID: TB-ROX-090623-8011-B

Lab Sample ID: 400-243066-9

Date Collected: 09/06/23 00:00

Matrix: Water

Date Received: 09/07/23 08:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			33.6 mL	35 mL	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/13/23 00:35	DS	EET PEN

Client Sample ID: P59-ROX-090623

Lab Sample ID: 400-243066-10

Date Collected: 09/06/23 09:05

Matrix: Water

Date Received: 09/07/23 08:21

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	641136	09/15/23 17:30	WPD	EET PEN
Total/NA	Analysis	8260D	DL	10	5 mL	5 mL	641297	09/16/23 09:17	WPD	EET PEN
Total/NA	Prep	3520C			259.8 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641055	09/14/23 20:46	S1B	EET PEN
Total/NA	Prep	3520C			259.8 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641090	09/14/23 23:52	TH	EET PEN
Total/NA	Prep	8011			35.3 mL	35 mL	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/12/23 22:27	DS	EET PEN

Client Sample ID: P58-ROX-090623

Lab Sample ID: 400-243066-11

Date Collected: 09/06/23 09:55

Matrix: Water

Date Received: 09/07/23 08:21

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	641297	09/16/23 09:40	WPD	EET PEN
Total/NA	Prep	3520C			265.6 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641055	09/14/23 21:07	S1B	EET PEN
Total/NA	Prep	3520C			265.6 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		5	0.4 mL	0.4 mL	641154	09/15/23 19:07	KJA	EET PEN
Total/NA	Prep	3520C			265.6 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641090	09/15/23 00:13	TH	EET PEN
Total/NA	Prep	8011			33.3 mL	35 mL	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/13/23 01:18	DS	EET PEN

Client Sample ID: P58-ROX-090623-DUP

Lab Sample ID: 400-243066-12

Date Collected: 09/06/23 09:55

Matrix: Water

Date Received: 09/07/23 08:21

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	641297	09/16/23 10:04	WPD	EET PEN
Total/NA	Prep	3520C			261.4 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641055	09/14/23 21:29	S1B	EET PEN
Total/NA	Prep	3520C	DL		261.4 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E	DL	5	0.4 mL	0.4 mL	642113	09/21/23 16:00	S1B	EET PEN
Total/NA	Prep	3520C			261.4 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		5	0.4 mL	0.4 mL	641154	09/15/23 19:28	KJA	EET PEN

Client Sample ID: P58-ROX-090623-DUP

Lab Sample ID: 400-243066-12

Date Collected: 09/06/23 09:55

Matrix: Water

Date Received: 09/07/23 08:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			261.4 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641090	09/15/23 00:33	TH	EET PEN
Total/NA	Prep	8011			34.8 mL	35 mL	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/13/23 01:39	DS	EET PEN

Client Sample ID: P93B-ROX-090623

Lab Sample ID: 400-243066-13

Date Collected: 09/06/23 11:15

Matrix: Water

Date Received: 09/07/23 08:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		5000	5 mL	5 mL	641136	09/15/23 18:41	WPD	EET PEN
Total/NA	Prep	3520C			264.8 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641055	09/14/23 21:50	S1B	EET PEN
Total/NA	Prep	3520C			264.8 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641090	09/15/23 00:54	TH	EET PEN
Total/NA	Prep	8011			34.6 mL	35 mL	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/13/23 02:00	DS	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-640625/1-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	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/12/23 17:29	DS	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-640651/1-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	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641239	09/15/23 17:33	VC1	EET PEN
Total/NA	Prep	3520C			250 mL	1 mL	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641154	09/15/23 16:40	KJA	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-641136/6

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	641136	09/15/23 09:55	WPD	EET PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-641297/4
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	641297	09/16/23 07:45	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640625/2-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	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/12/23 17:50	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640651/17-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641055	09/14/23 16:10	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640651/19-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	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641090	09/14/23 20:05	TH	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-640651/2-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	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641239	09/15/23 17:59	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-641136/1004
Date Collected: N/A
Matrix: Water
Date Received: 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	641136	09/15/23 08:59	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-641297/1002
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	641297	09/16/23 07:02	WPD	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-640625/3-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	640625	09/12/23 08:25	PG	EET PEN
Total/NA	Analysis	8011		1			640659	09/12/23 18:12	DS	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-640651/18-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641055	09/14/23 16:32	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-640651/20-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	640651	09/12/23 10:33	BKL	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	641090	09/14/23 20:25	TH	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-640651/3-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	640651	09/12/23 10:32	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	641239	09/15/23 18:25	VC1	EET PEN

Client Sample ID: MW4-ROX-090623
Lab Sample ID: 400-243066-4 MS
Date Collected: 09/06/23 09:35
Matrix: Water
Date Received: 09/07/23 08:21

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	641136	09/15/23 14:38	WPD	EET PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA MONTHLY GW

Job ID: 400-243066-1

Client Sample ID: MW4-ROX-090623

Date Collected: 09/06/23 09:35
Date Received: 09/07/23 08:21

Lab Sample ID: 400-243066-4 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	641136	09/15/23 15:03	WPD	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 641136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-243066-1	TB-ROX-090623-8260-A	Total/NA	Water	8260D	
400-243066-3	MW4-ROX-090623-EB	Total/NA	Water	8260D	
400-243066-4	MW4-ROX-090623	Total/NA	Water	8260D	
400-243066-5	MW25-ROX-090623	Total/NA	Water	8260D	
400-243066-6	MW7-ROX-090623	Total/NA	Water	8260D	
400-243066-6 - DL	MW7-ROX-090623	Total/NA	Water	8260D	
400-243066-7	MW7-ROX-090623-DUP	Total/NA	Water	8260D	
400-243066-8	TB-ROX-090623-8260-B	Total/NA	Water	8260D	
400-243066-10	P59-ROX-090623	Total/NA	Water	8260D	
400-243066-13	P93B-ROX-090623	Total/NA	Water	8260D	
MB 400-641136/6	Method Blank	Total/NA	Water	8260D	
LCS 400-641136/1004	Lab Control Sample	Total/NA	Water	8260D	
400-243066-4 MS	MW4-ROX-090623	Total/NA	Water	8260D	
400-243066-4 MSD	MW4-ROX-090623	Total/NA	Water	8260D	

Analysis Batch: 641297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-243066-7	MW7-ROX-090623-DUP	Total/NA	Water	8260D	
400-243066-10 - DL	P59-ROX-090623	Total/NA	Water	8260D	
400-243066-11	P58-ROX-090623	Total/NA	Water	8260D	
400-243066-12	P58-ROX-090623-DUP	Total/NA	Water	8260D	
MB 400-641297/4	Method Blank	Total/NA	Water	8260D	
LCS 400-641297/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 640651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-243066-3	MW4-ROX-090623-EB	Total/NA	Water	3520C	
400-243066-4	MW4-ROX-090623	Total/NA	Water	3520C	
400-243066-5	MW25-ROX-090623	Total/NA	Water	3520C	
400-243066-6	MW7-ROX-090623	Total/NA	Water	3520C	
400-243066-7	MW7-ROX-090623-DUP	Total/NA	Water	3520C	
400-243066-10	P59-ROX-090623	Total/NA	Water	3520C	
400-243066-11	P58-ROX-090623	Total/NA	Water	3520C	
400-243066-12	P58-ROX-090623-DUP	Total/NA	Water	3520C	
400-243066-12 - DL	P58-ROX-090623-DUP	Total/NA	Water	3520C	
400-243066-13	P93B-ROX-090623	Total/NA	Water	3520C	
MB 400-640651/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-640651/17-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-640651/19-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-640651/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-640651/18-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-640651/20-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-640651/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 641055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-243066-3	MW4-ROX-090623-EB	Total/NA	Water	8270E	640651
400-243066-4	MW4-ROX-090623	Total/NA	Water	8270E	640651
400-243066-6	MW7-ROX-090623	Total/NA	Water	8270E	640651

GC/MS Semi VOA (Continued)

Analysis Batch: 641055 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-243066-7	MW7-ROX-090623-DUP	Total/NA	Water	8270E	640651
400-243066-10	P59-ROX-090623	Total/NA	Water	8270E	640651
400-243066-11	P58-ROX-090623	Total/NA	Water	8270E	640651
400-243066-12	P58-ROX-090623-DUP	Total/NA	Water	8270E	640651
400-243066-13	P93B-ROX-090623	Total/NA	Water	8270E	640651
LCS 400-640651/17-A	Lab Control Sample	Total/NA	Water	8270E	640651
LCSD 400-640651/18-A	Lab Control Sample Dup	Total/NA	Water	8270E	640651

Analysis Batch: 641090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-243066-3	MW4-ROX-090623-EB	Total/NA	Water	8270E SIM	640651
400-243066-4	MW4-ROX-090623	Total/NA	Water	8270E SIM	640651
400-243066-6	MW7-ROX-090623	Total/NA	Water	8270E SIM	640651
400-243066-7	MW7-ROX-090623-DUP	Total/NA	Water	8270E SIM	640651
400-243066-10	P59-ROX-090623	Total/NA	Water	8270E SIM	640651
400-243066-11	P58-ROX-090623	Total/NA	Water	8270E SIM	640651
400-243066-12	P58-ROX-090623-DUP	Total/NA	Water	8270E SIM	640651
400-243066-13	P93B-ROX-090623	Total/NA	Water	8270E SIM	640651
LCS 400-640651/19-A	Lab Control Sample	Total/NA	Water	8270E SIM	640651
LCSD 400-640651/20-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	640651

Analysis Batch: 641154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-243066-5	MW25-ROX-090623	Total/NA	Water	8270E SIM	640651
400-243066-11	P58-ROX-090623	Total/NA	Water	8270E SIM	640651
400-243066-12	P58-ROX-090623-DUP	Total/NA	Water	8270E SIM	640651
MB 400-640651/1-A	Method Blank	Total/NA	Water	8270E SIM	640651

Analysis Batch: 641239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-243066-5	MW25-ROX-090623	Total/NA	Water	8270E	640651
MB 400-640651/1-A	Method Blank	Total/NA	Water	8270E	640651
LCS 400-640651/2-A	Lab Control Sample	Total/NA	Water	8270E	640651
LCSD 400-640651/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	640651

Analysis Batch: 642113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-243066-12 - DL	P58-ROX-090623-DUP	Total/NA	Water	8270E	640651

GC Semi VOA

Prep Batch: 640625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-243066-2	TB-ROX-090623-8011-A	Total/NA	Water	8011	
400-243066-3	MW4-ROX-090623-EB	Total/NA	Water	8011	
400-243066-4	MW4-ROX-090623	Total/NA	Water	8011	
400-243066-5	MW25-ROX-090623	Total/NA	Water	8011	
400-243066-6	MW7-ROX-090623	Total/NA	Water	8011	
400-243066-7	MW7-ROX-090623-DUP	Total/NA	Water	8011	
400-243066-9	TB-ROX-090623-8011-B	Total/NA	Water	8011	
400-243066-10	P59-ROX-090623	Total/NA	Water	8011	

GC Semi VOA (Continued)

Prep Batch: 640625 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-243066-11	P58-ROX-090623	Total/NA	Water	8011	
400-243066-12	P58-ROX-090623-DUP	Total/NA	Water	8011	
400-243066-13	P93B-ROX-090623	Total/NA	Water	8011	
MB 400-640625/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-640625/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-640625/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 640659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-243066-2	TB-ROX-090623-8011-A	Total/NA	Water	8011	640625
400-243066-3	MW4-ROX-090623-EB	Total/NA	Water	8011	640625
400-243066-4	MW4-ROX-090623	Total/NA	Water	8011	640625
400-243066-5	MW25-ROX-090623	Total/NA	Water	8011	640625
400-243066-6	MW7-ROX-090623	Total/NA	Water	8011	640625
400-243066-7	MW7-ROX-090623-DUP	Total/NA	Water	8011	640625
400-243066-9	TB-ROX-090623-8011-B	Total/NA	Water	8011	640625
400-243066-10	P59-ROX-090623	Total/NA	Water	8011	640625
400-243066-11	P58-ROX-090623	Total/NA	Water	8011	640625
400-243066-12	P58-ROX-090623-DUP	Total/NA	Water	8011	640625
400-243066-13	P93B-ROX-090623	Total/NA	Water	8011	640625
MB 400-640625/1-A	Method Blank	Total/NA	Water	8011	640625
LCS 400-640625/2-A	Lab Control Sample	Total/NA	Water	8011	640625
LCSD 400-640625/3-A	Lab Control Sample Dup	Total/NA	Water	8011	640625

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-641136/6
Matrix: Water
Analysis Batch: 641136

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			09/15/23 09:55	1
Acrolein	ND		20	3.3	ug/L			09/15/23 09:55	1
Acrylonitrile	ND		10	2.8	ug/L			09/15/23 09:55	1
Benzene	ND		1.0	0.50	ug/L			09/15/23 09:55	1
Bromobenzene	ND		1.0	0.54	ug/L			09/15/23 09:55	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/15/23 09:55	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/15/23 09:55	1
Bromoform	ND		5.0	0.25	ug/L			09/15/23 09:55	1
Bromomethane	ND		1.0	0.98	ug/L			09/15/23 09:55	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/15/23 09:55	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/15/23 09:55	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/15/23 09:55	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/15/23 09:55	1
Chloroethane	ND		1.0	0.76	ug/L			09/15/23 09:55	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/15/23 09:55	1
Chloroform	ND		1.0	0.90	ug/L			09/15/23 09:55	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/15/23 09:55	1
Chloromethane	ND		1.0	0.90	ug/L			09/15/23 09:55	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/15/23 09:55	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/15/23 09:55	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/15/23 09:55	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/15/23 09:55	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/15/23 09:55	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/15/23 09:55	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/15/23 09:55	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/15/23 09:55	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/15/23 09:55	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/15/23 09:55	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 09:55	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 09:55	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/15/23 09:55	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/15/23 09:55	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/15/23 09:55	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/15/23 09:55	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/15/23 09:55	1
2-Hexanone	ND		25	1.4	ug/L			09/15/23 09:55	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/15/23 09:55	1
Methylene bromide	ND		5.0	0.22	ug/L			09/15/23 09:55	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/15/23 09:55	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/15/23 09:55	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/15/23 09:55	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/15/23 09:55	1
Naphthalene	ND		5.0	3.0	ug/L			09/15/23 09:55	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/15/23 09:55	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/15/23 09:55	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/15/23 09:55	1
o-Xylene	ND		5.0	0.60	ug/L			09/15/23 09:55	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/15/23 09:55	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 400-641136/6
Matrix: Water
Analysis Batch: 641136

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			09/15/23 09:55	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			09/15/23 09:55	1
Styrene	ND		1.0	1.0	ug/L			09/15/23 09:55	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/15/23 09:55	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/15/23 09:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/15/23 09:55	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/15/23 09:55	1
Toluene	ND		1.0	0.90	ug/L			09/15/23 09:55	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/15/23 09:55	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/15/23 09:55	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/15/23 09:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/15/23 09:55	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/15/23 09:55	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/15/23 09:55	1
Trichloroethene	ND		1.0	0.15	ug/L			09/15/23 09:55	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/15/23 09:55	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			09/15/23 09:55	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/15/23 09:55	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/15/23 09:55	1
Vinyl acetate	ND		25	0.93	ug/L			09/15/23 09:55	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/15/23 09:55	1
Xylenes, Total	ND		10	1.6	ug/L			09/15/23 09:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*09/15/23 09:55*	*1*
Dibromofluoromethane	*94*		*75 - 126*		*09/15/23 09:55*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/15/23 09:55*	*1*

Lab Sample ID: LCS 400-641136/1004
Matrix: Water
Analysis Batch: 641136

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	240		ug/L		120	43 - 160
Acrolein	250	303		ug/L		121	38 - 160
Acrylonitrile	500	518		ug/L		104	64 - 142
Benzene	50.0	47.4		ug/L		95	70 - 130
Bromobenzene	50.0	47.3		ug/L		95	70 - 132
Bromochloromethane	50.0	42.6		ug/L		85	70 - 130
Bromodichloromethane	50.0	46.5		ug/L		93	67 - 133
Bromoform	50.0	50.6		ug/L		101	57 - 140
Bromomethane	25.0	17.7		ug/L		71	10 - 160
2-Butanone (MEK)	200	217		ug/L		109	61 - 145
Carbon disulfide	50.0	45.8		ug/L		92	61 - 137
Carbon tetrachloride	50.0	43.9		ug/L		88	61 - 137
Chlorobenzene	50.0	46.4		ug/L		93	70 - 130
Chloroethane	25.0	22.5		ug/L		90	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 400-641136/1004
Matrix: Water
Analysis Batch: 641136

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	43.6		ug/L		87	69 - 130
1-Chlorohexane	50.0	54.9		ug/L		110	69 - 130
Chloromethane	25.0	23.4		ug/L		93	58 - 137
cis-1,2-Dichloroethene	50.0	49.1		ug/L		98	68 - 130
cis-1,3-Dichloropropene	50.0	48.8		ug/L		98	69 - 132
Dibromochloromethane	50.0	46.3		ug/L		93	67 - 135
1,2-Dichlorobenzene	50.0	47.4		ug/L		95	67 - 130
1,3-Dichlorobenzene	50.0	48.3		ug/L		97	70 - 130
1,4-Dichlorobenzene	50.0	48.3		ug/L		97	70 - 130
Dichlorodifluoromethane	25.0	12.9		ug/L		52	41 - 146
1,1-Dichloroethane	50.0	47.4		ug/L		95	70 - 130
1,2-Dichloroethane	50.0	44.8		ug/L		90	69 - 130
1,1-Dichloroethene	50.0	44.4		ug/L		89	63 - 134
1,2-Dichloropropane	50.0	51.3		ug/L		103	70 - 130
1,3-Dichloropropane	50.0	50.0		ug/L		100	70 - 130
2,2-Dichloropropane	50.0	44.6		ug/L		89	52 - 135
1,1-Dichloropropene	50.0	47.4		ug/L		95	70 - 130
Ethylbenzene	50.0	48.6		ug/L		97	70 - 130
Ethyl methacrylate	50.0	49.4		ug/L		99	68 - 130
Hexachlorobutadiene	50.0	59.1		ug/L		118	53 - 140
2-Hexanone	200	227		ug/L		113	65 - 137
Isopropy benzene	50.0	46.9		ug/L		94	70 - 130
Methylene bromide	50.0	44.7		ug/L		89	70 - 130
Methylene Chloride	50.0	44.6		ug/L		89	66 - 135
4-Methyl-2-pentanone (MIBK)	200	209		ug/L		105	69 - 138
Methyl tert-butyl ether	50.0	46.4		ug/L		93	66 - 130
m-Xylene & p-Xylene	50.0	48.2		ug/L		96	70 - 130
Naphthalene	50.0	48.8		ug/L		98	47 - 149
n-Butylbenzene	50.0	50.8		ug/L		102	67 - 130
N-Propylbenzene	50.0	47.9		ug/L		96	70 - 130
o-Chlorotoluene	50.0	47.9		ug/L		96	70 - 130
o-Xylene	50.0	47.6		ug/L		95	70 - 130
p-Chlorotoluene	50.0	49.1		ug/L		98	70 - 130
p-Isopropyltoluene	50.0	48.6		ug/L		97	65 - 130
sec-Butylbenzene	50.0	49.5		ug/L		99	66 - 130
Styrene	50.0	45.4		ug/L		91	70 - 130
tert-Butylbenzene	50.0	54.0		ug/L		108	64 - 139
1,1,1,2-Tetrachloroethane	50.0	46.7		ug/L		93	67 - 131
1,1,2,2-Tetrachloroethane	50.0	48.7		ug/L		97	70 - 131
Tetrachloroethene	50.0	45.0		ug/L		90	65 - 130
Toluene	50.0	48.0		ug/L		96	70 - 130
trans-1,2-Dichloroethene	50.0	45.4		ug/L		91	70 - 130
trans-1,3-Dichloropropene	50.0	48.5		ug/L		97	63 - 130
1,2,3-Trichlorobenzene	50.0	53.9		ug/L		108	60 - 138
1,2,4-Trichlorobenzene	50.0	53.8		ug/L		108	60 - 140
1,1,1-Trichloroethane	50.0	43.0		ug/L		86	68 - 130
1,1,2-Trichloroethane	50.0	49.5		ug/L		99	70 - 130
Trichloroethene	50.0	43.7		ug/L		87	70 - 130
Trichlorofluoromethane	25.0	20.6		ug/L		83	65 - 138

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 400-641136/1004
Matrix: Water
Analysis Batch: 641136

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	45.6		ug/L		91	70 - 130
1,2,4-Trimethy benzene	50.0	48.1		ug/L		96	70 - 130
1,3,5-Trimethy benzene	50.0	48.1		ug/L		96	69 - 130
Vinyl acetate	50.0	47.9		ug/L		96	26 - 160
Vinyl chloride	25.0	21.9		ug/L		87	59 - 136
Xylenes, Total	100	95.8		ug/L		96	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*72 - 130*
Dibromofluoromethane	*92*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

Lab Sample ID: 400-243066-4 MS
Matrix: Water
Analysis Batch: 641136

Client Sample ID: MW4-ROX-090623
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND		200	167		ug/L		83	43 - 150
Acrolein	ND		250	272		ug/L		109	38 - 150
Acrylonitrile	ND		500	638		ug/L		128	62 - 149
Benzene	ND		50.0	58.4		ug/L		117	56 - 142
Bromobenzene	ND		50.0	62.2		ug/L		124	59 - 136
Bromochloromethane	ND		50.0	51.8		ug/L		104	64 - 140
Bromodichloromethane	ND		50.0	56.1		ug/L		112	59 - 143
Bromoform	ND	F1	50.0	72.8	F1	ug/L		146	50 - 140
Bromomethane	ND		25.0	17.3		ug/L		69	10 - 150
2-Butanone (MEK)	ND		200	153		ug/L		76	55 - 150
Carbon disulfide	ND		50.0	55.8		ug/L		112	48 - 150
Carbon tetrachloride	ND		50.0	54.8		ug/L		110	55 - 145
Chlorobenzene	ND		50.0	56.3		ug/L		113	64 - 130
Chloroethane	ND		25.0	22.4		ug/L		90	50 - 150
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	55.5		ug/L		111	60 - 141
1-Chlorohexane	ND		50.0	63.9		ug/L		128	56 - 136
Chloromethane	ND		25.0	21.7		ug/L		87	49 - 148
cis-1,2-Dichloroethene	ND		50.0	60.4		ug/L		121	59 - 143
cis-1,3-Dichloropropene	ND		50.0	57.2		ug/L		114	57 - 140
Dibromochloromethane	ND		50.0	60.7		ug/L		121	56 - 143
1,2-Dichlorobenzene	ND		50.0	59.9		ug/L		120	52 - 137
1,3-Dichlorobenzene	ND		50.0	58.7		ug/L		117	54 - 135
1,4-Dichlorobenzene	ND		50.0	58.4		ug/L		117	53 - 135
Dichlorodifluoromethane	ND		25.0	13.3		ug/L		53	16 - 150
1,1-Dichloroethane	ND		50.0	61.7		ug/L		123	61 - 144
1,2-Dichloroethane	ND		50.0	54.1		ug/L		108	60 - 141
1,1-Dichloroethene	ND		50.0	56.2		ug/L		112	54 - 147
1,2-Dichloropropane	ND		50.0	63.0		ug/L		126	66 - 137
1,3-Dichloropropane	ND		50.0	64.3		ug/L		129	66 - 133
2,2-Dichloropropane	ND		50.0	56.1		ug/L		112	42 - 144

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 400-243066-4 MS
Matrix: Water
Analysis Batch: 641136

Client Sample ID: MW4-ROX-090623
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	58.5		ug/L		117	65 - 136
Ethylbenzene	ND		50.0	58.3		ug/L		117	58 - 131
Ethyl methacrylate	ND		50.0	63.6		ug/L		127	64 - 130
Hexachlorobutadiene	ND		50.0	60.7		ug/L		121	31 - 149
2-Hexanone	ND		200	211		ug/L		105	65 - 140
Isopropy benzene	ND		50.0	52.6		ug/L		105	56 - 133
Methylene bromide	ND		50.0	53.7		ug/L		107	63 - 138
Methylene Chloride	ND		50.0	52.7		ug/L		105	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	234		ug/L		117	63 - 146
Methyl tert-butyl ether	0.33	J	50.0	55.4		ug/L		110	59 - 137
m-Xylene & p-Xylene	ND		50.0	55.7		ug/L		111	57 - 130
Naphthalene	ND		50.0	64.9		ug/L		130	25 - 150
n-Butylbenzene	ND		50.0	55.0		ug/L		110	41 - 142
N-Propylbenzene	ND		50.0	58.9		ug/L		118	51 - 138
o-Chlorotoluene	ND		50.0	60.4		ug/L		121	53 - 134
o-Xylene	ND		50.0	55.8		ug/L		112	61 - 130
p-Chlorotoluene	ND		50.0	59.6		ug/L		119	54 - 133
p-Isopropyltoluene	ND		50.0	56.0		ug/L		112	48 - 139
sec-Butylbenzene	ND		50.0	58.4		ug/L		117	50 - 138
Styrene	ND		50.0	54.1		ug/L		108	58 - 131
tert-Butylbenzene	ND		50.0	67.6		ug/L		135	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	59.4		ug/L		119	59 - 137
1,1,2,2-Tetrachloroethane	ND	F1	50.0	71.9	F1	ug/L		144	66 - 135
Tetrachloroethene	ND		50.0	54.3		ug/L		109	52 - 133
Toluene	ND		50.0	62.4		ug/L		125	65 - 130
trans-1,2-Dichloroethene	ND		50.0	55.2		ug/L		110	61 - 143
trans-1,3-Dichloropropene	ND		50.0	61.1		ug/L		122	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	64.9		ug/L		130	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	60.0		ug/L		120	39 - 148
1,1,1-Trichloroethane	ND		50.0	54.3		ug/L		109	57 - 142
1,1,2-Trichloroethane	ND		50.0	65.2		ug/L		130	66 - 131
Trichloroethene	ND		50.0	51.9		ug/L		104	64 - 136
Trichlorofluoromethane	ND		25.0	20.4		ug/L		82	54 - 150
1,2,3-Trichloropropane	ND		50.0	66.5		ug/L		133	65 - 133
1,2,4-Trimethy benzene	ND		50.0	57.8		ug/L		116	50 - 139
1,3,5-Trimethy benzene	ND		50.0	58.3		ug/L		117	52 - 135
Vinyl acetate	ND		50.0	47.1		ug/L		94	26 - 150
Vinyl chloride	ND		25.0	21.0		ug/L		84	46 - 150
Xylenes, Total	ND		100	111		ug/L		111	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*117*		*72 - 130*
Dibromofluoromethane	*96*		*75 - 126*
Toluene-d8 (Surr)	*106*		*64 - 132*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 400-243066-4 MSD
Matrix: Water
Analysis Batch: 641136

Client Sample ID: MW4-ROX-090623
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	154		ug/L		77	43 - 150	8	30
Acrolein	ND		250	309		ug/L		124	38 - 150	13	31
Acrylonitrile	ND		500	569		ug/L		114	62 - 149	12	30
Benzene	ND		50.0	51.6		ug/L		103	56 - 142	12	30
Bromobenzene	ND		50.0	56.1		ug/L		112	59 - 136	10	30
Bromochloromethane	ND		50.0	45.6		ug/L		91	64 - 140	13	30
Bromodichloromethane	ND		50.0	49.2		ug/L		98	59 - 143	13	30
Bromoform	ND	F1	50.0	61.1		ug/L		122	50 - 140	17	30
Bromomethane	ND		25.0	19.4		ug/L		78	10 - 150	11	50
2-Butanone (MEK)	ND		200	136		ug/L		68	55 - 150	12	30
Carbon disulfide	ND		50.0	50.2		ug/L		100	48 - 150	10	30
Carbon tetrachloride	ND		50.0	48.4		ug/L		97	55 - 145	13	30
Chlorobenzene	ND		50.0	50.6		ug/L		101	64 - 130	11	30
Chloroethane	ND		25.0	25.1		ug/L		100	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	48.0		ug/L		96	60 - 141	14	30
1-Chlorohexane	ND		50.0	57.2		ug/L		114	56 - 136	11	30
Chloromethane	ND		25.0	26.1		ug/L		104	49 - 148	18	31
cis-1,2-Dichloroethene	ND		50.0	53.3		ug/L		107	59 - 143	12	30
cis-1,3-Dichloropropene	ND		50.0	51.3		ug/L		103	57 - 140	11	30
Dibromochloromethane	ND		50.0	52.4		ug/L		105	56 - 143	15	30
1,2-Dichlorobenzene	ND		50.0	53.7		ug/L		107	52 - 137	11	30
1,3-Dichlorobenzene	ND		50.0	53.5		ug/L		107	54 - 135	9	30
1,4-Dichlorobenzene	ND		50.0	53.1		ug/L		106	53 - 135	10	30
Dichlorodifluoromethane	ND		25.0	14.5		ug/L		58	16 - 150	9	31
1,1-Dichloroethane	ND		50.0	51.5		ug/L		103	61 - 144	18	30
1,2-Dichloroethane	ND		50.0	49.7		ug/L		99	60 - 141	8	30
1,1-Dichloroethene	ND		50.0	48.9		ug/L		98	54 - 147	14	30
1,2-Dichloropropane	ND		50.0	56.3		ug/L		113	66 - 137	11	30
1,3-Dichloropropane	ND		50.0	55.8		ug/L		112	66 - 133	14	30
2,2-Dichloropropane	ND		50.0	48.4		ug/L		97	42 - 144	15	31
1,1-Dichloropropene	ND		50.0	50.3		ug/L		101	65 - 136	15	30
Ethylbenzene	ND		50.0	52.8		ug/L		106	58 - 131	10	30
Ethyl methacrylate	ND		50.0	55.6		ug/L		111	64 - 130	14	30
Hexachlorobutadiene	ND		50.0	57.8		ug/L		116	31 - 149	5	36
2-Hexanone	ND		200	180		ug/L		90	65 - 140	16	30
Isopropy benzene	ND		50.0	48.7		ug/L		97	56 - 133	8	30
Methylene bromide	ND		50.0	48.0		ug/L		96	63 - 138	11	30
Methylene Chloride	ND		50.0	46.3		ug/L		93	60 - 146	13	32
4-Methyl-2-pentanone (MIBK)	ND		200	209		ug/L		104	63 - 146	11	30
Methyl tert-butyl ether	0.33	J	50.0	49.6		ug/L		99	59 - 137	11	30
m-Xylene & p-Xylene	ND		50.0	51.3		ug/L		103	57 - 130	8	30
Naphthalene	ND		50.0	56.2		ug/L		112	25 - 150	14	30
n-Butylbenzene	ND		50.0	52.9		ug/L		106	41 - 142	4	31
N-Propylbenzene	ND		50.0	54.5		ug/L		109	51 - 138	8	30
o-Chlorotoluene	ND		50.0	55.9		ug/L		112	53 - 134	8	30
o-Xylene	ND		50.0	50.6		ug/L		101	61 - 130	10	30
p-Chlorotoluene	ND		50.0	54.2		ug/L		108	54 - 133	9	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 400-243066-4 MSD
Matrix: Water
Analysis Batch: 641136

Client Sample ID: MW4-ROX-090623
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	53.1		ug/L		106	48 - 139	5	30
sec-Butylbenzene	ND		50.0	54.4		ug/L		109	50 - 138	7	30
Styrene	ND		50.0	49.0		ug/L		98	58 - 131	10	30
tert-Butylbenzene	ND		50.0	62.0		ug/L		124	54 - 146	9	30
1,1,1,2-Tetrachloroethane	ND		50.0	52.0		ug/L		104	59 - 137	13	30
1,1,2,2-Tetrachloroethane	ND	F1	50.0	60.7		ug/L		121	66 - 135	17	30
Tetrachloroethene	ND		50.0	48.5		ug/L		97	52 - 133	11	30
Toluene	ND		50.0	54.7		ug/L		109	65 - 130	13	30
trans-1,2-Dichloroethene	ND		50.0	48.7		ug/L		97	61 - 143	12	30
trans-1,3-Dichloropropene	ND		50.0	53.5		ug/L		107	53 - 133	13	30
1,2,3-Trichlorobenzene	ND		50.0	57.4		ug/L		115	43 - 145	12	30
1,2,4-Trichlorobenzene	ND		50.0	56.2		ug/L		112	39 - 148	7	30
1,1,1-Trichloroethane	ND		50.0	47.4		ug/L		95	57 - 142	13	30
1,1,2-Trichloroethane	ND		50.0	55.8		ug/L		112	66 - 131	16	30
Trichloroethene	ND		50.0	46.9		ug/L		94	64 - 136	10	30
Trichlorofluoromethane	ND		25.0	20.2		ug/L		81	54 - 150	1	30
1,2,3-Trichloropropane	ND		50.0	55.5		ug/L		111	65 - 133	18	30
1,2,4-Trimethy benzene	ND		50.0	53.9		ug/L		108	50 - 139	7	30
1,3,5-Trimethy benzene	ND		50.0	54.4		ug/L		109	52 - 135	7	30
Vinyl acetate	ND		50.0	56.0		ug/L		112	26 - 150	17	33
Vinyl chloride	ND		25.0	24.1		ug/L		97	46 - 150	14	30
Xylenes, Total	ND		100	102		ug/L		102	59 - 130	9	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*114*		*72 - 130*
Dibromofluoromethane	*94*		*75 - 126*
Toluene-d8 (Surr)	*105*		*64 - 132*

Lab Sample ID: MB 400-641297/4
Matrix: Water
Analysis Batch: 641297

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			09/16/23 07:45	1
Acrolein	ND		20	3.3	ug/L			09/16/23 07:45	1
Acrylonitrile	ND		10	2.8	ug/L			09/16/23 07:45	1
Benzene	ND		1.0	0.50	ug/L			09/16/23 07:45	1
Bromobenzene	ND		1.0	0.54	ug/L			09/16/23 07:45	1
Bromochloromethane	ND		1.0	0.21	ug/L			09/16/23 07:45	1
Bromodichloromethane	ND		1.0	0.50	ug/L			09/16/23 07:45	1
Bromoform	ND		5.0	0.25	ug/L			09/16/23 07:45	1
Bromomethane	ND		1.0	0.98	ug/L			09/16/23 07:45	1
2-Butanone (MEK)	ND		25	2.6	ug/L			09/16/23 07:45	1
Carbon disulfide	ND		1.0	0.50	ug/L			09/16/23 07:45	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			09/16/23 07:45	1
Chlorobenzene	ND		1.0	0.90	ug/L			09/16/23 07:45	1
Chloroethane	ND		1.0	0.76	ug/L			09/16/23 07:45	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			09/16/23 07:45	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 400-641297/4
Matrix: Water
Analysis Batch: 641297

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			09/16/23 07:45	1
1-Chlorohexane	ND		1.0	0.32	ug/L			09/16/23 07:45	1
Chloromethane	ND		1.0	0.90	ug/L			09/16/23 07:45	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			09/16/23 07:45	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			09/16/23 07:45	1
Dibromochloromethane	ND		1.0	0.24	ug/L			09/16/23 07:45	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			09/16/23 07:45	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			09/16/23 07:45	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			09/16/23 07:45	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			09/16/23 07:45	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			09/16/23 07:45	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			09/16/23 07:45	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			09/16/23 07:45	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			09/16/23 07:45	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			09/16/23 07:45	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			09/16/23 07:45	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			09/16/23 07:45	1
Ethylbenzene	ND		1.0	0.50	ug/L			09/16/23 07:45	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			09/16/23 07:45	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			09/16/23 07:45	1
2-Hexanone	ND		25	1.4	ug/L			09/16/23 07:45	1
Isopropy benzene	ND		1.0	0.53	ug/L			09/16/23 07:45	1
Methylene bromide	ND		5.0	0.22	ug/L			09/16/23 07:45	1
Methylene Chloride	ND		5.0	3.0	ug/L			09/16/23 07:45	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			09/16/23 07:45	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			09/16/23 07:45	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			09/16/23 07:45	1
Naphthalene	ND		5.0	3.0	ug/L			09/16/23 07:45	1
n-Butylbenzene	ND		1.0	0.76	ug/L			09/16/23 07:45	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/16/23 07:45	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			09/16/23 07:45	1
o-Xylene	ND		5.0	0.60	ug/L			09/16/23 07:45	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			09/16/23 07:45	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			09/16/23 07:45	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			09/16/23 07:45	1
Styrene	ND		1.0	1.0	ug/L			09/16/23 07:45	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			09/16/23 07:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			09/16/23 07:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			09/16/23 07:45	1
Tetrachloroethene	ND		1.0	0.90	ug/L			09/16/23 07:45	1
Toluene	ND		1.0	0.90	ug/L			09/16/23 07:45	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			09/16/23 07:45	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			09/16/23 07:45	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			09/16/23 07:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			09/16/23 07:45	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			09/16/23 07:45	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			09/16/23 07:45	1
Trichloroethene	ND		1.0	0.15	ug/L			09/16/23 07:45	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			09/16/23 07:45	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 400-641297/4
Matrix: Water
Analysis Batch: 641297

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			09/16/23 07:45	1
1,2,4-Trimethy benzene	ND		1.0	0.82	ug/L			09/16/23 07:45	1
1,3,5-Trimethy benzene	ND		1.0	0.56	ug/L			09/16/23 07:45	1
Vinyl acetate	ND		25	0.93	ug/L			09/16/23 07:45	1
Vinyl chloride	ND		1.0	0.50	ug/L			09/16/23 07:45	1
Xylenes, Total	ND		10	1.6	ug/L			09/16/23 07:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*72 - 130*		*09/16/23 07:45*	*1*
Dibromofluoromethane	*92*		*75 - 126*		*09/16/23 07:45*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*09/16/23 07:45*	*1*

Lab Sample ID: LCS 400-641297/1002
Matrix: Water
Analysis Batch: 641297

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	237		ug/L		118	43 - 160
Acrolein	250	305		ug/L		122	38 - 160
Acrylonitrile	500	471		ug/L		94	64 - 142
Benzene	50.0	45.5		ug/L		91	70 - 130
Bromobenzene	50.0	44.5		ug/L		89	70 - 132
Bromochloromethane	50.0	40.5		ug/L		81	70 - 130
Bromodichloromethane	50.0	44.4		ug/L		89	67 - 133
Bromoform	50.0	43.5		ug/L		87	57 - 140
Bromomethane	25.0	16.9		ug/L		68	10 - 160
2-Butanone (MEK)	200	212		ug/L		106	61 - 145
Carbon disulfide	50.0	45.1		ug/L		90	61 - 137
Carbon tetrachloride	50.0	41.9		ug/L		84	61 - 137
Chlorobenzene	50.0	45.9		ug/L		92	70 - 130
Chloroethane	25.0	24.7		ug/L		99	55 - 141
2-Chloroethyl vinyl ether	25.0	20.1		ug/L		81	10 - 160
Chloroform	50.0	42.6		ug/L		85	69 - 130
1-Chlorohexane	50.0	54.3		ug/L		109	69 - 130
Chloromethane	25.0	26.4		ug/L		106	58 - 137
cis-1,2-Dichloroethene	50.0	47.6		ug/L		95	68 - 130
cis-1,3-Dichloropropene	50.0	46.0		ug/L		92	69 - 132
Dibromochloromethane	50.0	43.2		ug/L		86	67 - 135
1,2-Dichlorobenzene	50.0	46.3		ug/L		93	67 - 130
1,3-Dichlorobenzene	50.0	46.7		ug/L		93	70 - 130
1,4-Dichlorobenzene	50.0	47.5		ug/L		95	70 - 130
Dichlorodifluoromethane	25.0	14.2		ug/L		57	41 - 146
1,1-Dichloroethane	50.0	48.3		ug/L		97	70 - 130
1,2-Dichloroethane	50.0	41.7		ug/L		83	69 - 130
1,1-Dichloroethene	50.0	43.5		ug/L		87	63 - 134
1,2-Dichloropropane	50.0	50.3		ug/L		101	70 - 130
1,3-Dichloropropane	50.0	46.1		ug/L		92	70 - 130
2,2-Dichloropropane	50.0	42.4		ug/L		85	52 - 135

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 400-641297/1002
Matrix: Water
Analysis Batch: 641297

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	45.8		ug/L		92	70 - 130
Ethylbenzene	50.0	48.4		ug/L		97	70 - 130
Ethyl methacrylate	50.0	45.9		ug/L		92	68 - 130
Hexachlorobutadiene	50.0	59.5		ug/L		119	53 - 140
2-Hexanone	200	235		ug/L		118	65 - 137
Isopropy benzene	50.0	46.0		ug/L		92	70 - 130
Methylene bromide	50.0	42.0		ug/L		84	70 - 130
Methylene Chloride	50.0	41.9		ug/L		84	66 - 135
4-Methyl-2-pentanone (MIBK)	200	198		ug/L		99	69 - 138
Methyl tert-butyl ether	50.0	41.7		ug/L		83	66 - 130
m-Xylene & p-Xylene	50.0	46.9		ug/L		94	70 - 130
Naphthalene	50.0	47.3		ug/L		95	47 - 149
n-Butylbenzene	50.0	50.8		ug/L		102	67 - 130
N-Propylbenzene	50.0	45.7		ug/L		91	70 - 130
o-Chlorotoluene	50.0	47.9		ug/L		96	70 - 130
o-Xylene	50.0	46.1		ug/L		92	70 - 130
p-Chlorotoluene	50.0	46.4		ug/L		93	70 - 130
p-Isopropyltoluene	50.0	47.5		ug/L		95	65 - 130
sec-Butylbenzene	50.0	46.7		ug/L		93	66 - 130
Styrene	50.0	44.1		ug/L		88	70 - 130
tert-Butylbenzene	50.0	43.3		ug/L		87	64 - 139
1,1,1,2-Tetrachloroethane	50.0	44.3		ug/L		89	67 - 131
1,1,2,2-Tetrachloroethane	50.0	44.5		ug/L		89	70 - 131
Tetrachloroethene	50.0	44.0		ug/L		88	65 - 130
Toluene	50.0	46.3		ug/L		93	70 - 130
trans-1,2-Dichloroethene	50.0	42.6		ug/L		85	70 - 130
trans-1,3-Dichloropropene	50.0	44.4		ug/L		89	63 - 130
1,2,3-Trichlorobenzene	50.0	54.1		ug/L		108	60 - 138
1,2,4-Trichlorobenzene	50.0	53.8		ug/L		108	60 - 140
1,1,1-Trichloroethane	50.0	40.7		ug/L		81	68 - 130
1,1,2-Trichloroethane	50.0	44.7		ug/L		89	70 - 130
Trichloroethene	50.0	42.5		ug/L		85	70 - 130
Trichlorofluoromethane	25.0	23.0		ug/L		92	65 - 138
1,2,3-Trichloropropane	50.0	40.4		ug/L		81	70 - 130
1,2,4-Trimethy benzene	50.0	45.2		ug/L		90	70 - 130
1,3,5-Trimethy benzene	50.0	45.5		ug/L		91	69 - 130
Vinyl acetate	50.0	48.5		ug/L		97	26 - 160
Vinyl chloride	25.0	24.0		ug/L		96	59 - 136
Xylenes, Total	100	93.0		ug/L		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*72 - 130*
Dibromofluoromethane	*91*		*75 - 126*
Toluene-d8 (Surr)	*99*		*64 - 132*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-640651/1-A
Matrix: Water
Analysis Batch: 641239

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640651

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		09/12/23 10:32	09/15/23 17:33	1
Benzenethiol	ND		10	1.7	ug/L		09/12/23 10:32	09/15/23 17:33	1
Benzoic acid	ND		30	7.3	ug/L		09/12/23 10:32	09/15/23 17:33	1
Benzyl alcohol	ND		10	2.0	ug/L		09/12/23 10:32	09/15/23 17:33	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		09/12/23 10:32	09/15/23 17:33	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		09/12/23 10:32	09/15/23 17:33	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		09/12/23 10:32	09/15/23 17:33	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		09/12/23 10:32	09/15/23 17:33	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		09/12/23 10:32	09/15/23 17:33	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		09/12/23 10:32	09/15/23 17:33	1
4-Chloroaniline	ND		10	3.4	ug/L		09/12/23 10:32	09/15/23 17:33	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		09/12/23 10:32	09/15/23 17:33	1
2-Chloronaphthalene	ND		10	0.14	ug/L		09/12/23 10:32	09/15/23 17:33	1
2-Chlorophenol	ND		10	2.2	ug/L		09/12/23 10:32	09/15/23 17:33	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		09/12/23 10:32	09/15/23 17:33	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		09/12/23 10:32	09/15/23 17:33	1
Dibenzofuran	ND		10	0.17	ug/L		09/12/23 10:32	09/15/23 17:33	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		09/12/23 10:32	09/15/23 17:33	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		09/12/23 10:32	09/15/23 17:33	1
Diethyl phthalate	ND		10	0.24	ug/L		09/12/23 10:32	09/15/23 17:33	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		09/12/23 10:32	09/15/23 17:33	1
Dimethyl phthalate	ND		10	0.17	ug/L		09/12/23 10:32	09/15/23 17:33	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		09/12/23 10:32	09/15/23 17:33	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		09/12/23 10:32	09/15/23 17:33	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		09/12/23 10:32	09/15/23 17:33	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		09/12/23 10:32	09/15/23 17:33	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		09/12/23 10:32	09/15/23 17:33	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		09/12/23 10:32	09/15/23 17:33	1
1,4-Dioxane	ND		10	1.0	ug/L		09/12/23 10:32	09/15/23 17:33	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		09/12/23 10:32	09/15/23 17:33	1
Hexachlorobenzene	ND		10	0.17	ug/L		09/12/23 10:32	09/15/23 17:33	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		09/12/23 10:32	09/15/23 17:33	1
Hexachloroethane	ND		10	4.2	ug/L		09/12/23 10:32	09/15/23 17:33	1
Indene	ND		10	1.0	ug/L		09/12/23 10:32	09/15/23 17:33	1
Isophorone	ND		10	0.14	ug/L		09/12/23 10:32	09/15/23 17:33	1
2-Methylphenol	ND		10	1.8	ug/L		09/12/23 10:32	09/15/23 17:33	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		09/12/23 10:32	09/15/23 17:33	1
2-Nitroaniline	ND		10	2.2	ug/L		09/12/23 10:32	09/15/23 17:33	1
3-Nitroaniline	ND		10	1.8	ug/L		09/12/23 10:32	09/15/23 17:33	1
4-Nitroaniline	ND		10	1.5	ug/L		09/12/23 10:32	09/15/23 17:33	1
Nitrobenzene	ND		10	0.13	ug/L		09/12/23 10:32	09/15/23 17:33	1
2-Nitrophenol	ND		10	5.2	ug/L		09/12/23 10:32	09/15/23 17:33	1
4-Nitrophenol	ND		10	2.1	ug/L		09/12/23 10:32	09/15/23 17:33	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		09/12/23 10:32	09/15/23 17:33	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		09/12/23 10:32	09/15/23 17:33	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		09/12/23 10:32	09/15/23 17:33	1
Pentachlorophenol	ND		20	1.4	ug/L		09/12/23 10:32	09/15/23 17:33	1
Phenol	ND		10	2.6	ug/L		09/12/23 10:32	09/15/23 17:33	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-640651/1-A
Matrix: Water
Analysis Batch: 641239

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640651

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	ND		10	3.2	ug/L		09/12/23 10:32	09/15/23 17:33	1
Quinoline	ND		10	4.5	ug/L		09/12/23 10:32	09/15/23 17:33	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		09/12/23 10:32	09/15/23 17:33	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		09/12/23 10:32	09/15/23 17:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*64*		*46 - 124*	*09/12/23 10:32*	*09/15/23 17:33*	*1*
2-Fluorophenol	*3*	*S1-*	*13 - 113*	*09/12/23 10:32*	*09/15/23 17:33*	*1*
Nitrobenzene-d5	*54*		*36 - 126*	*09/12/23 10:32*	*09/15/23 17:33*	*1*
Phenol-d5	*8*	*S1-*	*17 - 127*	*09/12/23 10:32*	*09/15/23 17:33*	*1*
Terphenyl-d14	*68*		*44 - 149*	*09/12/23 10:32*	*09/15/23 17:33*	*1*
2,4,6-Tribromophenol	*37*		*26 - 150*	*09/12/23 10:32*	*09/15/23 17:33*	*1*

Lab Sample ID: LCS 400-640651/17-A
Matrix: Water
Analysis Batch: 641055

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640651

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	2.31	J *-	ug/L		2	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*70*		*46 - 124*
2-Fluorophenol	*24*		*13 - 113*
Nitrobenzene-d5	*63*		*36 - 126*
Phenol-d5	*49*		*17 - 127*
Terphenyl-d14	*90*		*44 - 149*
2,4,6-Tribromophenol	*55*		*26 - 150*

Lab Sample ID: LCS 400-640651/2-A
Matrix: Water
Analysis Batch: 641239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640651

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	ND	*-	ug/L		2	21 - 120
Benzoic acid	522	49.0	*-	ug/L		9	10 - 144
Benzyl alcohol	120	72.4		ug/L		60	28 - 120
Bis(2-chloroethoxy)methane	120	70.9		ug/L		59	47 - 120
Bis(2-chloroethyl)ether	120	138		ug/L		115	44 - 120
bis (2-chloroisopropyl) ether	120	55.8		ug/L		46	33 - 121
Bis(2-ethylhexyl) phthalate	120	93.0		ug/L		78	52 - 147
4-Bromophenyl phenyl ether	120	82.1		ug/L		68	54 - 122
Butyl benzyl phthalate	120	91.8		ug/L		76	54 - 133
4-Chloroaniline	120	68.1		ug/L		57	26 - 120
4-Chloro-3-methylphenol	120	82.8		ug/L		69	48 - 131
2-Chloronaphthalene	120	81.3		ug/L		68	52 - 121
2-Chlorophenol	120	56.4		ug/L		47	40 - 120
4-Chlorophenyl phenyl ether	120	85.5		ug/L		71	56 - 125
Dibenz[a,h]acridine	120	122		ug/L		102	31 - 150

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-640651/2-A
Matrix: Water
Analysis Batch: 641239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640651

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dibenzofuran	120	86.4		ug/L		72	56 - 122
3,3'-Dichlorobenzidine	160	104		ug/L		65	36 - 132
2,4-Dichlorophenol	120	76.0		ug/L		63	49 - 120
Diethyl phthalate	120	94.4		ug/L		79	50 - 137
2,4-Dimethylphenol	120	78.4		ug/L		65	48 - 120
Dimethyl phthalate	120	85.6		ug/L		71	57 - 124
Di-n-butyl phthalate	120	96.5		ug/L		80	58 - 126
4,6-Dinitro-ortho-cresol	240	168		ug/L		70	23 - 148
2,4-Dinitrophenol	240	123		ug/L		51	10 - 150
2,4-Dinitrotoluene	120	92.3		ug/L		77	54 - 142
2,6-Dinitrotoluene	120	83.7		ug/L		70	55 - 130
Di-n-octyl phthalate	120	97.4		ug/L		81	57 - 138
1,4-Dioxane	120	46.8		ug/L		39	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	73.6		ug/L		61	45 - 124
Hexachlorobenzene	120	84.8		ug/L		71	52 - 129
Hexachlorocyclopentadiene	120	35.3		ug/L		29	10 - 134
Hexachloroethane	120	78.1		ug/L		65	20 - 120
Indene	120	81.6		ug/L		68	49 - 120
Isophorone	120	71.4		ug/L		60	48 - 120
2-Methylphenol	120	81.0		ug/L		68	46 - 124
3 & 4 Methylphenol	120	75.2		ug/L		63	45 - 120
2-Nitroaniline	120	72.7		ug/L		61	51 - 145
3-Nitroaniline	120	66.7		ug/L		56	37 - 127
4-Nitroaniline	120	85.3		ug/L		71	36 - 137
Nitrobenzene	120	71.0		ug/L		59	45 - 120
2-Nitrophenol	120	77.2		ug/L		64	40 - 124
4-Nitrophenol	240	184		ug/L		77	23 - 146
N-Nitrosodimethylamine	120	54.6		ug/L		45	29 - 137
N-Nitrosodi-n-propylamine	120	75.8		ug/L		63	45 - 120
N-Nitrosodiphenylamine	119	79.4		ug/L		67	54 - 120
Pentachlorophenol	240	169		ug/L		70	31 - 130
Phenol	120	58.2		ug/L		49	11 - 120
Pyridine	240	98.8		ug/L		41	16 - 120
Quinoline	120	87.2		ug/L		73	49 - 130
2,4,5-Trichlorophenol	120	81.3		ug/L		68	51 - 136
2,4,6-Trichlorophenol	120	81.0		ug/L		67	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*46 - 124*
2-Fluorophenol	*22*		*13 - 113*
Nitrobenzene-d5	*64*		*36 - 126*
Phenol-d5	*44*		*17 - 127*
Terphenyl-d14	*69*		*44 - 149*
2,4,6-Tribromophenol	*68*		*26 - 150*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-640651/18-A
Matrix: Water
Analysis Batch: 641055

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640651

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	3.07	J *-	ug/L		3	10 - 120	28	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*69*		*46 - 124*
2-Fluorophenol	*38*		*13 - 113*
Nitrobenzene-d5	*61*		*36 - 126*
Phenol-d5	*56*		*17 - 127*
Terphenyl-d14	*81*		*44 - 149*
2,4,6-Tribromophenol	*62*		*26 - 150*

Lab Sample ID: LCSD 400-640651/3-A
Matrix: Water
Analysis Batch: 641239

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640651

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	ND	*-	ug/L		2	21 - 120	4	30
Benzoic acid			522	18.4	J *- *1	ug/L		4	10 - 144	91	30
Benzyl alcohol			120	82.4		ug/L		69	28 - 120	13	30
Bis(2-chloroethoxy)methane			120	74.7		ug/L		62	47 - 120	5	30
Bis(2-chloroethyl)ether			120	153	*+	ug/L		127	44 - 120	10	30
bis (2-chloroisopropyl) ether			120	62.0		ug/L		52	33 - 121	11	30
Bis(2-ethylhexyl) phthalate			120	100		ug/L		83	52 - 147	7	30
4-Bromophenyl phenyl ether			120	90.2		ug/L		75	54 - 122	9	30
Butyl benzyl phthalate			120	101		ug/L		84	54 - 133	10	30
4-Chloroaniline			120	76.4		ug/L		64	26 - 120	12	30
4-Chloro-3-methylphenol			120	88.1		ug/L		73	48 - 131	6	30
2-Chloronaphthalene			120	93.5		ug/L		78	52 - 121	14	30
2-Chlorophenol			120	50.6		ug/L		42	40 - 120	11	30
4-Chlorophenyl phenyl ether			120	94.9		ug/L		79	56 - 125	10	30
Dibenz[a,h]acridine			120	132		ug/L		110	31 - 150	7	30
Dibenzofuran			120	95.5		ug/L		80	56 - 122	10	30
3,3'-Dichlorobenzidine			160	111		ug/L		70	36 - 132	6	30
2,4-Dichlorophenol			120	77.2		ug/L		64	49 - 120	1	30
Diethyl phthalate			120	105		ug/L		87	50 - 137	10	30
2,4-Dimethylphenol			120	82.9		ug/L		69	48 - 120	6	30
Dimethyl phthalate			120	95.0		ug/L		79	57 - 124	10	30
Di-n-butyl phthalate			120	105		ug/L		87	58 - 126	8	30
4,6-Dinitro-ortho-cresol			240	188		ug/L		78	23 - 148	11	30
2,4-Dinitrophenol			240	126		ug/L		52	10 - 150	2	30
2,4-Dinitrotoluene			120	103		ug/L		86	54 - 142	11	30
2,6-Dinitrotoluene			120	93.8		ug/L		78	55 - 130	11	30
Di-n-octyl phthalate			120	107		ug/L		89	57 - 138	10	30
1,4-Dioxane			120	40.1		ug/L		33	31 - 120	15	30
1,2-Diphenylhydrazine (as Azobenzene)			120	80.9		ug/L		67	45 - 124	9	30
Hexachlorobenzene			120	93.8		ug/L		78	52 - 129	10	30
Hexachlorocyclopentadiene			120	44.1		ug/L		37	10 - 134	22	30
Hexachloroethane			120	86.3		ug/L		72	20 - 120	10	30

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-640651/3-A
Matrix: Water
Analysis Batch: 641239

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640651

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Indene			120	90.5		ug/L		75	49 - 120	10	30
Isophorone			120	75.5		ug/L		63	48 - 120	6	30
2-Methylphenol			120	86.9		ug/L		72	46 - 124	7	30
3 & 4 Methylphenol			120	80.9		ug/L		67	45 - 120	7	30
2-Nitroaniline			120	81.0		ug/L		67	51 - 145	11	30
3-Nitroaniline			120	73.6		ug/L		61	37 - 127	10	30
4-Nitroaniline			120	97.4		ug/L		81	36 - 137	13	30
Nitrobenzene			120	75.0		ug/L		62	45 - 120	6	30
2-Nitrophenol			120	78.8		ug/L		66	40 - 124	2	30
4-Nitrophenol			240	208		ug/L		87	23 - 146	12	30
N-Nitrosodimethylamine			120	66.0		ug/L		55	29 - 137	19	30
N-Nitrosodi-n-propylamine			120	84.9		ug/L		71	45 - 120	11	30
N-Nitrosodiphenylamine			119	87.9		ug/L		74	54 - 120	10	30
Pentachlorophenol			240	182		ug/L		76	31 - 130	7	30
Phenol			120	59.5		ug/L		50	11 - 120	2	30
Pyridine			240	112		ug/L		47	16 - 120	12	30
Quinoline			120	93.2		ug/L		78	49 - 130	7	30
2,4,5-Trichlorophenol			120	91.1		ug/L		76	51 - 136	11	30
2,4,6-Trichlorophenol			120	88.3		ug/L		74	50 - 127	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*70*		*46 - 124*
2-Fluorophenol	*13*		*13 - 113*
Nitrobenzene-d5	*57*		*36 - 126*
Phenol-d5	*42*		*17 - 127*
Terphenyl-d14	*73*		*44 - 149*
2,4,6-Tribromophenol	*75*		*26 - 150*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 400-640651/1-A
Matrix: Water
Analysis Batch: 641154

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640651

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		09/12/23 10:32	09/15/23 16:40	1
Acenaphthylene	ND		0.20	0.044	ug/L		09/12/23 10:32	09/15/23 16:40	1
Anthracene	ND		0.20	0.047	ug/L		09/12/23 10:32	09/15/23 16:40	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		09/12/23 10:32	09/15/23 16:40	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		09/12/23 10:32	09/15/23 16:40	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		09/12/23 10:32	09/15/23 16:40	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		09/12/23 10:32	09/15/23 16:40	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		09/12/23 10:32	09/15/23 16:40	1
Chrysene	ND		0.20	0.033	ug/L		09/12/23 10:32	09/15/23 16:40	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		09/12/23 10:32	09/15/23 16:40	1
Fluoranthene	ND		0.20	0.034	ug/L		09/12/23 10:32	09/15/23 16:40	1
Fluorene	ND		0.20	0.089	ug/L		09/12/23 10:32	09/15/23 16:40	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		09/12/23 10:32	09/15/23 16:40	1
Phenanthrene	ND		0.20	0.090	ug/L		09/12/23 10:32	09/15/23 16:40	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 400-640651/1-A
Matrix: Water
Analysis Batch: 641154

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640651

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		0.20	0.039	ug/L		09/12/23 10:32	09/15/23 16:40	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		09/12/23 10:32	09/15/23 16:40	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		09/12/23 10:32	09/15/23 16:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*94*		*18 - 147*	*09/12/23 10:32*	*09/15/23 16:40*	*1*
2-Fluorobiphenyl	*75*		*15 - 128*	*09/12/23 10:32*	*09/15/23 16:40*	*1*
Nitrobenzene-d5	*69*		*10 - 144*	*09/12/23 10:32*	*09/15/23 16:40*	*1*

Lab Sample ID: LCS 400-640651/19-A
Matrix: Water
Analysis Batch: 641090

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640651

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	2.00	1.64		ug/L		82	40 - 140
Acenaphthylene	2.00	1.79		ug/L		89	40 - 140
Anthracene	2.00	1.55		ug/L		77	40 - 140
Benzo[a]anthracene	2.00	1.74		ug/L		87	40 - 140
Benzo[a]pyrene	2.00	1.41		ug/L		71	40 - 140
Benzo[b]fluoranthene	2.00	1.55		ug/L		78	40 - 140
Benzo[g,h,i]perylene	2.00	1.54		ug/L		77	40 - 140
Benzo[k]fluoranthene	2.00	1.60		ug/L		80	40 - 140
Chrysene	2.00	1.73		ug/L		87	40 - 140
Dibenz(a,h)anthracene	2.00	1.37		ug/L		69	40 - 140
Fluoranthene	2.00	1.78		ug/L		89	40 - 140
Fluorene	2.00	1.67		ug/L		83	40 - 140
Indeno[1,2,3-cd]pyrene	2.00	1.45		ug/L		73	40 - 140
Phenanthrene	2.00	1.52		ug/L		76	40 - 140
Pyrene	2.00	1.72		ug/L		86	40 - 140
1-Methylnaphthalene	2.00	1.74		ug/L		87	40 - 140
2-Methylnaphthalene	2.00	1.78		ug/L		89	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*112*		*18 - 147*
2-Fluorobiphenyl	*91*		*15 - 128*
Nitrobenzene-d5	*66*		*10 - 144*

Lab Sample ID: LCSD 400-640651/20-A
Matrix: Water
Analysis Batch: 641090

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640651

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	2.00	1.63		ug/L		81	40 - 140	1	40
Acenaphthylene	2.00	1.75		ug/L		87	40 - 140	2	40
Anthracene	2.00	1.57		ug/L		79	40 - 140	1	40
Benzo[a]anthracene	2.00	1.82		ug/L		91	40 - 140	4	40
Benzo[a]pyrene	2.00	1.43		ug/L		72	40 - 140	2	40
Benzo[b]fluoranthene	2.00	1.46		ug/L		73	40 - 140	6	40

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 400-640651/20-A
Matrix: Water
Analysis Batch: 641090

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640651

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[g,h,i]perylene			2.00	1.47		ug/L		74	40 - 140	4	40
Benzo[k]fluoranthene			2.00	1.54		ug/L		77	40 - 140	4	40
Chrysene			2.00	1.72		ug/L		86	40 - 140	1	40
Dibenz(a,h)anthracene			2.00	1.34		ug/L		67	40 - 140	2	40
Fluoranthene			2.00	1.82		ug/L		91	40 - 140	3	40
Fluorene			2.00	1.63		ug/L		82	40 - 140	2	40
Indeno[1,2,3-cd]pyrene			2.00	1.44		ug/L		72	40 - 140	1	40
Phenanthrene			2.00	1.54		ug/L		77	40 - 140	1	40
Pyrene			2.00	1.71		ug/L		85	40 - 140	1	40
1-Methylnaphthalene			2.00	1.83		ug/L		91	40 - 140	5	40
2-Methylnaphthalene			2.00	1.86		ug/L		93	40 - 140	4	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*112*		*18 - 147*
2-Fluorobiphenyl	*94*		*15 - 128*
Nitrobenzene-d5	*67*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-640625/1-A
Matrix: Water
Analysis Batch: 640659

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640625

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-D bromo-3-Chloropropane	ND		0.030	0.017	ug/L		09/12/23 08:25	09/12/23 17:29	1
1,2-D bromoethane	ND		0.020	0.015	ug/L		09/12/23 08:25	09/12/23 17:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*51 - 149*	*09/12/23 08:25*	*09/12/23 17:29*	*1*

Lab Sample ID: LCS 400-640625/2-A
Matrix: Water
Analysis Batch: 640659

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640625

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-D bromo-3-Chloropropane			0.101	0.0964		ug/L		96	60 - 140
1,2-D bromoethane			0.101	0.0962		ug/L		95	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*82*		*51 - 149*

Lab Sample ID: LCSD 400-640625/3-A
Matrix: Water
Analysis Batch: 640659

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640625

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-D bromo-3-Chloropropane			0.101	0.0991		ug/L		99	60 - 140	3	30
1,2-D bromoethane			0.101	0.101		ug/L		100	60 - 140	5	30

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-640625/3-A
Matrix: Water
Analysis Batch: 640659

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 640625

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	94		51 - 149

400-243066 COC

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: 9/6/2023
PO #	**GSAP Project ID**	PAGE: 2 of 2
60697537 – 3.3.2	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 – 3.3.2

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, S. Beadle	

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; loredana.filimon@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

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-090623-8260-B	9/6/2023	0000	Water	2					2	X			
	TB-ROX-090623-8011-B	9/6/2023	0000	Water	2					2		X		
	P59-ROX-090623	9/6/2023	0905	Water	6			2		8	X	X	X	X
	P58-ROX-090623	9/6/2023	0955	Water	6			2		8	X	X	X	X
	P58-ROX-090623-DUP	9/6/2023	0955	Water	6			2		8	X	X	X	X
	P93B-ROX-090623	9/6/2023	1115	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
MARY MASSA	FEDEX: See page 1	9/6/2023	1600
Relinquished by: (Signature)	Received by: (Signature)	Date: 9/7/24	Time 821
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time

CUSTODY SEALS: See page 1

Version: 12July23

2.2°C IR8
2.8°C IR8

9/22/2023

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: 9/6/2023
PO #	**GSAP Project ID**	PAGE: 1 of 2
60697537 – 3.3.2	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 – 3.3.2

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): J Mayer 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; loredana.filimon@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☐ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60697537 – 3.3.2

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-090623-8260-A	9/6/2023	0000	Water	2					2	X			
	TB-ROX-090623-8011-A	9/6/2023	0000	Water	2					2		X		
	MW4-ROX-090623-EB	9/6/2023	0825	Water	6			2		8	X	X	X	X
	MW4-ROX-090623	9/6/2023	0935	Water	6			2		8	X	X	X	X
	MW25-ROX-090623	9/6/2023	1100	Water	6			2		8	X	X	X	X
	MW7-ROX-090623	9/6/2023	1210	Water	6			2		8	X	X	X	X
	MW7-ROX-090623-DUP	9/6/2023	1210	Water	6			2		8	X	X	X	X

Joe Mayer 9-6-23

Relinquished by: (Signature)	Received by: (Signature)	Date	Time:
JOE MAYER	FEDEX: 5293 4337 5412, 5293 4337 5423	9/6/2023	1600
Relinquished by: (Signature)	Received by: (Signature) BP	Date 9/7/23	Time 821
Relinquished by: (Signature)	Received by: (Signature)	Date	Time:

Version: 13Oct22

CUSTODY SEALS: 1599784, 1599785, 1599786, 1599787

2.8°C BRS
2.2°C IR

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9/22/2023

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-243066-1

Login Number: 243066
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.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time (excluding tests with immediate HTs)		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Job ID: 400-243066-1
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	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	12-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-23
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

File: C:\USERS\LORENTE\AECOM\GDS GIS SERVICES - GIS CAD PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USF00888-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 3Q23 GW RPT\AUGUST 2023 ROXANA GROUNDWATER\WORKSPACE\FIGURE 3B AUGUST 2023 CONTOURS WF.DWG Last edited: Aug. 10, 23 @ 9:21 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
- 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 AUGUST 3–4, 2023.

403
403
(A-32)
403.5
402.5
402
TYDEMAN AVE
FIRST ST
SECOND ST
THIRD ST
FOURTH ST
FIFTH ST
SIXTH ST
SEVENTH ST
EIGHTH ST
HIGHWAY 111 (S. CENTRAL AVE)
CHAFFEE ST
VILLAGE OF ROXANA
VILLAGE OF ROXANA
NORTH PROPERTY
WOOD RIVER REFINERY
WEST PROPERTY
MAIN PROPERTY
PUBLIC WORKS YARD
BP
T-13 402.83
T-1 402.62
MW-9 402.63
MW-10 402.51
MW-28 403.83
ROST-4-PZ(A) 403.52
ROST-4-PZ(B) 403.20
P-55R 403.94
MW-27 403.22
ROST-4-PZ(D) 402.91
ROST-4-PZ(C) 402.76
ROST-4-PZ 402.96
ROST-3-MW 402.42
ROST-4-PZ(E) 402.95
MW-11 402.33
ROST-4-PZ(F) 403.01
ROST-4-PZ(G) 402.24
P-54 402.41
P-60 402.12
P-68 402.12
T-12 402.09
MW-17 402.21
MW-24 402.34
MW-22 402.24
MW-18 402.11
P-59 402.01
MW-19 402.06
MW-16 402.17
MW-20 402
P-56 401.97
MW-12 402.22
MW-2 402.04
MW-1 402.15
MW-26 402.17
T-6 401.94
MW-4 402.16
MW-21 402.04
P-57 401.99
MW-3 402.23
P-93A 402.02
P-93B
P-93C
P-93D
MW-25 402.20
MW-7 402.15
MW-5 402.25
MW-23 402.32
P-58 402.08
MW-8
P-74 401.91
MW-13 402.47
MW-6A 402.43
MW-6B
MW-6C
MW-6D
P-66 402.18
MW-14 402.49
P-114R 402.48
W-77
W-85
W-78
W-79
W-80
W-89
W-81
1986 APPROXIMATE BENZENE RELEASE SITE RAND AVENUE
2020 APPROXIMATE BUCKEYE PIPELINE GASOLINE RELEASE SITE
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
P-69
P-62
P-70
P-61
P-75
P-67
P-71
P-72
P-73
P-117
P-116
P-115
P-119
T-64
T-63
T-62
T-24
T-7
S-1
F-76
F-77
F-80
F-78
F-72
F-74
F-75

DRAFT

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 September 2023
DSGN. BY: gds
CHKD. BY: mr/bh

Groundwater Contours August 2023 – West Fenceline

FIG. NO. 3b

File: C:\USERS\LORENTE\AECOM\GDS GIS SERVICES - GIS CAD PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 3Q23 GW RPT\SEPTEMBER 2023 ROXANA GROUNDWATER\WORKSPACE\FIGURE 3B AUGUST 2023 CONTOURS WF.DWG Last edited: Sep. 22, 23 @ 6:01 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 SEPTEMBER 7, 2023.
4. WELL P-74 WAS INACCESSIBLE DURING THE MONTHLY GAUGING EVENT DUE TO CONSTRUCTION ACTIVITIES.

403
402.5
403
402.5
403.5
402
401.5
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
3RD STREET
NORTH PROPERTY
WOOD RIVER REFINERY
WEST PROPERTY
MAIN PROPERTY
BP
PUBLIC WORKS YARD
1986 APPROXIMATE BENZENE RELEASE SITE RAND AVENUE
2020 APPROXIMATE BUCKEYE PIPELINE GASOLINE RELEASE SITE
T-13 402.71
T-1 402.51
MW-10 402.21
MW-9 402.57
MW-28 403.72
ROST-4-PZ(A) 403.39
ROST-4-PZ(B) 403.16
P-55R 403.84
MW-27 403.11
ROST-4-PZ(D) 402.82
ROST-4-PZ(C) 402.70
ROST-4-PZ 402.90
ROST-3-MW 402.35
ROST-4-PZ(E) 402.83
MW-11 402.24
ROST-4-PZ(F) 402.97
ROST-4-PZ(G) 402.23
P-54 402.27
MW-24 402.24
MW-22 402.22
MW-17 402.23
T-12 402.15
MW-18 402.19
MW-19 402.19
MW-16 402.17
P-59 402.10
MW-12 402.16
MW-20 402.12
P-56 402.07
MW-2 402.11
MW-1 402.12
MW-26 402.13
MW-4 402.18
MW-21 402.06
P-57 402.04
MW-3 402.05
P-93A 402.02
P-93B
P-93C
P-93D
MW-25 402.03
MW-7 402.10
MW-5 402.15
MW-8
MW-23 402.21
P-58 402.10
P-60 402.16
P-68 401.16
T-24
T-2
T-6 402.02
P-66 402.03
MW-6A 402.31
MW-6B
MW-6C
MW-6D
MW-13 402.26
MW-14 402.40
P-114R 402.18
W-77
W-85
W-78
W-79
W-80
W-89
W-81
A-58
A-57
A-34
A-32
A-33
A-37
A-35
A-27
A-16
A-30
A-22
A-29
A-147
P-62
P-69
P-70
P-74
P-61
P-71
P-72
P-73
P-75
P-117
P-116
P-115
P-119
P-67
T-7
T-62
T-63
T-64
S-1
F-50
28

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 October 2023 DSGN. BY: gds CHKD. BY: mr/bh	Groundwater Contours September 2023 – West Fenceline
	FIG. NO. 1

File: C:\USERS\LORENTE\APPDATA\LOCAL\TEMP\FIGURE 6 3Q23 DISSOLVED PHASE BENZENE CONCENTRATIONS IN GROUNDWATER_1_14970_D189A83D.DWG Last edited: Sep. 26, 23 @ 3:38 PM by: lorente

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. 560 / 460) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
6. CONTOUR LINES IN AREA OF P-55R AND P-66 ADJUSTED BASED ON AVAILABLE AUGUST/SEPTEMBER 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.
9. WELL P-74 WAS INACCESSIBLE DURING THE MONTHLY 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
1ST STREET
2ND STREET

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(B)
ROST-4-PZ(C) 0.0026
ROST-3-MW <0.001 / <0.001
ROST-4-PZ(D)
ROST-4-PZ(E) 0.002
ROST-4-PZ(F)
ROST-4-PZ(G) <0.001
MW-11 <0.001
P-54 <0.001
MW-24 <0.001
MW-22 0.0015
MW-16 <0.001
PZ-2(84)
PZ-2(70.5)
MW-12 <0.001
MW-20
MW-01 <0.001
MW-2 <0.001
MW-26 <0.001
MW-4 <0.001
MW-3 <0.001
MW-25 0.016
MW-5 <0.001
MW-23 <0.001
MW-8
MW-13 <0.001
MW-6A <0.001
MW-6B <0.001 / <0.001
MW-6C <0.001
MW-6D <0.001
P-114R <0.001
MW-14 <0.001
P-115
MW-17
MW-18
MW-15
MW-7 560 / 460
P-55R 0.08*
P-60-11
P-60-S
P-60
P-60-12
P-60-13
P-68 0.08
0.01
T-12 1.9
P-59 0.89
P-56 <0.001
P-57 0.10
P-93A 0.084
P-93B 480
P-93C 0.047 / 0.042
P-93D <0.001
P-58 320 / 330
P-66 1.11
1.00
0.005
0.05
0.5
5.0
50
500

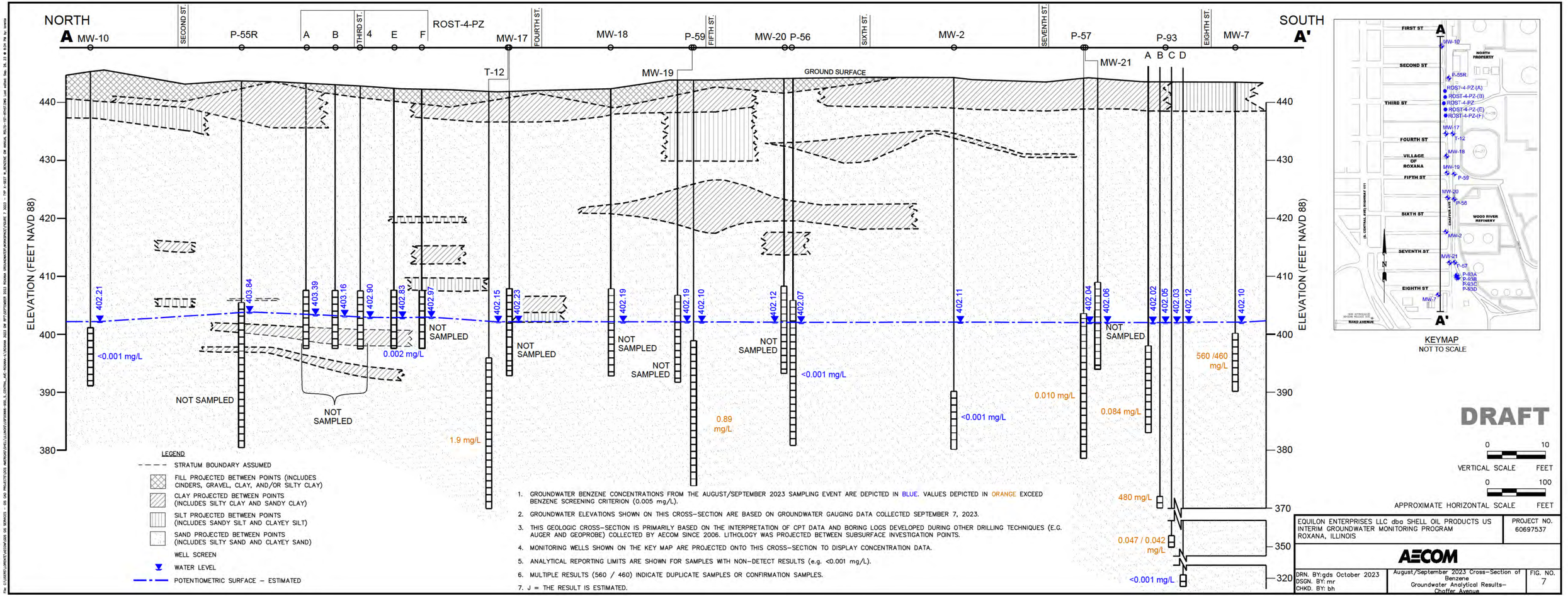
NORTH PROPERTY
MAIN PROPERTY
WEST PROPERTY
WOOD RIVER REFINERY
VILLAGE OF ROXANA
PUBLIC WORKS YARD

A-34 A-28 A-33 A-27 A-22
F-76 F-77 F-78 F-73 F-74 F-75
P-69 P-70 P-74 P-61 P-73 P-75
R-77 W-77
T-24
R-78 W-78
R-79 W-79
R-80 W-80
R-81 W-81
R-85 W-85
R-89 W-89

DRAFT

0 200
SCALE FEET
N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60697537
AECOM		
DRN. BY:gds October 2023 DSGN. BY:mr CHKD. BY:bh	August/September 2023 Dissolved Phase Benzene Concentrations in Groundwater	FIG. NO. 6



1. GROUNDWATER BENZENE CONCENTRATIONS FROM THE AUGUST/SEPTEMBER 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 SEPTEMBER 7, 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 (560 / 460) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
7. J = THE RESULT IS ESTIMATED.

KEYMAP
NOT TO SCALE

DRAFT

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. 60697537

AECOM

DRN. BY: gds October 2023
DSGN. BY: mr
CHKD. BY: bh

August/September 2023 Cross-Section of Benzene
Groundwater Analytical Results–
Chaffee Avenue

FIG. NO. 7

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